THESIS

on

A CATALOGUE of the BUPRESTIDAE of the UNITED STATES and ADJACENT TERRITORY INCLUDING BIBLIOGRAPHY, SYNONMY, DISTRIBUTION and HOSTS.

Submitted to the

OREGON AGRICULTURAL COLLEGE.

In Partial Fulfilment of the Requirements

For the Degree of

MASTER of SCIENCE in

AGRICULTURE

by

Willard J. Chamberlin.

June 1920.

Approved.

Redacted for Privacy

Head of Department, In Charge of Major.

Redacted for Privacy

Dean of the School of Agriculture.

Redacted for Privacy

Chairman of Committee on Graduate Students and Advanced Degrees.

AA

CATALOGUE

of the

BUPRESTIDAE of the UNITED STATES and ADJACENT TERRITORY.

Including Bibliography, Synonmy, Distribution and Hosts.

by

W. J. Chamberlin
Forest Entomologist
Oregon Agricultural College.
Corvallis, Oregon.

Foreword

The first requirement in undertaking any problem in Entomology, be it of a systematic or an economic nature, is a comprehensive knowledge of the literature on the subject. The working up of a more or less complete bibliography, is then, one of the first essentials and is often a task requiring considerable time, especially for workers who have only limited library facilities.

Some years ago, the author became interested in the family Buprestidae and began keeping a card index to all articles and notes concerning species of this family. In the course of a few years the card catalogue assumed such proportion that it was put into manuscript form and an attempt was made to make it as complete as possible from the library facilities at hand and by borrowing such books as possible from other libraries. This task was completed early in 1917. Upon receiving a discharge from the army in New York in 1919, the opportunity presented itself for further work in the large libraries of the East. Through the hearty cooperation of the authorities of the American Museum of Natural History, New York; Philadelphia Academy of Science, Philadelphia; and the United States National Museum at Washington, it was possible to examine the large amount of literature which has made this catalogue fairly complete.

It has been the aim to include every reference in American and Foreign literature which mentions any species of Buprestidae found in the United States, Canada or Lower (Bajo) California, to give the type locality as near as possible, to indicate the distribution and follow this with exact records of capture

and to list the known host plants.

It is hoped that the present paper will lighten the task of those working with this family and may lead some one who has access to the large collections and types of the East to revise some of the genera which are so badly in need of revision.

PREFACE

The following catalogue is intended to include all names which have been proposed for species belonging to the family Buprestidae occurring in the United States and adjacent territory, including all the species known to occur in Canada and Lower (Bajo) California. All articles and notes referring to such species have been included if seen.

The Genera are listed alphabetically and the type of each genus given. The species are listed alphabetically under their respective genera. Following the specific names the literature is cited chronologically, the synonyms being inserted in italics at their proper dates.

In order to obtain the correct reference to any particular article it is merely necessary to note the date, author and page of the reference as given under the species. (Example: Under Acmaeodera acuta, 1900 Griffith p. 568) and use this in conjunction with the list of authors and titles on page 437. Under Griffith we note, 1900 Ent. News Vol. XI, "Coleopterous Funa of Phoenix, Arizona and surrounding Region" pp. 561-568. In this article on p. 568 A. acuta, will be mentioned. In cases where an author has two or more articles dealing with Buprestidae, published during the same year, the correct article for a particular reference can be selected by the pagination. If an author has more than one article in the same year, with the same pagination a small letter has been added to the date to prevent confusion in selecting the article desired.

Following the bibliography, the type locality of the

species is given as near as possible and the geographical distribution set forth. Besides the general distribution a number of records of capture are given to indicate exact localities and dates of capture. The numbers in parenthesis following these dates indicate the authority for or the collection in which the species was seen.

The type locality of species, here given have been taken from literature and in many cases are very unsatisfactory. Among those species described by early European and American authors, we find such localities as the following given: "Bor. Amer." "Arkansas River," "Louisiana Territory," "W.T." and "H.B.," "Cal." and "Texas". Such statements are of little or no value, and in many cases there seems to be no additional data regarding these indefinite localities while in a few other cases it has been possible to trace the origin of the material to more definite localities. The author in many cases was not responsible for the indefinite nature of the locality set forth since the material has been submitted to him bearing indefinite locality and no amount of inquiry served to bring out the exact place of capture.

In presenting the distribution and hosts of the various species, the author has obtained the date from publications, from the examination of a number of the largest and finest public and private collections in this country, from correspondence and from personal collecting and rearing of species. Where species have been reported for[a] out of their regular range, special inquiry has been made regarding the authenticity and in presenting the date the authority is given in order that other workers may be able to establish the status of the case for themselves. Some rather disconcerting information in regard to distribution has appeared in the search

for such as Cholcophora angulicollis from Ontario (14); Buprestis confluens from Florida (9) and Duina obscura from Oregon (C). Yet their seems to be no doubt regarding the identity of the specimens and the capture seems to be founded on good authority so the records are included.

It cannot be hoped that the present paper is without omission or error and the author will appreciate receiving any additional data regarding hosts, unusual distribution, omissions or error in regard to the literature. The work has been brought up to January 1920.

Acknowledgments

The author wishes to express his thanks to the following gentlemen who at various times allowed him to examine their fine collections, compare specimens and obtain data as to distribution and records of capture.

Mr. Chas. W. Leng, Stanton Island, N.Y.

Mr. Chas. Schaeffer, Brooklyn, N.Y.; Mr. Alan S. Nicolay, Brooklyn, N.Y.; Mr. Henry G. Klagas, Pittsburg, Pa.; Mr. Howard Notman, Brooklyn, N.Y.; Mr. Chas. Liebeck, Philadelphia, Pa.; Mr. Henry W. Wenzel, Philadelphia, Pa.; Mr. Frank R. Mason, Germantown, Philadelphia, Pa.; Mr. Daggett, Los Angeles, Cal.; Mr. Chas. Dury, Cincinatti, Ohio; Colonel Thomas L. Casey, Washington, D.C.; Dr. A. Fenges, Pasadena, Calif.; Dr. E. C. Van Dyke, Berkeley, Calif.; Mr. Wm. T. Davis, Stanton Island, N.Y.; to Dr. Frank E. Lutz and Mr. A. S. Mutchler for the privilege of examining the collection of the American Museum of Natural History. To Dr. Henry Skinner for the privilege of examining the material in the Philadelphia Academy of Science, including the Type col-

lection of Dr. Geo. H. Horn. To Dr. E. A. Schwarz, Messrs. Barber and Fisher for the privileges extended while at the U. S. National Museum.

More especial thanks are due Mr. Chas. W. Leng who has at various times helped in placing obscure references, loaned certain books, identified specimens and allowed specimens to be acquired from his own cabinet. To Mr. Andrew Mutchler of the American Museum of Natural History, whose intimate knowledge of the literature on Coleoptera was for many weeks most generously given and often brought to light obscure references which would have otherwise undoubtedly escaped detection. To Mr. Chas. Schaffer of the Brooklyn Museum who repeatedly brought out the treasures of that institution for inspection and who most generously gave many rare forms of Buprestidae from the Southwest. To Dr. A. Fenyes of Pasadena for specimens and valuable data. To Mr. Alan Nicolay for some fine specimens. To Mr. Henry W. Wenzel of Philadelphia for rare specimens and data. To Mr. Howard Notman for the privilege of examining and acquiring specimens from the Byers Collection. To Mr. C. A. Frost of Framingham, Mass. for comparing specimens with the Leconte types and furnishing notes on certain species. To Mr. H. E. Burke for courtesies extended at the Forest Insect Laboratory at Los Gatos, Calif. and to Dr. E. C. Van Dyke of Berkeley for identifying doubtful material and for many notes on hosts and distribution of western species.

Corvallis, Oregon.
February 20, 1920. W. J. Chamberlin--

*Index to the Numbers following the records of capture.

(1) Collection of Mr. Howard Notman, Brooklyn, N.Y. (Byers Collection)

(2) Collection of Mr. Charles Leibeck, Philadelphia, Pa.

(3) Collection of Mr. H. G. Klages, Pittsburg, Pa.

(4) Collection of Mr. Chas. W. Leng, Stanton Island, N.Y.

(5) Records from Articles of Prof. H. C. Fall.

(6) Prof. F. H. Snow. (Specimens in various collections and cited by various authors)

(7) The Daggett collection, Los Angeles, Calif.

(8) Collection of Mr. Henry W. Wenzel, Philadelphia, Pa.

(9) Collection of Mr. Frank R. Mason, Germantown, Philadelphia.

(10) U. S. National Museum Collection and the collection of the Forestry Division of the Bureau of Entomology.

(11) Collection of Mr. Chas. Dury, Cincinnati, Ohio.

(12) Collection of Colonel T. L. Casey, Washington, D. C.

(13) Collection of Dr. A. Fenyes, Pasadena, California.

(14) Mr. C. A. Frost, Framingham, Mass.

(15) Collection Articles and Correspondence of Dr. E. C. Van Dyke, Berkeley, California.

(16) Collection of Mr. Chas. Schaffer, and that of the Brooklyn Museum of Arts and Sciences, Brooklyn, N.Y.

(17) Collection of The Philadelphia Academy of Science

*See remarks on page II of the Preface.

(18) Collection of the American Museum of Natural History. New York City.

(19) Collection and Articles of Mr. Alan S. Nicolay, Brooklin, N.Y.

(20) J. N. Knull in literature.

(21) Collection of Mr. W. T. Davis, Stanton Island, N.Y.

(22) Collection and writings of Prof. H. F. Wickham, Iowa City, Iowa.

(23) Mr. H. E. Burke, Writings of,

(24) Writings of Prof. T. D. A. Cockerell,

(W) Prof. H. F. Wickham

(O) Collection of Oregon Agricultural Experiment Station, Corvallis, Oregon.

(C) Collection of the author, W. J. Chamberlin, Corvallis, Oregon.

Genus Acmaeodera Esch.

1829 Eschscholtz p. 9

Type of the genus.

acuta Lec.

1859 retifera Leconte p. 72

1859 Leconte p. 224

1859 retifera Leconte p. 227

1878 Horn p. 13 pl. 1, fig. 14.

1899 Fall p. 20

1900 Griffith p. 568

1901 Fall p. 119

1902 Kerremans p. 33

1906 Kerremans p. 135 pl. 13 fig. 3

1913 Woodworth p. 194

1917 Chamberlin p. 167

Type locality: Ft. Tejon, California.

Distribution: Arizona, California, Utah, Washington and Lower California.

Arizona: Prescott (4);

California: Los Angeles Co. (1); Yosemite (10); Pasadena IV-13 (4); Yreka (4); Kaweah (7); Tulare (16); San Diego (5); Ahwahnee V (13); Sierra Madra VI-VII (13); Independence (13), Monterey (13); Mojave V (13) Upland (13), Mariposa Co. VI-4 (C).

Washington: Spokane (4)

Hosts: Adult feeds on Primrose.

alacia Fall

1899 Fall p. 29

1901 Fall p. 120

1902 Kerremans p. 33

1906 Kerremans p. 172

1913 Woodworth p. 194

Type locality: Los Angeles Co., Calif.

Distribution: California, Arizona and Texas.

Arizona: Bill Wms. Fork Aug (2); Phoenix (18); Coyote Mts. 3500 ft. VIII-5 (18); Santa Cruz Valley, Cobolbi Mts. 3100 ft. VIII-10 (18); Tuscon VIII-15 (C); Mesa VIII-5 (C);

California: Los Angeles Co. (5)-(10).

Texas: Chisos Mts. VIII-2(8); Davis Mts. VII-7 (8)

alacris Horn

1878 Horn p. 25 pl. 1 fig. 40

1899 Fall p. 37

1901 Fall p.

1902 Kerremans p. 33

1906 Kerremans p. 145

1913 Woodworth p. 194

Type locality: Fort Yuma, California.

Distribution: California and Arizona.

Ft. Yuma, Cal., Jerome Ariz. Aug. (13).

amabilis Horn

1878 Horn p. 7 pl. 1 fig. 3

1898 Cockerell p.

1899 Fall p. 10

1902 Kerremans p. 33

1906 Kerremans p. 78

1907 Fall-Cockerell p. 180

1917 Burke p. 329

Type locality: Arizona.

Distribution: Arizona and New Mexico.

Arizona: Palmarlee IV-VIII (16); Cochire Co. VIII (2); Oak Creek Can. 6000 ft. Aug. (C); Huackuca Mts. VIII-IX (1);

New Mexico: Ft. Wengate VIII; Magdalena Mts. (C).

Host: Alnus tenuifolia

Season: Aug.-Sept. (Ariz.) July[2].

amplicollis Lec.

1866 Leconte p. 348, p. 383

1878 Horn p. 6, pl. 1, fig. 1

1889 Waterhouse p. 178

1894 Horn p. 272-273

1898 Cockerell p.

1898 Wickham p. 305

1899 Fall p. 9

1902 Kerremans p. 28

1906 Kerremans p. 74 pl. 11 fig. 8

1906 Fall-Cockerell p. 180

Type locality: Fort Whipple (Phoenix) Arizona.

Distribution: Arizona, New Mexico and California.

California: Placerville (10) Los Angeles (10).

Arizona: Prescott (C); Nogales VII-30 (C); Phoenix;

Tuscon Mts.; Huachuca Mts. VII-VIII-23 (1); Ft. Huachuca VII-4, VIII-25 (13); Patagonia Mts. V (4); Santa Rita Mts; Santa Catalina Mts. VII; Sabino Basin VII-10 (18); Oak Creek Can. VIII 6500 ft. (c),

New Mexico: Albuquerque; Water Canyon 5000 ft. VIII (10)

Hosts: On Aretostoph viscida and Ceanothus intergerimunus and C. cuneatus.

Season:

angelica Fall

1899 Fall p. 16

1901 Fall

1902 Kerremans p. 33

1906 Kerremans p. 96 pl. 12 fig. 3

1913 Woodworth p. 194

1917 Burke p. 329

1917 Chamberlin p. 166

Type locality: Los Angeles Co., California.

Distribution: California.

California: Lake, Eldorado, Mariposa, Los Angeles and Placer Counties. Sierra Modra (13); Ahwahnee V (13); (Cotype Chiles S. Madra Mts. VII-20 (7)) Mt. Wilson VI-12 (16) Pasadena VI-10 (C); San Gabriel Mts. VI (4).

Hosts: Larva mine the wood of Douglas Oak (Quercus douglosii) poison oak (Toxicodendron diversifolia), deer brush (Ceanothus intgerrimus), buck brush (C. cuneatus) and Yerba Santa (Erydectlon sp.)

arizonae Horn

See pulchella Herbst.

biedermanni Skinner

See pubventris Horn

bishopiana Fall

1907 Fall p. 240

1913 Woodworth p. 195

Type locality: Bishop, California.

Distribution: So. California; Big Pine and Independence, Inyo Co., June (13); Palm Springs, Cal. VI (13).

Hosts:

Altitude:

bivulnera Horn

1894 Horn p. 328, 371

1899 Fall p. 32

1902 Kerremans p. 33

1906 Kerremans p. 187 pl. 14 fig. 4

1907 Fall

Type locality: Tuscon, Arizona

Distribution: Arizona and Lower California

Arizona: Santa Cruz Village, Cobabi Mts. 3100 ft. VIII-10 (18); Tuscon VII-13 (C) S.B. Ranch, Cochise Co. 3700 ft. VIII-10; Lower California; San Felipe (9)

Hosts:

bowditchi Fall

1901 Fall p.307

1906 Kerremans p. 134, pl. 13 fig. 2

1913 Woodworth p. 195

Type Locality: Prescott, Arizona.

Distribution: Arizona, Southern California and Texas.

Arizona: Yavapai Co. V, VII; Chiricahis Mts. VIII, (10) Prescott VI (13), VII, IX (C); Phoenix (Cotype Prescott VII (10).)

Texas; Flatonia VII-30 (8).

Hosts: Arizona Oak (Quercus arizonica)

Note: A. bowditchi is considered by some to be a synonym of A. pubiventris. At present I believe it is distinct.

clausa Horn

1894 Horn p. 328, 374, pl. 7 fig. 3

1899 Fall p. 11

1902 Kerremans p. 33

1906 Kerremans p. 82

Type Locality: Santa Rosa, Lower California.

Distribution: Lower California, San Jose del Cabo, Coral de Piedra, Sierra El Tasta and Santa Rosa (C)

Hosts:

Altitude:

comata Lec.

1858 Leconte p. 70

1859 Leconte p. 225 pl. 11 fig. 5

1871 Saunders p. 79

1873 Crotch p. 90

1878 Horn p. 24, pl. 1 fig. 39

1899 Fall p. 37

1901 Fall p.

1902 Kerremans p. 33

1906 Kerremans p. 21

1913 Woodworth p. 195

Type locality: Fort Yuma, California (Near Gila)

Distribution: Arizona, California and Colorado.

Arizona: Phoenix (1)

California: Ft. Yuma (Lec.)

Colorado: (Saunders)

Hosts:

connexa Lec.

1859 Leconte p. 71

1859 Leconte, p. 223

1866 Leconte p. 384

1878 Horn p. 13 pl. 1, fig. 13

1878 connexa, acuta, rectifera Glover plate XX fig. 5

1891 Duges, p. 13

1894 Fall p. 98

1897 Fall p. 237

1899 Fall p. 22

1901 Fall p. 119

1902 Kerremans p. 29

1906 Kerremans p. 138 pl. 13 fig. 4

1913 Woodworth p. 195

1917 Chamberlin p. 167

1917 Burke p. 329

Type Locality: Ft. Tejon, California.

Distribution: Oregon, California, Colorado, Utah, Texas, Arizona and New Mexico.

Oregon: Corvallis VI-12 (C); Rogue River 2000 ft. VII-18 (9);

California: Marin Co. (16); Kern Co. (10); Los Angeles Co. (10); Lake Co. (2); Del Norte Co. (18); Mariposa Co. VI (10); Tolumne Co. VI (10) Yosemite VII, (13); Mariposa VI-14 (C); Tulare (16); Sierra Medra 5000 ft. VI (13); Mt. Lowe (13); Tellac (13); Napa Co. V, VI (8); Kern River 5000 ft. VII-3 (7); Mill Valley V, VI (4); Mt. Wilson (4); Yreka (4)

Colorado: Camp Baldy VI-22

New Mexico (1)

Texas: New Brunstel (8); Round Mt. (8)

Utah: Silver Lake VII-2 (8)

Hosts: Adults taken feeding on Primrose. Said to breed in Pine. Bred from live oak Quercus wistizeni

Altitude:

conoidea Fall

1899 Fall p. 31

1902 Kerremans p. 33

1906 Kerremans p. 195

1918 Burke p. 211

Type Locality: Arizona

Distribution: Colorado, Arizona, Texas

Colorado: (4)

Arizona: Coyote Mts. VIII, (C); Kitt Peak VIII-7 (C); Huachuca Mts. (1); Oak Cr. Can. 6000 ft. VII (4); Tuscon (4); Prescott (4);

Texas: El Paso (4).

Hosts: Mines stalks of Spanish dagger (Dasylerion wheeleri)

consors Horn.

1878 Horn p. 20 pl. 1 fig. 30

1894 Horn p. 375

1899 Fall p. 29

1902 Kerremans p. 34

1906 Kerremans p. 179

1919 Van Dyke p. 155

Type Locality: Texas.

Distribution: Texas, Arizona Pinal Mts. (16).

Hosts:

Altitude:

contigua Kerr.

See flavomargmata Gray

convicta Fall

1899 Fall p. 11

1902 Kerremans p. 34

1906 Kerremans p. 179

Type Locality: Santa Rita Mts. Arizona.

Distribution: Arizona: Santa Rita Mountains.

Hosts:

Altitude:

coquilletti Fall

1899 Fall p. 15

1901 Fall

1902 Kerremans p. 34

1906 Kerremans p. 89

1913 Woodworth p. 195

Type Locality: Los Angeles Co., California.

Distribution: Colorado and So. California.

Colorado: Camp Baldy VII-22 (10);

California: (Cotype Los Angeles Co. July (10)); San Gabriel Mts. VI, VII (♀); Pasadena (1) Sierra Madra VI, (13); Mt. Wilson VI (13).

Hosts:

Altitude:

cribricollis Horn

1894 Horn p. 375 pl. 8 fig. 4

1899 Fall p. 33

1902 K$_e$rremans p. 34

1906 K$_e$rremans p. 191

1907 Fall p. 242

1919 Van Dyke p. 190

Type Locality: Texas.

Distribution: California, Arizona and Texas.

California: Imperial Valley

Arizona: Phoenix (1)

Texas: El Paso (4)

Hosts:

croceonotata Lec.

See flavosticta Horn.

cubaecola Duv.

1857 Duval p. 57

1867 Cheverlot p. 583

1893 Gundlach p. 166

1899 Fall p. 16, 35 (marginanotata)

1899 pulcherrima Fall p. 16

1902 Kerremans p. 34

1906 Kerremans p. 61 pl. 11 fig. 5

1914 Leng and Matchler p. 429

1918 Van Dyke p. 229

1919 Van Dyke p. 190 pl. 7 fig. 6

Type Locality: Cuba

Distribution: Cuba and Florida Keys.

Florida: Key Largo (C) Big Key IX-19 (4); Metacombe Key (10); Key West (C)

Hosts:

Altitude: Sea level.

culta Web.

See tubulus Fab.

cuneata Fall

1899 Fall p. 21

1900 Griffith p. 568

1902 Kerremans p. 34

1906 Kerremans p. 131 pl. 12 fig. 9

Type Locality: Rio Verde, Utah

Distribution: Arizona, California and Utah.

Arizona: Tempe Desert (1); Verde River (2); (Cotype Phoenix (7)); Prescott (C); Buckman Co. (10); Teena IV-13 (10).

California: Eldorado Co. VI (8): Plumas Co. VI (8).

Hosts: Alnus tenufolia
Altitude:

cuprina Spin.

1838 Spinola p. 367

1841 hirtula Gory p. 29 pl. 5 fig. 27

1878 Horn p. 5.

1882 Waterhouse p. 20

1889 Waterhouse p. 177

1894 Horn p. 370

1899 Fall p. 7

1906 Kerremans p. 24

Type Locality: California?

Distribution: Texas? Mexico; Tacamboro, Mishocan; Amula, Guerrero, Alvarezo Mts., Jalopa, and Parada.

Hosts: Unknown.

Altitude: Up to 6000 ft. in the Mountains of Mexico.

daggetti Fall

1899 Fall p. 26

1902 Kerremans p. 34

1906 Kerremans p. 150 pl. 13 fig. 6

Type Locality: Ft. Huachucha, Arizona.

Distribution: Arizona and Southern California.

Arizona: Phoenix (9); Prescott (9); Huachuca Mts. VII (C); PinalMts. (9) Santa Catalina Mts. (Sabino Basin) VII-8 (C); Cochiese Co. (4); Nogalis VIII-1 (4); Tuscon VI-7 (4); Palmerlee VIII-28 (Cotype, Arizona. (10)).

Hosts:

Altitude: Ariz. 3800

Season; June-Sept. (Ariz.)

delumbis Horn

See gibbula Leconte

decipiens Lec.

1866 Leconte p. 348, 383

1878 Horn p. 16, pl. 1 fig. 17

1899 Fall p. 26

1902 Kerremans p. 29

1909 Fall and Cockerell p. 180

Type Locality: Arizona.

Distribution: Arizona, New Mexico, Texas.

Arizona: Oak Cr. Can. VII; Huachuca Mts. VIII-5 (16); Ft. Huachuca (7);

New Mexico: Ft. Wingate VI, VII, VIII, IX, X, (4), (18), (C); Los Crucis V-9 (10);

Texas: Brustes Co. VI-10 (10).

Hosts: Adults taken on Verbisina.

Season: June-Aug.

dehorni Horn

1878 Horn p. 15 pl. 1, fig. 21

1899 Fall p. 24

1901 Fall p. 119

1902 Hopping p. 202

1902 Kerremans p. 34

1906 Kerremans p. 145

1913 Woodworth p. 195

Type Locality: California

Distribution: California; Utah and Nevada.

California: Mariposa, Los Angeles and Eldorado Counties, Kaweah (2); San Louis Obispo IV (16); San Gabriel Mts. VII-29 (4); Mt. Wilson VI (13) Deep Creek, S. B. Mts. 6000 ft. VI-5 (7);

Utah: Ivon Co. (C)

Nevada: Franktown (4)

Hosts: Ceanothus

Altitude: 8000 Calif.

disjuncta Fall

1899 Fall p. 9

1902 Fall & Cockerell p. 378

1902 Kerremans p. 34

1906 Kerremans p. 75

1907 Fall & Cockerell p.180

Type Locality: Arizona

Distribution: Arizona, New Mexico, Texas and Mexico.

Arizona: Comobabi Mts. Cobabi Mts. VIII; S.B. Ranch, Cochise Co. (4); Rincon Mts. 3750 ft. (1) Huachuca Mts. VIII-23 (16); New Mexico.

Texas: Chisos: VII (8).

Mexico (C).

Hosts: Adults taken on Helianthus annuris

dispar Gory

See pulchella Herbst.

distincta Kerr.

1902 Kerremans p. 29

1906 Kerremans p. 171

Type Locality: Colorado.

Distribution: Colorado

Hosts:

Altitude:

dolorosa Fall

1899 Fall p. 25 pl. 1, fig. 35

1901 Fall p. 120

1902 Kerremans p. 34

1906 Kerremans p. 148

1907 Fall p. 241

1913 Woodworth p. 195

1917 Chamberlin p. 168

Type Locality: Los Angeles Co., California.

Distribution: Southern California.

So. California: Mt. Wilson VI (C); Bishop VI (13); Azusa VI (13) Pasadena V (13); S. Madra V(13); Echo Mt. 3000 ft. (C); (Cotype San Bernardino Mts. 6400 ft. (7); (Cotype L.A.Co.(10)

Hosts:

Eve Fall

Fall manuscript name.

Distribution: Bishop Cal. (C)

faceta Fall

1907 Fall p. 241

Type Locality: Santa Rosa, Lower California.

Distribution: Lower California.

Hosts:

falli Kerr.

1899 Subcyanea Fall p. 8 (Name preoccupied)

1903 falli n.n. Kerremans p. 34.

1906 Kerremans p. 71 pl. 11 fig. 6

1907 Fall & Cockerell p. 180

Type Locality: Arizona.

Distribution: New Mexico, Arizona, Texas, and California.

Arizona: Palmarlee Cochise Co. (9) VIII; S. B. Ranch Cochise Co. VIII 3750 (Snow); Douglas (4);

California: San Bernardino Co.

Texas: Kent, Colberson Co. IX

Mexico: Durango (9)

Hosts:

Altitude: Texas 4000 ft. Ariz. 3750 ft.

fenyesi Fall

1899 Fall p.12

1902 Kerremans p. 34

1906 Kerremans p. 84 pl. 11 fig. 9

1913 Woodworth p. 195

Type Locality: So. California.

Distribution: California, Colorado and Utah.

California: Lake Co. (2); Los Angeles VI (7); Azura V (13); S. Madra (13); Pasadena VI-9 (C) San Diego Co. Riverside Co. (5); San Bernardino Co. (5); (Cotype L.A. and San Diego Co. (10).

Colorado (4)

Utah: (Knaus).

Hosts:

flavomarginata Gray

1831 Gray p. 358 pl. 31 fig. 2

1834 Cheverlot fosc. III No. 2

1837 Laporte et Gory p. 2 pl. 1 fig. 2

1838 Spinola p. 360

1848 White p. 5

1857 Lacordaire p. 67

1857 Leconte p. 7

1859 Leconte p. 222

1866 Leconte p. 383

1878 Horn p. 8 pl. 1 fig. 4

1882 Waterhouse p. 21

1889 proxima Waterhouse p. 178

1894 Horn p. 328, 369

1897 contigua Kerremans p. 42?

1899 Fall p. 8

1900 Kerremans p. 285

1901 Fall p. 119

1902 Kerremans p. 28

1906 Kerremans p. 31

1913 Woodworth p. 195

1914 Leng. & Matchler p. 429

1917 contigua Kerr. = flavomarginata Gory. Leng. & Matchler p. 205

Type Locality: Eagle Pass, Texas. (Brazil - see Gray)

Distribution: Southern California, Southwestern Texas, Arizona, Mexico, Chili and the Antilles.

California:

Texas: Burnette Co. IX-17 (10); Austin (C). Eagle Pass (Lec.); Dallas (4); Carmal Co. (4); New Brunsfels (16).

Arizona:

Lower California: Santa Rosa (C); El Taste, San Felipe (18); San Jose del Cabo

Mexico: Guanajuata; Villa Lerdo, Durango; San Geronimo, Guadalupe; Guadalajora; Jolisco; Tula, Hedalgo; Jaloppa, Vera Cruz; Gaumer, Temax, Yucatan; Cordova; Oaxaca; Almolonga.

Hosts:

Altitude:

flavosignata Gory

See pulchella Herbst.

flavosticta Horn.

1863 croceonotata Leconte p. 43 (name preoccupied)

1873 flavosticta Strum = croceonotata Lec., Leconte p. 332

1878 flavosticta n.n. for croceonotata Lec. Horn p. 15

pl. 1 fig. 16.

1882 Waterhouse p. 24

1889 Waterhouse p. 180

1891 Duges p. 10

1894 Horn p. 328, 370

1899 Fall p. 20

1901 Fall p. 119

1902 Kerremans p. 29

1906 K$_e$rremans p. 130

1913 Woodhouse p. 195

Type Locality: Lower California.

Distribution: Oregon?, California, Lower California and Mex.

California: Los Angeles Co. (7), (2); Riverside (5); San Diego Co. (5); Palm Springs IV (13).

Lower California: Cabo San Lucis Magdalena Islands, San Jose del Cabo (C); Santa Rosa (C);

Mexico: Chehuahua, Durango, Hidalgo

Oregon: One doubtful record.

Hosts:

Altitude:

gemina Horn

1878 Horn p. 23 pl. 1, fig. 37

1894 nebulosa Horn p. 376

1894 Horn p. 376-377

1899 Fall p. 34

1901 Fall p. 120

1902 Kerremans p. 34

1902 nebulosa Horn. K$_e$rremans p. 35

1906 K$_e$rremans p. 200

1907 Fall p. 242

1913 Woodworth p. 195

1913 nebulosa Horn = gemina Horn. Woodworth p. 195

1917 Chamberlin p. 168

1919 gemina = acuta Van Dyke p. 189

Type Locality: San Bernardino Valley, California.

Distribution: California.

California: Siskiyou (1), Mariposa (16), Eldorado (16), Los Angeles (5) Riverside (5) Tulare (4) Napa and San Bernardino Counties.

Hosts: Adults taken on Wild buckwheat, Erisgonum sp.

geranii Harris.

See tubulus Fab.

gibbula Lec.

1858 Leconte p. 69

1859 Leconte p. 225 pl. 11, fig. 6

1873 Crotch p. 90

1878 Horn p. 24 pl. 1 fig. 38

1894 delumbis Horn p. 378

1898 Wickham p. 305

1898 Wickham p. 235

1899 Fall p. 35

1901 Fall p. 119

1902 Kerremans p. 29

1902 delumbis Kerremans p. 34

1902 Van Dyke p. 173

1902 Van Dyke p. 200

1904 Kunze p. 242

1904 Wickham p. 307

1906 Kerremans p. 55

1907 delumbis Fall & Cockerell p. 154

1907 Fall & Cockerell p. 154

Type Locality: Type collected between El Paso, Texas, and San Diego, Calif.

Distribution: California, New Mexico, Arizona, Texas, Lower California.

California: San Diego (10); Pasadena IX (13); Palm Springs

Arizona: Santa Rita Mts. 8000 ft. (9); Rincon Mts.(1); Florence VII 25 (1); Yuma (9); Palmerlee VIII-9 Combobai Mts. St. Catalina Mts.; Tuscon VIII-12 (4); Phoenix (C); Hot Springs VIII-25 (10)

New Mexico

Texas: Chisos VII-21 (8); Uvalde VI-18 (9)

Lower California: Santa Rosa (4);

Hosts: Mesquite (Prosopis juleflora)

Season: June (Florence)

griffithi Fall.

1899 Fall p. 36

1900 Griffith p. 568

1902 Kerremans p. 34

1904 Kunze p. 242

1904 Wickham p. 307

1906 Kerremans p. 47

Type Locality: Tempe Desert, Arizona.

Distribution: Desert Regions of Arizona (Phoenix; Huachuca Mts.

(1); Tempe (8); Hot Springs VI/26 (10); Tuscon VI-1 (4); Prescott (C).

Hosts:

guttefera Lec.

1859 Leconte p. 72

1859 Leconte p. 229

1873 Crotch p. 90

1878 Horn p. 21 pl. 1 fig. 34

1878 versuta Horn p. 21 pl. 1, fig. 33

1894 Horn p. 373

1899 Fall p. 32

1901 versuta Fall p. 120

1899 versuta Fall p. 32

1901 Fall p. 120

1902 Kerremans p. 34

1902 versuta Kerr. p. 37

1906 Kerremans p. 181

1907 versuta Horn = guttefera Lec. Fall p. 240

1913 Woodworth p. 195

1919 Van Dyke p. 187

Type Locality: Ft. Tejon, California.

Distribution: California, Arizona and Texas.

California: Pasadena VI-10 (1); S. Madra Mts. V, VI (2); Los Angeles Co. (5) Mt. Wilson VI-11, VI-24 (7); Los Gatos VI (13); Mariposa Co.

Arizona: Hot Springs VI-28 (10); Sabino Canyon V (10);

Texas: Chisos Mts. VII-24 (8).

Hosts: On Yucca blossoms and on Palo verde

haemorrhoa Lec.

See rubronotata Lap. et. Gory.

hepburni Lec.

1859 Leconte p. 254

1878 Horn p. 12 pl. 1 fig. 12.

1894 Horn p. 375

1898 Cockerell p.

1899 Fall p. 17

1901 Fall p. 119

1902 Kerremans p. 34

1906 Kerremans p. 102

1907 Fall p. 240

1913 Woodworth p. 195

1917 Chamberlin p. 167

1917 Burke p. 329.

1919 Van Dyke p. 189.

Type Locality: California.

Distribution: Arizona, California, Nevada and New Mexico.

California: Los Angeles, Eldorado (10), Kern (10), Mariposa VI (C), Sierra Nevada, Sonoma, Shasta, Larsen VI-5 (8), Tulare (16), and Placer Counties. Yreka (2); Keweah (2); Pomona IX-19 (7); Sawtell (9); Yosemite (10); Placerville (10); Santa Barbara (13); Pasadena VI (13); Sylvania (13); Raymond V (13).

Arizona: Comobabi Mts. VIII-10.

Hosts: Taken on Baeria Sp. primrose and poppy. Mines Garry oak (Quercus garryana) and Pear (Pyrus communis) Douglas Oak (Quercus douglosii) live Oak (Q. wislizeni) and Pear (Pyrus communis)

hepburni var. latiflava Fall

1907 Fall p. 240

Type locality: Yosemite Valley, California.

Distribution: California south of Yosemite Valley California; Sierra Madra (13); Lancaster (13); Raymond (13).

hirtula Gory

See cuprina Spinola

horni Fall

1899 Fall p. 25

1900 Kerremans p. 341

1902 Kerremans p. 34

1903 Kerremans p. 285

1906 Kerremans p. 151

1917 Chamberlin p. 168

1919 Van Dyke p. 152

Type Locality: Arizona

Distribution: Arizona and California;

California: San Jasinto Mt., Tuolumne Co., El Dorado Co. (7), Placerville (16).

immaculata Horn

See pulchella Herbst

insignis Horn

1894 Horn p. 328, 377

1899 Fall p. 34

1902 Kerremans p. 34

1906 Kerremans p. 201

1907 Fall p. 242

Type Locality: San Raymundo, Lower California.

Distribution: Lower California.

Hosts: Taken on Cactus.

Note: Known only by the type.

jacosa Fall

1899 Fall p. 14

1901 Fall p. 119

1902 Kerremans p. 35

1906 Kerremans p.

1913 Woodworth

1919 Van Dyke p. 152

Type locality: Southern California (Sierra Foothills).

Distribution: Southern California and Colorado.

California; Pasadena V, VI (C); Sierra Madra (13);

Mt. Wilson (13); (Cotype Los Angeles Co. VI (10)).

Colorado: Camp Baldy VII-28 (10).

Hosts:

labyrinthica Fall.

1899 Fall p. 21

1901 Fall p. 119

1902 Kerremans p. 35

1906 Kerremans p. 132 pl. 13 fig. 1

1907 Fall p. 241

1913 Woodworth p. 195

1917 Chamberlin p. 167

Type Locality: Tuolumne Co., California.

Distribution: Arizona, California, Utah and Nevada.

Arizona:

California: (Cotypes, Los Angeles and San Diego Counties (10); Castella VII-6 (15); Argus Mts. V (10); Pasadena IV-20 (11); Amador (18), San Bernardino VI-5 (7), San Diego (10), Santa Clara, Tulare (4) and Siskiyou Counties. Pomona V-19 (7); Placerville VII (10); Palm Springs (13); Azusa V (13); Waterman Canyon V-26 (11); Milpita 3 V-21 (C).

Host: Breeds in Yellow pine (P. ponderosa) Adults taken on Calif. poppy.

lanata Horn.

See pubiventris Horn

laticollis Kerr.

1902 Kerremans p. 28

1906 Kerremans p. 142

Type Locality: North America

Distribution:

latiflava Fall

See hepburnii Lec.

larreae Fall= cribricollis Horn (13)

1907 Fall p. 244

1918 Burke p. 311

Type locality: Mojave, California.

Distribution: Arizona. California Mojave 6/25

Host: mines wood of Creosote bush (Covillea Tridentata)

lucia Fall

1901 Fall p. 307

1906 Kerremans p. 173 pl. 13 fig. 9.

Type Locality:

Distribution: Colorado, Arizona, New Mexico, California.

Colorado: Glenwood Springs (13)

Arizona: Bill Wms. Fork (1); Phoenix (1); Ft. Apache; Yampai V; Prescott VI, VII, IX (C);

New Mexico: Ft. Wingate VIII; Copiteris IV-26 (10)

California: Bishop VI (13)

Hosts:

macra Horn

1878 Horn p. 8 pl. 1 fig. 5

1898 Wickham p. 305

1899 Fall p. 10

1902 Derremans p. 35

1906 Kerremans p. 69

Type Locality: Texas.

Distribution: Arizona and Texas.

Arizona: Tuscon.

Texas: Round Mt. (8); Burnette Co. 11 (16).

Hosts:

maculefera Horn

1894 Horn p. 372 pl. 8 fig. 5

1899 Fall p. 8

1902 Kerremans p. 35

1906 Kerremans p. 67

1907 Fall & Cockerell p. 180

Type locality: Texas.

Distribution: New Mexico and Texas

New Mexico: Los Crucis IX-23

Texas Macdona VII-25 (8).

Host: Taken on Biglovia sp.

marginotata Chev.

1867 Cheverlot p. 583

1906 Kerremans p. 56

1919 Van Dyke p. 190 pl. 7 fig. 7

Type Locality: Cuba.

Distribution: Cuba and Florida Keys.

Florida: Key Largo (C); Metacombe Key.

Host:

Note: This species is listed in many collections under A. cubaecola.

mariposa Horn

1878 Horn p. 22 pl. 1 fig. 35

1899 Fall p. 24

1901 Fall p. 119

1902 Hopping p. 202

1902 Kerremans p. 27

1906 Kerremans p. 147

1913 Woodworth p. 195

1917 Burke p. 330

1917 Chamberlin p. 168.

Type locality: Mariposa, California.

Distribution: California.

California: Sonoma Co. (16); El Dorado Co. VI-7 (8); Raymond (13); Kaweah (2); Placerville V, VII (10); Lake Tahoe (15).

Hosts: The adults feed on the foliage and the larvae mine the wood of Mountain mahogany (Cercocarpus parvifolius), Christmas Berry (Heteromeles arbutifolia), Poison Oak (Taxicodendron diversiloba), coffee berry (Rhamnus californica), deer brush (Ceanothus integerrimus), blue brush (C. thyrsiflorus) and red bud Cercis oceidentalis.

Altitude: 8000 ft. Eldorado Co., Cal.

Season: May-July.

miliaris Horn

1878 Horn p. 10 pl. 1 fig. 9

1898 Cockerell p.

1899 Fall p. 15

1902 Kerremans p. 35

1906 Kerremans p. 93

1907 Fall & Cockerell p. 180

Type locality: Texas.

Distribution: Arizona, Colorado, Utah, New Mexico, and Texas.

Arizona: Flagstaff VII-15 (4); Ft. Huachuca VII-IX-12 (C);

Ash Cr. Can. 6000 ft. (Snow);

Colorado: Durango (4);

Texas: Karrville V-30 (10); New Brunsfels (16).

mima Gory

See scalaris Mannerheim

mixta Lec.

See pulchella Herbst.

morbosa Fall

1899 Fall p. 20

1901 Fall p. 119

1902 Kerremans p. 35

1906 Kerremans p. 129

1913 Woodworth p. 195

Type Locality: Los Angeles Co. California.

Distribution: California: (Pasadena (5); Pomona(5); S. Madra VI (13) Upland IV (13).

Hosts:

multiguttata Dejean

See ornata Fabricii

nebulosa Horn

See Gemica Horn

neglecta Fall

1899 Fall p. 31

1902 Kerremans p. 35

1905 Knaus p. 351

1906 Kerremans p. 198 pl. 14 fig. 5

1919 Van Dyke p. 189

Type locality: Texas.

Distribution: Colorado, Arizona, California and Texas.

Colorado: Canyon City (10).

California: Napa Co. (Horn)

Texas: (Cotype "Tex" (7)); (Cotype Burnette Co. (10));

Waco (11); Round Mt. (8); Austin (C); Fedor VI (13);

Houston VI-25 (9); Cypress Mills VIII-10 (9);

Hosts:

Altitude:

obesa Kerr.

1909 Kerremans p. 271

Type locality: Texas.

Distribution: Texas.

obtusa Horn

1878 Horn p. 19 pl. 1 fig. 29

1894 Horn p. 376

1899 Fall p. 29

1902 Kerremans p. 29

1906 Kerremans p. 170 pl. 13 fig. 8

Type locality: Texas

Distribution: Colorado, New Mexico and Texas.

Colorado: Durango (4).

New Mexico: Ft. Wingate VI.

Texas: Fedor, Lee Co. VI-6 (2); Cypress Mills VII (1); Lurling (9); Paris (16); Lee Co. 3700 ft. (C).

Altitude: 3700 Lee Co. Texas.

opacula Lec.

1859 Leconte p. 69

1857 Leconte p. 222 pl. 1, fig. 5.

1866 Leconte p. 383

1878 Horn p. 7 pl. 1 fig. 2

1899 Fall p. 10

1902 Kerremans p. 35

? 1906 Kerremans p.

1913 Woodworth p. 195

Type locality: El Paso Texas.

Distribution: Arizona.

opinabilis Fall

1899 Fall p. 30

1902 Kerremans p. 35

1906 Kerremans p. 184 pl. 14 fig. 2

Type locality: San Jose del Cabo. Lower California.

Distribution: Lower California (San Jose del Cabo,(13) Santa Rosa (1); Cotype San Jose del Cabo (10).

Hosts:

ornata Fab.

1775 Buprestis ornata Fabricii p. 220

1781 Buprestis Fabricii p. 277

1787 Buprestis Fabricii p. 180

1788 Buprestis Linne p. 1931

1790 Buprestis Oliver p. 50, No. 64, pl. 7 fig. 67

1792 Buprestis Fabricii p. 199

1801 Buprestis Herbst p. 209 pl. 154 fig. 5a-b

1801 Buprestis Fabricii p. 199

1801 Buprestis Weber p. 74

1805 Illiger p. 90 No. 73

1817 Schonherr p. 238

1821 Buprestis Dejean p. 29

? 1821 Buprestis volvulus Dejean p.

1824 Buprestis xanthocyina Germar p.

1825 Buprestis Say p. 62

1829 Buprestis geranii Harris p. 8

1829 Eschscholtz p. 8

1832 Gray p. 357

1837 Laporte & Gory I p. 6 pl. 2 fig. 7

1836 Buprestis Say p. 159

1837 B. ornata, B. multiguttata Dejean p. 84

1838 Spinola p. 365

1841 dispar Laporte & Gory p. 31 pl. 6 fig. 29

1841 Laporte & Gory p. 31

1848 White p. 5.

1857 Leconte p. 7

1859 Leconte p. 224

1866 Leconte p. 384

1878 Glover pl. 41 fig.11

1878 var. mixta Glover pl. 44 fig. 34

1878 Horn p. 14 pl. 1 fig. 15

1886 Horn p.137

1889 Blanchard p. 30

1893 Hopkins p. 181

1894 Horn p. 374

1898 Cockerell p.

1899 Fall p. 23

1900 Griffith p. 568

1902 Kerremans p. 29

1902 dispar Kerremans p. 29

1906 Kerremans p. 126

1907 Fall & Cockerell p. 180

1909 Blatchley p. 794

1909 Smith p. 293

1913 Manee p. 170

Type Locality:

Distribution: Maine to Florida west to Colorado and Texas.

Virginia: Fredrichsburg V-31 (18)

Florida: Gainsville V-1 (18);

Ohio: Cincinnati V-14 (11);

Penn: Darby (8);

North Caroline: Black Mts. V-23 (9)

South Carolina (4)

Utah: Salt Lake (10); Dry Cr. Can. (10); Silver Lake VII (10);

Colorado: Manitou (18)

Texas: Burnett Co. (10); Fedor (2); Davis Mts. VII (8);

Arkansas: Marion Co. (C)

Arizona: Prescott (4); Yuma (4)

Hosts: Adults feed on dogwood, dandelion, wild rose & Locust blossoms; breeds in Hickory & Locust.

pallidula Kerr.

1909 Kerremans p. 269

Type locality: California.

plagiaticauda Horn

1876 Horn p. 10 pl. 1 fig. 8

1899 Fall p. 14

1902 Kerremans p. 29

1906 Kerreamsn p. 90

1913 Woodworth p. 195

1917 Burke p. 329

1919 Van Dyke p. 189

1917 Chamberlin p. 167

Type locality: Mariposa Co., California.

Distribution: California.

California: Siskiyou (15) Mariposa, El Dorado, Tulare, and Los Angeles Counties. Ahwahnee (13); Kaweah (2); Placerville (10); Lake Tahoe (15).

Host: Manzanita (Arctostaphylos viscida)

postica Fall

1899 Fall p. 25

1901 Fall p. 120

1902 Kerremans p. 36

1906 Kerremans p. 149

1913 Woodworth p. 195

1919 VanDyke p. 189

Type Locality: Los Angeles County, California.

Distribution: Southern California

So. California: Cotype Los Angeles Co. VI (10); Monrovia V San Gabriel VI (13); Pasadena; Sierra Madra VI (C); Bishop, Hullville.

Hosts:

prorosa Fall

1899 Fall p. 23

1901 Fall p. 119

1902 Kerremans p. 36

1906 Kerremans p. 144, pl. 13 fig. 5

1913 Woodworth p. 195

1919 Van Dyke p.152

Type locality: Los Angeles Co., Calif.

Distribution: Southern California.

So. California: El Dorado, San Bernardino and Los Angeles Counties. Los Angeles VI (5); Mt. Wilson VI-13 (1); Placerville (10); Sierra Madra VII (13) Pasadena VI-10 (C);

Host: Kellog Oak (Quercus Kellogii), Myrtle, Ceanothus cuneatus

proxima Waterhouse

See flavormargmata Gray

pubiventris Horn

1878 Horn p. 9 pl. 1 fig. 7

1880 Horn p. 148

1880 lanata Horn p. 148

1899 Fall p. 12

1899 lanata Fall p. 11

1901 Fall p. 119

1902 Kerremans p. 36

1902 lanata Kerremans p. 29

1906 Kerremans p. 87

1906 lanata Kerremans p. 85 pl. 12 fig. 1

1903 biedermanni Skinner p. 239 pl. 10 fig. 2

1907 biedermanni Kerremans p. 518

1913 Woodworth p. 195

1913 lanata Woodworth p. 195

1919 biedermanni Skinner = lanata Horn Van Dyke p. 188

1919 lanata Horn = pubeventris Horn. Van Dyke p. 188

1919 Van Dyke p. 187

Type locality: Owen's Valley California.

Distribution: Utah, Arizona, California.

Utah: Virginia River (4); St. George (4); Kanab.

Arizona: Type of biedermanni Florence V-8 (17); Tuscon (9)

California: Owens Valley V, VI (17); Bishop V-20, VI (C);

Mojave VI-1 (13); Lancaster V (13); Los Angeles Co. (5);

San Bernardino Co. (5); Big Pine VI (10);

Hosts:

pulchella Herbst.

1790 Buprestis ornata (name preoccupied) Oliver, p. 50 pl. 7 fig. 7.

1801 Buprestis Herbst p. 216 pl. 44, fig. 6 a.b.

1817 Schonherr p. 238

1821 Buprestis volvulus Dejean p. 29

? 1824 olydina Germar p.

1825 Buprestis Say p. 61

1837 volvulus Laporte et Gory I p. 6 pl. 2 fig. 8

1836 Buprestis Say p. 159

1837 flavosignata Dejean p. 84

1837 volvulus Dejean p. 84

1837 pulchella Dejean p. 84

1838 ornata Spinola p. 365

1841 flavosignata Gory p. 30 pl. 6 fig. 29

1841 dispar Gory p. 31 pl. 6 fig. 29

1857 flavosignata Gory = volvulus Fab. Leconte. p. 7

1857 volvulus Dej. = pulchella Herb. Leconte p. 7

1857 dispar Leconte p. 7

1857 Leconte p. 7

1859 mixta Leconte p. 227

1859 Leconte p. 225

1859 mixta Leconte p. 222

1863 Leconte p. 82

1873 dispar Gory = mixta Lec. Leconte p. 332

1873 Crotch p. 89

1878 pulchella, varigata, mixta. Glover plate XX fig. 6

1878 Schwarz p. 452

1878 Horn p. 18 pl. 1 fig. 22

1878 var. arizonae Horn. p. 19 pl. 1 fig. 25

1878 var. mixta Horn p. 19 pl. 1 fig. 26

1878 var. immaculata Horn p. 19

1878 Hubbard & Schwarz p. 656

1885 Townsend p. 231

1886 Hamilton p. 28

1895 Hamilton p. 364

1895 Townsend p. 43

? 1898 Cockerell p.

1899 Wickham p. 7

1899 Fall p. 29

1902 Kerremans p. 29

1902 11 ornata Oliver Kerremans p. 29

1902 volvulus L. & G. Kerremans p. 29

1902 flavosignata Gory Kerremans p. 29

1902 mixta Lec. Kerremans p. 29

1902 arizonae Horn, Kerremans p. 29

1902 immaculata Horn Kerremans p. 29

1902 Fletcher p. 107

1904 Hopkins p. 39

1905 Fall p. 271

1905 Knaus p. 351

1906 Kerremans p. 14 p. 175

1907 Fall & Cockerell p. 181

1909 Burke p. 406

1909 Smith p. 293

1909 Blatchley p. 793

1909 Wickham p. 23

1911 Watson p. 84

1912 Gibson p. 100

1913 Manee p. 170

1913 Woodworth p. 195

Type Locality:

Distribution: Florida to Manitoba, west to California and Texas.

N. J. Lisbon (2); DeCosta (8);

No. Carolina: Black Mountains VI-13, VII-5 (9);

Georgia: Tifton (2) Savanna VI (18); Decator Co. (4);
Brunswick (10); Tybee Isl. VI-20 (8); Round Mt. VII-10 (8)
Florida: Key West (4); Sanford V (18); Pensacola X (18);
Ft. Meyer IV (18); Lakeland V-4 (18);
Illinois: McBride (4); Oak Park VIII-5 (7);
Iowa: Keahut (2) Iowa City (W); Ames (W) Elma VI-15 (9)
Wisconsin: Beaver Dam VIII-1 (C)
Mich: Detroit 10
Indiana: McAllister VI (10)
Kansas: Topeka (10)
Missouri: St. Louis (2)
Indian Territory: Mcalaster VI-11 (13)
Texas: La Voca (10); Alvin VII-30 (18); Green Valley VII-10 (8); Chisos Val. VII-1 (8) Carmel Co.
Colorado: Pine Grove (10); Manitou (18) Colo. Springs (10) Cheyenne Can. VII (14).
Arizona: Yarapai Co. V (18); Tuscon V-20 (18);
New Mexico: Red Mesa VI (C); Sandia Mts. (Watson); Ft. Wingate VI-5 (9);
Montana (2); Utah, Nebraska
California: Owens Valley
Canada: Manitoba, Ontario, Montreal

var. mixta: El Paso, Tex. (4); Sapello Can. N.M. (4); Tuscon, Ariz. VI-15 (4); Vowells Mills, La. VIII (4); Vernon Parish, La. (4); Denver Colo. (4); Medicine Bow, Wyo. 6560 ft. VI-23 (4)

Var. immaculata: Colorado (4); Texas (4).

Var. arizonae: Key West, Fla. (4); Texas (4); Key Largo, Fla. (4); Steinhatchee,Fla. (4).

Hosts: Adults taken on Opuntia, primrose, dandelion, thistle,

Rudbechia hurta, Ceanothus americanus and Asclepias tuberosa. Breeds in Bald Cypress (Burke) Taxodium districum and probably in the stems of some of the above mentioned plants.

Altitude: Colorado 2000.

pulchella Gory

See variegata Leconte

pulcherrima Duval.

This is a Cuban species and should not appear on the U. S. list.

quadrisereata Fall.

1899 Fall p. 18

1902 Kerremans p. 36

1906 Kerremans p. 104

1913 Woodworth p. 195

Type Locality: Los Angeles Co., Calif.

Distribution: So. California and Cuba.

California: Pasadena XI-2 (C); Mt. Wilson VI-17 (16); Los Angeles Co. (10); Santa Barbara Co. (cotype Los Angeles Co. (10)).

Cuba: Guantanamo.

Host:

Altitude: Near sea level.

quadrivittata Horn

1870 Horn p. 79

1878 Horn p. 23 pl. 1 fig. 37

?1898 Cockerell p.

1899 Full p. 34

1902 Kerremans p. 29

?1906 Kerremans p.

1907 Fall & Cockerell p. 180

1913 Woodworth p. 195

1919 Van Dyke p. 188

Type Locality: Utah.

Distribution: Colorado, Arizona, New Mexico, Texas, California and Utah.

Colorado (4) (C).

Arizona: Oracle VII-14 (10); Hot Springs VI-21 (10); Ft. Apache (13); Traxton 4200 ft. VI (C); Huachuca Mts. (10); Tuscon (4), Nogalis (4); St. Catalina Mts. VIII-19, 3500 ft. (8) Coyote Mts. VII (8);

New Mexico: Silver City VII-12 (11);

Texas: El Paso (4); Sanderson, Terrell Co., Davis Mts. VII-7 (8)

California: Mt. Lowe VIII (8); Los Angeles VII; Palm Springs (8); Nojave (5)

Utah: St. George.

quatuordecimguttata Lap. et Gory.

See tubulus Fabricii

recticollis Fall

1899 Fall p. 13

1902 Kerremans p. 36

1906 Kerremans p. 88

1907 Fall and Cockerell p. 180

Type locality: Winslaw, Arizona.

Distribution: Arizona (Winslow) and New Mexico.

Host: Taken on Fullugia

Altitude 6300

retifera Lec.

See acuta Leconte

robusta Horn

1878 Horn p. 9 pl. 1 fig. 7

1899 Fall p. 10

1901 Fall p. 119

1902 Kerremans p. 29

1906 Kerremans p.81

1913 Woodworth p. 195

1919 Van Dyke p. 153

Type locality: Owen's Valley California.

Distribution: So. California

California: Owens Valley, Bishop VI-25 (10), VIII (1).

variety rubrosuffusa Fall

1907 Fall p. 240

Type locality, Majove, California.

rubescens Schaef.

1904 Schaeffer, p. 210

1907 Kerremans p. 615

Type locality: Santa Rosa, Lower California.

Distribution: Lower California. Santa Rosa (1); El Taste (1).

rubronotata Lap. et. Gory

1837 Laporte et Gory p. 5 pl. 1 fig. 5

1838 stellaris (Name preoccupied) Spinola p. 364

1840 stellaris Gory p. 28 pl. 5 fig. 25

1841 stellaris Gory p. 28 pl. 5, fig. 25

1849 Solier p. 481

1858 haemorrhoa Leconte p. 68

1859 haemorrhoa Leconte p. 223 pl. 11, fig. 4

1873 stellaris Chev. = rubronottata Gory-Leconte p. 332

1873 hoaemorrhoa Lec. = fasciatopunetata Chev. Leconte p. 332

1878 stellaris Horn p. 14 pl. 1 fig. 18

1882 Waterhouse III, p. 22.

1899 Fall. 23

1902 haemorrhoa Lec. = stellaris Chev. Kerremans p. 28

1913 Woodworth p. 195

1913 stellaris haemorrhoa Woodworth p. 195

Type locality:

Distribution: Texas, Mexico and Chili

Texas: Loredo.

Mexico: Pueblo, Chihuhua, Michicau and Guerrero.

scalaris Mann.

1837 Mannerheim p. 25

1841 mima Gory p. 29 pl. 5 fig. 26

1858 semivittata Leconte p. 69

stepburni Leconte

1859 semivittata Leconte p. 227, pl. 11, fig. 7

1859 Leconte p. 227

1866 semivittata Leconte p. 383

1873 mima Gory = semivittata Lec. Leconte p. 332

1878 mima Horn p. 17

1878 mima Gory = semivittata Lec. Horn p. 26

1882 mima Waterhouse p. 23

1891 stepburni = Duges p. 9

1895 mima Townsend p. 43

? 1898 mima Cockerell p.

1899 Fall p. 27

1902 Kerremans p. 29

1902 mima Kerremans p. 29

1902 semivittata Kerremans p. 29

1902 Cockerell p. 378

1906 K$_e$rremans p. 158

1907 Fall & Cockerell p. 179

1908 Heyne and Taschenberg p. 127

Type locality:

Distribution: Arizona, New Mexico, Texas, Mexico.

Arizona: Santa Rita Mts. VIII (C); Coyote Mts. 3500 ft. VIII, (5) Tuscon 3600 ft. VIII-14 (18); Ft. Huackucha (7); Pinal Mts. (4); Kitt's Peak VIII-10 (18); S.B.Ranch, Cochise Co. 3750 ft. (6);

New Mexico: Orgon Mts. Los Crucis III-8

Texas: El Paso; Sweetwater, Nolan Co. VIII (C); Brownsville VIII 27 (C); Carmal Co. (4); Demmit Co. VI-10 (10)

Mexico: San Louis Potosi; Pueblo; Coahuila; Durango; Michican; Motamoros, Villa Lerde; Monterey and Guerrero.

Hosts: Adults taken on Vebesina encelioides, Polypteris hookerina on Thurbaria and thistle.

Altitude 6000 ft. in Gurrero Mexico. Texas 2100

scapularis Horn.

1894 Horn p. 328, 369 pl. 8 fig. 6

1899 Fall p. 7

1902 Kerremans p. 36

1906 Kerremans p. 12

Type locality: Sierra El Chinche, Lower California.

Distribution: Lower California and California.

Lower California: El Taste (1); Santa Rosa (16).

semivittata Lec.

See scalaris Mannerheim

serena Fall.

1899 Fall p. 16

1902 Kerremans p. 36

1906 Kerremans p. 99

Type locality: Tuscon, Arizona.

Distribution: Arizona.

Arizona: Tuscon Huachuca Mts. VII (C); Palmarlee (9); Ray [illegible]

Host: Horse bean (Parkinsonia microphylla)

Altitude:

sinuata Van Dyke

1919 Van Dyke p. 152 pl. 7 fig. 1

Type Locality: Hullville, Lake Co., Calif.

Distribution: California (Los Angeles, El Dorado & Lake Counties)

Host: Ceanothus cuneatus

Sub. species sexnotata Van Dyke

1919 Van Dyke p. 153 pl. 7 fig. 3

Type locality: Hullville, Lake Co., Calif.

Distribution: California (Lake, El Dorado & Los Angeles Counties)

Host: Ceanothus cuneatus

snowi Fall

1905 Fall p. 270

Type locality Bill Williams Fork, Arizona.

Distribution: Arizona.

Host:

sparsa Horn

1878 Horn p. 11 pl. 1, fig. 10

1899 Fall p. 15

1899 Wickham p. 7

1902 Cockerell p. 378

1902 Kerremans p. 29

1902 Skinner p. 40

1906 Kerremans p. 95 pl. 12 fig. 2

1907 Fall & Cockerell p. 180

Type Locality: Manitou, Colorado.

Distribution: Colorado, New Mexico, Arizona, Utah and California.

Colorado: Cheyenne Can. (10), Waldo Can. (10) Glenwood Springs VIII (13); Colorado Springs

New Mexico: Koehler (C); Beulah VIII; Magdalena Mts. VI., Los Vegos VIII-16 (10); Gallup (4); Ft. Wingate VI, IX, (4); Oak Cr. VIII (10); Grant Co. VI-1 (9)

Arizona: Sabino Basin (18); Ft. Huachuca VII (7); Cochise Co. IV (16);

Hosts: Taken on Chrysopsis villosa and Achillea millifolium. On Yarrow weed.

Altitude 6000 ft. in Arizona.

Season: June-Aug.-Sept.

squamosa Van Dyke

1919 Van Dyke p. 186

Type Locality: Florence, Arizona.

Distribution: Arizona.

Arizona: Posatype Hot Springs VI-29; Catalina Springs, and Florence.

Hosts: Taken on Jatropha multifida and bred from Palo Verde.

stellaris Spinola

See rubronottata Laporte et Gory.

Note: The stellaris of Cheverlot is a Mexican species.

stepburni Lec.

See scalaris Mannerheim

stigmata Horn

1894 Horn p. 328, 370, 372, pl. 7 fig. 2

1898 Wickham p. 305

1899 Fall p. 32

1902 Kerremans p. 36

1906 Kerremans p. 186 pl. 14 fig. 3

1907 Fall p. 241

Type Locality: Tuscon, Arizona.

Distribution: Arizona and Lower California.

Arizona Bill Wms. Fork VIII (2);

Lower California: Cobo San Lucis, San Jose del Cabo,

Santa Rosa VIII (C); El Taste (1);

Hosts: Taken on flowers of mimosa.

subbalteata Lec.

1863 Leconte p. 82

1873 Crotch p. 90

1878 Horn p. 20 pl. 1 fig. 31

1894 Horn p. 328

1899 Fall p. 30

1902 Kerremans p. 36

1906 Kerremans p. 183

1907 Fall & Cockerell p. 180

Type locality: Cape San Lucas, Lower California.

Distribution: New Mexico and Lower California.

Hosts:

subcyanea Fall

See falli Kerremans

texana Lec.

1858 Leconte p. 228, 229

1873 Crotch p. 89

1878 Horn p. 20 pl. 1 fig. 32

1899 Fall p. 30

1902 Kerremans p. 29

1906 Kerremans p. 180

Type Locality: Texas.

Distribution: Texas and Lower California.

Lower California: San Jose del Cabo (1); Santa Rosa (1)

tubulus Fab.

1801 Buprestis Fabricii p. 200

1801 B. culta Weber p. 75

1802 B. culta Illiger p. 248

1824 Buprestis Say p. 62

1829 geranii Harris p. 8

1837 Laporte Gory I, p. 11 pl. 3 fig. 15

1837 quatuordecimguttata Laporte et Gory p. 12 pl. 3 fig. 18

1836 Say p. 159

1837 Buprestis Dejean p. 84

1838 Spinola p. 383

1846 Strum p. 56

1848 White p. 6

1857 Leconte p. 7

57

1857 B. culta Web. Leconte p. 7

1857 B. geranii Hor. Leconte p. 7

1859 Leconte p. 228

1870 Horn p. 79

1873 Crotch p. 90

1878 culta Horn p. 22 pl. 1 fig. 36

1878 culta, tubalus Glover plate XI fig. 35

1878 culta Schwarz p. 452

1878 culta Hubbard & Schwarz p. 656

1882 Waterhousep. 27

1883 Hayward p. 56

1889 culta Blanchard p. 30

1889 Chittenden p. 220

1893 Hopkins p. 184

1893 culta Townsend p. 202

1894 Horn p. 371

1894 culta Horn p. 371, 376

1895 culta Hamilton p. 364

1895 culta Townsend p. 44

? 1898 culta Cockerell p.

1899 Fall p. 31

1901 Scott, p. 31

1902 Kerremans p. 29

1902 culta Kerremans p. 29

1902 geranii Kerremans p. 29

1902 quatuordeamguttata Kerr. p. 29

1902 Fletcher p. 107

1906 Kerremans p. 197

1907 Fall & Cockerell p. 180

1909 Wickham p. 23

1909 culta Smith p. 293

1909 Blatchley p. 794

1913 culta Manee p. 170

1915 Lovell p. 75, 112.

1919 Nicolon p. 17

Type Locality:

Distribution: Ontario to Florida, west to Idaho, New Mexico and Texas.

New Jersey: 5 mi. Beach VI (8); Ft. Lee (18); Westville V (2); Buena (2); Namse V-30 (4); Greenwood Lake VI-4 (4).

Massachusetts: Newton (13); Medford (18); Framingham (14)

Pennsylvania: Bethlehem (13);

Connecticut (1)

North Carolina: Kittrell (10); Black Mts. VI-20 (9);

Virginia: E. Falls Church VI-18 (9);

Indian Territory: Atoka (13);

Georgia: Tifton (2);

Alabama: Spring Hill V-20 (11); Mobile V-7 (11); Mobile V-13 (9); New York: Rockland Co. VI-21 (4); Long Island VII (19); Saffeson (18)

Florida: Enterprise (2); Green Cove Springs (4); Gamsville V-1 (18); Sanford V-8 (18); Tampa IV-18 (10); Fruitland Park (C); Gulfport (C).

Iowa: Iowa City (W)

Kansas: Onaga (4);

Arizona: Sabino Canyon (10);

Idaho: St. Simon IV (4)

Nevada: Verdi (7);

Missouri: Kansas City (10);

Michigan: Detroit (10);

Texas: Dennison (10);

Washington, D. C. (10)

Maryland: Baltimore (10), Plummers Island (10)

New Mexico: Los Vegos III-18 (10)

Hosts: Taken on Hypoxys erecta, Erigeron, dogwood, Asclepia tuberosa, blackberry, Granium maxulatum & wild rose. Breeds in Red Haw ( ), Crataegus, Quercus stems of Dasyleron wheeleri, and Hickory (Hickoria sp).

tuta Horn

1878 Horn p. 11 pl. 1 fig. 11

1894 Horn p. 374

1899 Fall p. 17

1901 Fall p. 119

1902 Kerremans p. 37

1906 Kerremans p. 100 pl. 12 fig. 5

1907 Fall p. 240

1913 Woodworth p. 195

Type Locality: St. George, Utah.

Distribution: Utah, Arizona, California and Texas.

Utah: St. George (16).

Arizona: Argus Mts. (10); Phoenix (C).

California: Death Valley (5).

Texas (4).

Van dykei Fall

1899 Fall p. 23

1901 Fall p. 119

1902 Kerremans p. 37

1906 Kerremans p. 143

1913 Woodworth p. 195

1917 Burke p. 330

1917 Chamberlin p. 167

Type Locality:

Distribution: Washington, Oregon, California, Utah and Nevada.

Oregon: Klamath Falls VII-9 (C);

California: Santa Clara Co. (16); Los Angeles Co. (5); Placerville (10); Lake Tahoe V-27 (C); Mowhawk (13); Mendicino Co. VI-10 (4) Alameda Co. (1); Sierra Madra (13); Cotype Siskiyou Co. (10); San Diego Co. McCloud VII.

Host: Breeds in Ceanothus integerrimmus sp. and Quercus wislizeni

Altitude: Sea level to 5000 ft.

variegata Lec.

1852 Leconte p. 67

1859 Leconte p. 226

1866 Leconte p. 384

1873 pulchella Gory = variegata Lec. Leconte p. 332

1878 Horn p. 16 pl. 1 fig. 19

1894 Horn p. 375

? 1898 Cockerell p.

1899 Fall p. 22

1901 Fall p. 119

1900 K$_e$rremans p. 42

1902 Kerremans p. 29

1906 Kerremans p. 140

? 1907 Fall & Cockerell p.

1911 Watson p. 81

1913 Woodworth p. 195

1917 Chamberlin p. 167

Type Locality: Santa Fe, New Mexico.

Distribution: Rocky Mountain and Pacific Coast States.

Oregon: Hood River V-21 (10)

California: Canville, Trinity Co. VI (15); Mojave (5);

Idaho: Idaho Falls (3);

Utah: Park City VI (10); Silver Lake VII (8); Big Cottonwood Canyon (10); Provo VII-10 (9); Wahatch Mts. VI-20 (10); Salt Lake City VI (2), VII (10); Red Butte VII-3 (9); Beaver Co. (4); Ft. Douglas VII-26 (4); Ogden (10); Beaver Creek Canyon V-29 (18); American Fork Can. VI-23 (10); Emegration, Can. VII-23 (10);

Colorado: Glenwood Springs (13);

New Mexico: Alamogordo V (10); Aztec (10); Albuquerque (W).

Arizona: Prescott (4)

Nevada: and Texas.

Hosts: Beaten from dead branches of P. ponderosa

Season: May-August.

versuta

See guttifera

volvulus Dej.

See ornata Fab. and pulchella Herbst

wenzeli Van Dyke

1919 Van Dyke p. 154 pl. 7 fig. 4

Type Locality: Chisos Mts. Texas.

Distribution: Chisos Mountains, Texas.

Hosts: Unknown.

wheeleri Van Dyke

1919 Van Dyke p. 155 pl. 7 fig. 5

Type Locality: Sabino Canyon, Santa Catalina Mountains, Arizona.

Distribution: Santa Catalina Mountains, Arizona.

Genus Actenodes Lac.

1857 Lacordaire p. 72

Type of the genus Chrysobothris

acornis Say

1836 Buprestis, Say p. 159

1841 Chrysobothris rugulosa Gory p. 177 pl. 30 fig. 172

1846 Chrysobothris punctata Melsheimer p. 147

1859 Leconte p. 241

1859 Blionota californica Motschulsky p. 184

1873 C. rugulosa Gory = A. acornis Say, Leconte p. 332

1878 Hubbard-Schwarz p. 656

1886 C. californica Mots. = A. acornis Say, Horn p. 118

1897 Castle p. 8

1903 Kerremans p. 194

1901 B. californica Mots. = A. acornis Say, Fall p. 117

1903 rugulosa, punctata, Kerremans p. 194

1904 Schaeffer p. 209

1909 Blatchley p. 792

1909 Smith p. 292

1913 Woodworth p. 195

1919 Nicolay p. 19

Type locality:

Distribution: New York to Florida, west to Michigan, Wisconsin, Iowa and Texas.

New York: Rockaway Beach VI-2 (19); Yaphauk VII-13 (19); Montauk Beach VII-2 (19); Bellport VII (19); Port Jefferson VI-7 (19); Buffalo (10);

Wisconsin: Neopit VII-7 (c); Lake Co. VI-10 (11);

Michigan: Detroit (10);

New Jersey: Atlantic City (10)

Ohio: Cincinnati (11)

Louisiana: Vernon Parish (4)

Virginia: Falls Church (10)

Kentucky (4)

Indiana: Orange Co. VI-2 (10)

Texas: Brownwood V I (10).

Host: Bred from Maple (Acer sp.) and hickory (Hickoria sp.)

auronotata Gory

See bellula Mannerheim

bella Leconte

See bellula Mannerheim

bellula Mannerheim

1837 Chrysobothris bellula Mannerheim p. 79

1837 Chrysobothris Dejean p. 90

1841 C. auronotata Laporte-Gory II, p. 20 pl, 4 fig. 30

1846 C. auronotata Strum p. 61

1857 C. auronotata Duval p. 29, 64, pl. 7, fig. 8

1859 bella Leconte p. 240

1867 auronotata Cheverlot p. 584

1873 bella Lec. = auronotata L-G. Leconte p. 332

1878 auronotata Schwarz p. 451

1878 auronotata Leconte p. 470

1893 auronotata Gundlach p. 168

1903 Kerremans p. 194

1903 bella Lec. = bellula Mann. Kerremans p. 194

1903 auronotata Chev. = bellula Mann. Kerremans p. 194

1904 auronotata Chev. Schaeffer p. 209

1906 auronotata Chev. Wenzel p. 38

1914 auronotata Chev. = bellula var. scobrina Mann. Leng - Matchler p. 430.

Type locality:

Distribution: Georgia, Florida, Cuba, Antilles, Haiti and Chili.

Georgia: Tybee Isl. VI-21 (8); Savanah (10)

Florida: Key West IX-18 (4); Miami (1); Elliott Key (1); Lake Worth (10); Biscayne (10).

calcarata Chev.

1835 Chrysobothris calcarota Cheverlot p. 103

1837 C. fulgurata Mannerheim p. 80

1841 C. fulgurata Gory II p. 29 pl. 6 fig. 42

1841 C. lebasi Gory II, p. 29 pl. 6 fig. 43

1844 Chrysobothris Melsheimer p. 145

1868 Glover p. 92

1875 Horn p. 148

1878 Schwarz p. 451

1878 Leconte p. 470

1878 Glover plate XXXIII fig. 38

1882 Waterhouse p. 31

1889 Waterhouse p. 182

1891 Horn p. 46

1898 Wickham p. 305

1901 Fall p. 117

1904 Schaeffer p. 209

1909 Wickham p. 205

1918 Burke p. 211

Type locality: Mexico

Distribution[1]: Southern Arizona and Texas,

Mexico, Guatamala, Nicaragua and Columbia.

Arizona: Tuscon (13); Bill Williams Fork VIII (c); Phoenix (4);

Yuma (c);

Mexico: Matamoris (13)

---

1. This species has been reported from Florida and from Rockville, Pa. Probably an error in determination or in labeling.

Host: Palo verde (Cercidum torreyanum), Bacchata (Zizyphus obtusifolia), (Reported to breed in Peach and White oak by Glover and bred from Hickoria sp. by A. B. Champlain.)

flexicaulis Schaef.

1904 Schaeffer p. 209

Type locality: Brownsville, Texas.

Distribution: Taken only near Brownsville, Texas.

Host: Larva work in Acacia flexicaulis

fulgurata Mannerheim

See calcarata Cheverlot.

lebasi Laporte-Gory

See calcarata Cheverlot

mandax Horn

1891 Horn p. 46

1901 Fall p. 117

1903 Kerremans p. 195

1904 Schaeffer p. 209

1903 Woodworth p. 195

Type locality: Ft. Yuma, Arizona.

Distribution: Arizona, Texas, California, Illinois and Mexico. Arizona: Paratype "Ariz" (17); Prescott (9); Yuma (9);

Texas: New Brunsfels VI-16 (1); Lectotype "Tex.", Paratype "Tex" (17).

Illinois: Paratype "Ill." (17);

Mexico: Reynosa V-20 (10).

punctata Melsheimer

See acornis Say

rugulosa Gory

See acornis Say

Genus Agaeocera Water.

1882 Waterhouse p. 4.

Type of the genus Anthaxia gigas L & G.

gentilis Horn

1885 Halecia gentilis Horn p. 144

1886 Halecia Henshaw p. 95

1889 Waterhouse p. 169

1903 Kerremans p. 60

1903 fenyesi Kerremans p. 60

1908 Kerremans p. 275

1909 Anataxia gentilis Casey p. 172

Type locality; Texas.

Distribution: Arixona, Texas and Mexico.

Arixona: St. Catalina Mts.; Coyote Mts. 3800 ft.

Texas: Uvalde VII-18, 930 ft. (10); Brewster Co. VI (10); San Diego VI-10 (10); Sabina V-26 (10); Rio Grande VI-17 (10); Dimmit Co. (10).

Mexico. Sonora 4000 ft.; Villa Lerdo, Durango; and Coa Niela.

scintillans Water.

1882 Waterhouse p. 4

1903 Kerremans p. 60

Type locality: Sonora, (The spelling in the original work is Songora) Mexico.

Distribution: Arizona and Mexico.

Mexico: Sonora (Waterhouse); Venedio, Sinaloa VII-5 (c), (15).

Arizona: Sabino Basin, St. Catalina Mts. VII-10, 3800 ft. (c).

Genus Agrilus Stephens

1830 Stephens p. 239

Type of the Genus Buprestis, elata, Dejean.

abditus Horn

1891 Horn p. 332

1903 Kerremans p. 281

Type locality: Western Nevada.

Distribution: Nevada and Arizona.

Arizona: Cochire Co. VII-16 (16).

Host: Unknown

Season:

abductus Horn

1891 Horn p. 325

1900 Chittenden p. 67

1903 Kerremans p. 281

Type locality: Texas (Exact locality not known)

Distribution: Arizona, Texas and New Mexico.

Texas: Brownsville (16); San Diego (17).

New Mexico: Alamogordo V-20 (17). Arizona, White oak.

Host: (Quercus arizonica)

abjectus Horn

1891 Horn p. 321

1903 Kerremans p. 281

Type locality: Texas (Exact locality unknown)

Distribution: Texas and Kansas.

Texas: Davis VII-9 (8); Flotonia VII-30 (8).

Kansas: Onaga (13)

Host: Unknown.

abstersus Horn

1891 Horn p. 325

1900 Chittenden p. 67

1903 Kerremans p. 281

Type locality: Southern Arizona.

Distribution: Arizona.

Arizona: Lectotype and Parotypes "Ariz" (17).

Host: Devil's Claw (Acacia greggii)

Season:

acutipennis Mann.

1837 Mannerheim p. 109

1837 Dejean p. 93

1841 latebrus Laporte-Gory II, p. 38, pl. 9 fig. 50

1841 Gory IV, p. 225, pl. 37, fig. 216

1845 Zeigler p. 267

1845 quadri-impressa Zeigler p. 267

1857 4-impressa Lacordaire p. 85

1857 Leconte p. 9

1859 latebrus L-G, Leconte p. 246

1840 Gory p. 225 fig. 216

1873 Crotch p. 93

1878 Hubbard-Schwarz p. 656

1889 Blanchard p. 32

1891 Horn p. 307

1894 Laurent p. 7

1894 Horn p. 378

1894 Harrington p. 11, 15.

1894 Smith p. 189

1894 Smith p. 323

1895 Hamilton p. 364

1900 Chittenden p. 67

1903 Kerremans p. 269

1903 latebus C-G, Kerremans p. 269

1903 4-impressa Zeig., Kerremans p. 269

1906 Felt p. 701

1906 Fall p. 168

1906 Fletcher p. 101

1909 Blatchley p. 801

1909 Easton p. 50

1909 Smith p. 295

1909 Wickham p. 23

1912 Frost p. 252

1917 Nicolay p. 93

1917 Chagnon p. 219

1917 Burke p. 331

1918 Gibson p. 112

1919 Nicolay p. 14.

Type locality:

Distribution: Southeastern Canada to Florica,
west to California.

Canada: Thomhill, Manitoba VI (Wallis);

St. Johns, Que. (Fletcher); Ontario (Harrington).

Mass. Tyrigsboro (4); Framingham V-20, VI-22 (c).

New York: Bellport L.I. V-7 (19)

New Jersey: Hewitt (4); Ft. Lee (9)

Penn. Pittsburg (3)

Rhode Island: Watchhill VI-30 (9)

Iowa: Elma (W)

Utah: American Fork Can. (17), Colorado.

Kansas (4), Florida (10),

Texas: Hackley (9);

California: Pasadena V (13); Castle Crag VII (13).

Host: Bred from gambel oak (Quercus gambelii). Said to breed in poplar and birch.

Season:

addendus Crotch.

1873 Crotch p. 95

1891 Horn p. 329

1894 Horn p. 329

1903 Kerremans p. 271

1907 Fall-Cockerell p. 152, 181

Type locality: Texas

Distribution: Arizona, New Mexico, Texas, Nevada, and Lower California.

New Mexico: Highrolls V-29 (17); Alamogordo IV-29 (17);

Texas: Round Mt. (8); Brownsville VIII (16); New Brunsfels (16)

Arizona (17), Nevada (17)

Lower California: Coral de Piedro (Horn); Sierra El Taste (Horn).

advena Leconte

See lacustris Leconte

aelens Gory

See granulatus Say

angelicus Horn

1891 Horn p. 298

1895 Fall p. 98

1901 Fall p. 119

1903 Kerremans p. 282

1906 Fall p. 168

1912 Frost p. 246

1913 Woodworth p. 195

1917 Burke p. 330

1917a Burke pl. VIII fig. 4, pl. IX fig. 1

1919 Rohwer p. 4.

Type locality: Santa Cruz Mountains, California.

Distribution: California

California: Lectotype Los Angeles (17); San Bernardino Mts. 5000 July (5); Deep Creek 6000 ft. (5)

Host: California live oak (Quercus agrifolia); Taken on Wislizenus oak (Q. wislizeni)

Season: May-July

anxius Gory

1837 Dejean p. 93

1841 Gory (Suppl) p. 226, pl. 37 fig. 217

1848 White p. 36

1857 Leconte p. 9

1859 torpidus Leconte p. 247

1859 gravis Leconte p. 247

1873 Crotch p. 93

1874 Austin p. 269

1878 torpidus Hubbard-Schwarz p. 636

1889 Blanchard p. 32

1889 Linter p.

1889 Schwarz p. 74

1890 Cook p. 119

1891 torpidus Davis p. 66

1891 Horn p. 306

1891 Hopkins p. 259

1892 Slosson p. 6

1892 torpidus Davis p. 80

1893 torpidus Cockerell p. 329

1894 Smith p. 189

1894 Linter p. 406

1895 Harrington p. 31

1895 Evans p. 146

1896 Bowditch p. 7

1898 Chittenden p. 44

1898 Felt p. 993

1899 Slingerland p. 7

1899 Felt pp. 556, 557, 563, 569, 582, 590, 605.

1899 Wickham p. 7

1900 Felt p. 24

1900 Felt p. 1007

1900 Chamberlin p. 42

1900 Chittenden pp. 65, 67

1901 Felt p. 792, 859

1902 MacGillivroy-Houghton p. 46-49

1903 Evans p. 391

1903 Chittenden p. 313

1903 Kerremans p. 269

1903 gravis Lec. p. 285

1903 Harrington p. 81

1904 Hopkins p. 21, 38

1904 Chittenden p. 67

1905 Felt p. 186

1905 Felt p. 257, 284

1906 Slingerland p. 65, 78

1908 Washburn (Minn. Pres. Bul. No. 33)

1909 Burke p. 403, fig. 26

1909 Blatchley p. 801

1909 Frost p. 67

1909 Wickham p. 23

1909 Smith p. 295

1909 Felt p. 98

1910 Gibson p. 13

1911 Felt pp. 108, 109, 113, 127

1912 Felt p. 15-36

1912 Felt p. 101

1912 Frost p. 252

1913 Swaine p. 91

1913 Swaine p. 56

1914 Swaine p. 54

1915 Swaine p. 106

1915 Caesar p. 46

1916 Blackburn-Ellis p. 46

1917 Swaine p. 102

1917 Chagnon p. 219

1917 Hutchings p. 66-70, plate 1.

1917 Gibson p. 149

1917 Burke p. 331

1918 Houser p. 326-327

1918 Swaine p. 1928

1919 Swaine p. 46-48

1920 Knull p. 10

Type locality: torpidus Illinois

Distribution: Maine to West Virginia, west to Rocky Mountain and Pacific Coast States. Canada.

New York: West Point VI-14 (c); N.Y.City V-10 (c); Peekskill (4); Buffalo (4).

New Jersey: Newfoundland VI (4); Hewitt VII (4)

Penn: Spucerville (Knull).

Minn: Duluth(7), Iowa: Iowa City (W), Colorado (Morrison) New Mexico (17), So. California (17), Idaho: Cascade VI-22 (c).

Canada: Edmonton, Alberta VI (Gibson).

Hosts: White Birch (Betula alba), Paper bark birch (B. papyrifera), Mountain birch (B. frontinalis), Aspen (Populus tremuloides), Carolina poplar (P. deltoides) Balm of Gilead (P. balsamifera) and (P. grandidentata)

arcuatus Say

1825 Buprestis arcuata Say p. 251

1836 Say p. 162

1841 cupricollis Gory (Suppl) p. 240, pl. 40, fig. 232

1857 cupricollis Gory, Leconte p. 9

1859 Leconte p. 242

1859 torquatus Leconte p. 243

1859 Lacordaire p. 84

1859 fulgens Leconte p. 243

1859 obliquas Leconte p. 243

1870 Pettit p. 102

1873 Crotch p. 92

1878 Hubbard-Schwarz p. 636, 656

1889 torquatus Blanchard p. 32

1891 cupricollis Gory. Horn p. 297

1891 Horn p. 296

1891 torquatus Lec. = arcuata Say, Horn p. 287

1894 Stormberg p. 36

1895 Hamilton p. 364

1900 Chittenden p. 67

1903 cupricollis Gory, Kerremans p. 271

1903 Kerremans p. 271

1906 Fall p. 168

1909 Easton p. 50

1909 Smith p. 295

1909 Blatchley p. 799

1909 Wickham p. 23

1916 Frost p. 386

1917 Chagnon p. 219

1918 var torquatus Ruggles p. 15

1919 cupricollis Gory p. 29

1920 Knull p. 10

Type locality: Indiana

Distribution: Canada to Florida west to Montana and California.

1918 politus var coryli Gibson p. 112

1919 Nicolay p. 19

Type locality:

Distribution: Massachusetts, New York, Indiana and Manitoba.

New York: Wyandauch VIII-21 (19).

Mass: Paratype "Mass" (17); Sheaburn VI-21 (c).

Illinois: Lagrange VII-28 (c). Riverside VIII-1 (c).

Manitoba: Dangleford (Wallis)

Host: Hazel (Corylus americanus)

audax Horn

1891 Horn p. 300

1903 Wickham p. 70

1903 Kerremans p. 282

1918 Fisher p. 68

Type locality: Texas.

Distribution: Arizona, Texas and Illinois

Texas: Lectotype and Paratype "Tex" (17); Kerrville IV-12 (10).

Illinois (4)

aureus Cheverlot

1837 Cheverlot p. 98

1866 cousii Leconte p. 348, 384

1873 cousii Lec. = aureus Chev., Leconte p. 333

1873 cousii Lec., Crotch p. 94

1891 cousii Lec. Horn p. 309

1897 cousii Lec., Cockerell p. 150

1900 cousii Lec., Chittenden

1903 cousii Lec. = aureus Chec. Kerremans p. 269

1905 cousii Schaeffer p. 131

1906 cousii Lec. Fall p. 168

1907 cousii Fall-Cockerell p. 180

Type locality: Santa Fè, New Mexico.

Distribution: Arizona, New Mexico.

New Mexico: Santa Fe (c); Albuquerque (16); Ft. Wingate IX (4); Jernez Mts. 7500 ft. (8)

Host: Taken on Mentzelia nuda.

auricomus Frost.

1912 Frost p. 251

Type locality: Framingham, Massachusetts.

Distribution: Massachusetts, Connecticut and Pennsylvania,

Connecticut: Lyme V-29. New Haven VI-12. Penn. Castle Rock VI-4 (Greer)

Host: On red oak (Quercus rubea).

auroguttatus Schaeffer.

1905 Schaeffer p. 149

Type locality: Palmarlee, Huachuca Mts. Arizona.

Distribution: Arizona.

Arizona: Palmarlee, Cochire Co. VII-26 (c),

Host: Black oak (Quercus velutinus)

Season: July-Aug.

aurolineatus Gory

See bilineatus Weber

biguttatus Gory

See granulatus Say

bilineatus Weber

1801 Buprestis Weber p. 74

1802 Buprestis Illiger p. 248

1817 Buprestis Schonherr p. 213

1825 Buprestis Say p. 249

1836 Buprestis Say p. 162

1837 Dejean p. 93

1837 bivittatus Kirby p. 161, 164

1837 flavolineatus Mannerheim p. 110

1840 Erichson p. 240

1841 aurolineatus Gory (Suppl) p. 241, 248, pl. 41, fig. 240

1848 bivittatus Kby., White p. 38

1857 aurolineatus Gory = bilineatus Web. Leconte p. 9

1859 Leconte p. 245

1859 bivittatus Kby. Lacordaire p. 84

1866 Leconte p. 384

1870 Pettit p. 102

1872 bivittatus Kby., Bethume p. 35

1873 Crotch p. 93

1877 Provancher p. 360

1878 Hubbard-Schwarz p. 636, 656

1878 Glover pl. XX fig. 16

1880 Zesch-Reinecke p. VII

1884 Harrington p. 102

1885 Harrington p. 31

1889 Tolman p. 343

1889 Chittenden p. 221

1889 Blanchard p. 32

1889

1890 Packard p. 222

1891 Horn p. 301

1891 Hopkins p. 257

1893 Chittenden p. 95

1893 Hopkins p. 82

1893 Hopkins p. 181

1893 Hamilton p. 274

1893 Townsend p. 202

1894 Hopkins p. 145

1894 Hopkins p. 251

1895 Hamilton p. 346

1895 Harrington p. 31

1896 Hopkins p. 246

1896 Hopkins p. 130-131

1897 Harrington p. 70

1897 Chittenden p. 1-8, fig. 1

1897 Chittenden p. 67-75

1898 Hopkins p. 103, 108

1899 Harris p. 414

1899 Hopkins p. 437

1899 Hopkins p. 254-255

1899 Lugger p. 61

1900 Chittenden p. 66-67

1900 Moffat p. 100

1902 Chittenden p. 732

1903 Kerremans p. 269

1903 bivittatus Kby. Kerremans p. 269

1903 flavolineatus Man. Kerremans p. 269

1903 aurolineatus Gory Kerremans p. 269

1903 Chittenden p. 313

1904 Chittenden cir. 24, p. 1.

1904 Pettit p. 24

1904 Hopkins p. 38

1905 Felt p. 257, 280

1906 Fall p. 168

1907 Harrington p. 70

1907 Hopkins p. 99

1909 Smith p. 295

1909 Burke p. 401 fig. 25.

1909 Wickham p. 23

1909 Blatchley p. 800

1909 Easton p. 50

1909 Felt p. 106, 136

1910 Gibson p. 100

1911 Felt p. 113-114

1912 Frost p. 252

1913 Manee p. 170

1914 Felt p. 373

1915 Chopman p. 283 plate

1917 Chagnon p. 214

1917 Morris p. 22

1917a Burke p. 3 pl. VI fig. 2

1919 Nicolay p. 19

1920 Knull p. 10

Type locality:

Distribution: Southern Canada, Maine to Georgia west

to Wisconsin, Iowa and Texas.

Hosts: White oak (Quercus alba) red oak (Q. rubra), Black oak W.V. (Q. velutina), Scarlet oak (Q. coccinea), Bur oak (Q. macrocarpa), Chestnut (Castenea dentata), and beech (Fegas sp.)

bivittatus Kirby

See bilineatus Weber

blanchardi Horn

See horni Kerremans

blandus Horn

1891 Horn p. 321

1901 Fall p. 120

1903 Wickham p. 70

1903 Kerremans p. 272

1913 Woodworth p. 195

Type locality: Tehachepi, California.

Distribution: Southern California, Utah and Arizona.

California: Lectotype and Paratypes Tehachapi Cal (17); Pasadena VI-VII (5) Azusa (9)

Utah: (1); Virginia River (4)

Arizona: Prescott (9).

burkei Fisher

1917 Fisher p. 287

1917b Burke (under agrilus sp.) p. 331

Type locality: Placerville, California

Distribution: California, Oregon, New Mexico, Colorado and Victoria, B. C. (4).

Hosts: White alder (Alnus rhombifolia), paper-leaf alder(A. tenuifolia).

Season: April-July.

cavatus Chevrolat

1835 Chevrolat p. 99 No. 142.

1859 Lacordaire p. 85

1873 texanus Crotch p. 94

1887 texanus Cr. -- cavatus Chev., Horn p. 145

1889 Waterhouse p. 69

1891 Horn p. 310

1891 Duges p. 22

1903 Kerremans p. 268

1903 texanus Cr. Kerremans p. 268

1906 Fall p. 168

Type locality: Mexico

Distribution: Florida, Texas, Arizona and Mexico.

Texas: New Brunsfels (1); Flotonia VII-30 (8); Fedor (3); Bethage V-7 (9).

Arizona: Pinal Mts. (9); Nogales VIII-31 (16).

Mexico: Sonora, Cerro de Plumas, Almotonga, Guerrero, Cordova, Vera Cruz and Jalapa.

Host: Unknown.

celti Knull

1920 Knull p. 11

Type locality: Hummerlstown, Penn.

Host: Hackberry (Celtis occidentalis)

cephalicus Lec.

Var. of egenus Gory

champlaini Frost

1912 Frost p. 245

1912 Britton p. 291

Type locality: Linn Co., Connecticut.

Distribution: Connecticut and Pennsylvania.

Host: Hop-hornbeam (Ostrya virginica)

Season:

concinnus Horn

1891 Horn p. 310

1903 Kerremans p. 283

Type locality: Georgia

Distribution: Georgia, Florida and Texas.

Florida: Jacksonville V-16 (17) Cotype"Florida" (17).

Texas: Brownsville VI (16).

Hosts:

Season:

cousii Leconte

See aurens Chevrolat

coryli

Variety of arcuatus Say

crataegi Frost

1912 Frost p. 247

1915 Kiviat, p. 237

Type locality: Chinchilla, Pennsylvania.

Distribution: Pennsylvania, Wisconsin and Illinois

Penn. Highspire, Harrisburg, Bred from Crataegus

III-11, IV-6

Illinois: Edgebrook VI-8, Riverside VI-26 (c)

Host: Crataegus

crinicornis Horn

1871 Horn p. 294

1903 Kerremans p. 283

1909 Blatchley p. 798

1915 Kiviat p. 237

1915 Weiss p. 101

Type locality: Massachusetts

Distribution: New Jersey, Massachusetts, Pennsylvania,

Virginia, Ohio, Indiana and Illinois.

Host:

Season: May-June

cuneus Leconte

See lacustris Leconte

cupricollis Gory

See arcuatus Say

cupreolus Leconte

See politus Say

defectus Leconte

See otiosus Say

desertus Leconte

See politus Say.

difficilis Gory

1841 Gory IV, p. 224, pl. 37, fig. 215

1837 Dejean p. 93

1855 occidentalis Uhler p. 416

1857 occidentalis Uhler = difficilis Gory, Leconte p. 9

1859 Leconte p. 244

1873 Crotch p. 92

1878 Hubbard-Schwarz p.656

1891 Horn p. 287

1896 Hamilton p. 263

1900 Chittenden p. 67

1903 Kerremans p. 269

1903 occidentalis Uhl. Kerremans p. 269

1909 Blatchley p. 797

Type locality:

Distribution: Mississippi Valley, Michigan to Texas.

Michigan, Ohio: Cincinnati (11); Iowa (17); Kentucky (16); Missouri (10: Tennessee: Elmwood (13);

Louisiana (16); Texas: Fedor (4), Dallas (11). 39

Host: Willow (Salix sp.)

dollii Schaeffer

1904 Schaeffer p. 210

Type locality: Brownsville, Texas.

Distribution: Texas and Arizona.

Arizona: Huachuca VII, VIII (1).

dozieri Fisher

1918 Fisher p. 67

Type locality: Gainsville, Florida

Distribution: Florida (Gainsville, Archer and Enterprise)

Host: Blue beech (Osbrya virginiana)

Season: March-April.

egenus Gory

1841 Gory p. 258 pl. 43 fig. 251

1837 Dejean p. 93

1857 Leconte p. 9

1859 Leconte p. 249

1863 Leconte p. 82

1869 Glover p. 91

1871 Glover p. 67

1871 Glover p. 65

1878 Hubbard-Schwarz p. 636, 656

1880 Zesch-Reinicke p. VII

1883 Harrington p. 80

1884 Harrington p. 102

1884 Harrington p. 36, 45.

1885 Harrington p. 31

1889 Schwarz p. 31

1889 Chittenden p. 219

1889 Blanchard p. 32

1890 Packard p. 291, 372

1891 Schwarz p. 74

1891 Horn p. 331

1891 Schwarz p. 258

1892 McGillivroy-Houghton p. 251

1893 Hopkins p. 184

1895 Hamilton p. 364

1900 Chittenden p. 67

1903 Kerremans p. 271

1903 Knous p. 176

1906 Felt p. 715, 729

1907 Fall-Cockerell p. 181

1908 Houghton p. 162

1909 Smith p. 295

1909 Blatchley p. 804

1913 Manee p. 170

1915 Johnson p. 312

1916 Garman p. 124

1917 Chagnon p. 219

1919 Nicolay

1920 Knull p. 11

Type locality:

Distribution: Connecticut to North Carolina, west to

Indiana, Missouri, Kansas, Nebraska, Arizona and Texas. Also reported from Canada.

Common on Long Island on scrub oak, May to Aug. (19); Stanton Island N.Y. (4); Framingham, Mass. VI-10 (14); Chiricahua Mts., Arizona VI-2 (10); Dallas, Texas (4); Riverside, Illinois VIII-3 (c).

Pennsylvania: Harrisburg (Knull); Highspire V-29 (c)

Maryland: Plummers Island VI-15 (c).

N. Carolina: Ashville VI-12 (c)

Iowa: Iowa City VI-25 (c).

West Virginia: White Sulphur VII-13 (c).

Host: Breeds in White hickory (Hickoria alba) and yellow locust (Robinia pseudacacia) and (R. neomexicana), Adults feed on the leaves of the hosts.

variety cephalicus Leconte

1859 Leconte p. 249

1903 Kerremans p. 283

1912 Frost (Redescribed) p. 246

1918 Gibson p. 112

1920 Knull p. 10

Type locality:

Distribution: Manitoba (Gibson) Maine, Connecticut, Pennsylvania, Indiana and Illinois.

Host: Hazel (Corylus americana) and Dogwood (Cornus florida)

Season: May-July

variety puncticeps Leconte

1859 Leconte p. 249

1880 Zesch-Renicke p. VII

1903 Kerremans p. 283

1912 Frost p. 249

Type locality:

Distribution: Massachusetts, Connecticut.

Host: Black locust (Gledischia trianthos)

var. gemiatus Say

1836 Buprestis geminatus Say p. 163

1842 nigricans Gory (suppl) p. 257, pl. 43, p. 250

1857 Leconte p. 9

1857 Lacordaire p. 84

1873 nigricans Gory. Leconte p. 332

1873 geminatus Say = otiosus Say, Crotch p. 92

1891 geminata Say = otiosus Say, Horn p. 287

Type locality:

Distribution: Wisconsin

Hosts:

fallax Say

1836 Say p. 163

1841 zemes Gory (suppl), p. 234, pl. 39 fig. 225

1855 impressipennis Uhler p. 416

1857 Lacordaire p. 84

1857 zemes Gory, Leconte p. 9

1859 Leconte p. 246

1873 zemes Gory = quadriguttatus Gory, Leconte p. 332

1873 Crotch p. 93

1880 Zesch-Reinecke p. VII.

1891 Davis p. 67

1891 Hopkins p. 256

1891 Horn p. 316

1893 Hopkins p. 184

1894 Stormberg p. 36

1895 Hamilton p. 364

1899 Evans p. 321

1900 Chittenden p. 67

1903 Kerremans p. 272

1903 impressipennis Uhler, Kerremans p. 272

1906 Felt p. 746

1908 Houghton p. 160

1909 Blatchley p. 802

1909 Wickham p. 23

1909 Smith p. 295

1912 Frost p. 252

1917 Chagnon p. 219

1920 Knull

Type locality:

Distribution: (Canada to Louisiana and Texas, west to Nebraska, Horn p. 317) Delaware, New York, New Jersey Pennsylvania, West Virginia, Iowa, Indiana, Missouri and Florida.

New York: Long Island (4)

New Jersey: Anglesea VI-1 (8)

Penn. Phila. V-30 (8); Jannette (13);

Kansas: Baldwin VI-2 (0)

Missouri: St. Louis (8)

Florida: Marianna IV-25, VI-12 (14).

Iowa: Iowa City (W); Fairfax (W) Waterloo (W).

Hosts: Hackberry (Celtus occidentalis) Honey locust (Robinia pseudocacia) Black locust (Gledischia trianthos). Also reported from cottonwood and oak.

Season: June (Illinois)

felix Horn

1891 Horn p. 326

1894 Horn p. 328

1900 Chittenden p. 67

1900 Griffith p. 568

1903 Kerremans p. 285

1905 Schaeffer p. 131

Type locality: Tuscon, Arizona.

Distribution: Connecticut, Penn. Mass. Indiana, Iowa.

Connecticut: Lyme

Penn: Highspire VI-2, VI-20 (c), Jannette VI-5 (3).

Mass: Sherborn VI-9 (14)

Indiana: Lafayette VI-21

Iowa: Iowa City VI-25 (c).

Host: Palo verde (Parkinsonia microphylla)

ferrisi Dury

1908 Dury p. 368

1909 Blatchley p. 797

Type locality: Cincinnati, Ohio.

Distribution: Indiana, Ohio and Kentucky.

Indiana: (Blatchley);

Kentucky: Louisville (16);

Host: Hackberry (Celtis occidentalis)

Season: June-July

flavolineatus Mannerheim

See bilineatus Weber

floridanus Crotch

1873 Crotch p. 94

1878 Schwarz p. 452

1891 Horn p. 328

1900 Chittenden p. 67

1919 Blatchley p. 29

Type locality: Florida

Distribution: Florida

Host: oak (Quercus sp.)

frenatus Gory

See vittaticollis Randell

frosti Knull

1920 Knull p. 8

Type locality: Framingham, Mass. V-25.

Distribution: Pennsylvania and Massachusetts.

fulgens Leconte

1859 Leconte p. 243

1873 Crotch p. 92

1889 Blanchard p. 32

1890 Riley-Howard p. 348

1895 Harrington p. 31

1915 Kiviat p. 237

Type locality: Missouri

Distribution: Lake Superior to Missouri

Host: Hazel (Corylus americana) On maple.

Season:

fusipennis Gory

1841 Gory IV p. 238, pl. 39, fig. 230

1857 Leconte p. 9

1859 Leconte p. 242

1873 Crotch p. 92

1891 Horn p. 289

1903 Kerremans p. 285

1912 Leng. p. 298

Type locality:"United States" (Probably Georgia).

Distribution: Tennessee, Georgia and North Carolina.

North Carolina: Tyron (10).

Host: Sourwood (Oxydendrum arboreum)

geminatus Say

Variety of egenus Gory

granulatus Say

1823 Buprestis granulatus Say p. 162

1836 Buprestis Say p. 162

1837 Dejean p. 93

1841 quadriguttatus Gory (Suppl) p. 228, pl. 39 fig. 219.

1841 alens Gory (Suppl) p. 234

1841 biguttatus Gory p. 24

1857 quadriguttatus Gory, Leconte p. 9

1859 Leconte p. 245

1859 quadriguttatus Leconte p. 245

1873 biguttatus Gory = granulatus Say, Crotch p. 93

1873 zemes Gory = granulatus Say, Crotch p. 93

1873 Crotch p. 93

1883 Burrill p. 121

1889 Blanchard p. 32

1890 Packard p. 443-444

1891 Horn p. 302

1891 Blanchard p. 308

1895 Hamilton p. 364

1895 Evans p. 146

1899 Harris p. 411

1903 Kerremans p. 273

1908 Gibson p. 125

1909 Smith p. 295

1909 Blatchley p. 801

1913 Manee p. 171

1917 Burke p. 330

Type locality:

Distribution: New England to Carolina, west to Montana, Idaho and Colorado.

Mass: Fall River (9)

New York: Rockland Co. (4); Stanton Island VI (4);

Penn. Philadelphia (2); Abington (2); Fox Chase VII-28 (8); Swarthmore VII-8 (c).

Maryland: Plummer's Island VI-21 (c).

Wisconsin: Bayfield (1)

Colorado: Littleton VI-24 (14).

Host: Lombardy poplar (Populus nigra-italica), black alder (alnus nigra), willow (Salix sp.), black cottonwood (Populus trechocarpa), Carolina poplar (P. deltoides)

Season:

gravis Leconte

See anxius Gory

horni Kerremans

1891 blanchardi Horn p. 306

1900 horni N.N. for blanchardi (name preoccupied), Horn, Kerremans p. 341

1903 Kerremans p. 285

1909 Frost p. 67

1917 Chagnon p. 218

Type locality: Tyngsboro, Massachusetts.

Distribution: Ontario, to New York west to Lake Superior Region

Ontario: Colandar VII-19 (c).

Massachusetts: Lectotype, Tyngsboro (17); Framingham VII-27

Illinois: La Grange VII-11 (2).

Host: Not reported.

Season:

huachucae Schaeffer

1905 Schaeffer p. 150

Type locality: Ramsey Canyon, Huachuca Mts., Arizona.

Distribution: Cochise Co., Arizona.

Arizona: Ramsey Canyon (16) Palmerlee VIII-2 (c).

Host: Unknown

Season: July-Aug.

illictus Fall

See jacobinus Horn

imbellis Crotch

1873 Crotch p. 94

1878 Schwarz p. 452

1889 Blanchard p. 29, 32

1891 Horn p. 332

1891 Blanchard p. 308

1900 Chittenden p. 68

1903 Kerremans p. 271, 286

1909 Easton p. 50

1909 Smith p. 295

1919 Nicolay p. 20

Type locality: Florida.

Distribution: New England to Florida, Manitoba to

Texas, Arizona and Lower California.

Mass: Nantucket Island (4); Saugus VIII-22 (14).

New York: Yakhauk and Queens VI-VII (19),

New Jersey: Spotswood (4); Clementon V-30 (2); Westville VI-14 (c).

Maryland: Blandsburg VII-6 (10);

Virginia: Pennington Gap VII-2 (10); Falls Church (10).

Florida: Type "Fla." (17); Leve Co. (8); Miami (1); Tampa (4); St. Augustine VI-10 (2).

Lower California: El Taste (1)

Arizona: Williams VII-27 (4).

Host: Bred from Yellow locust (Robinia pseudocacia) and taken on sunflower (Helianthemum canadenses)

Season:

impexus Horn

1891 Horn p. 327

1894 Stormberg p. 36

1900 Chittenden p. 68

1903 Kerremans p. 272

Type locality: Arkansas.

Distribution: Illinois, Arkansas, Nebraska, to Texas and Arizona.

Nebraska: Lectotype Neb. (17);

Kansas: Onaga (1); Dickinson Co. VIII (0).

Arkansas: Paratype Ark. (17).

Texas: Alpine VI-23 (2).

Arizona: Catalina Springs (10).

Host: Honey locust (Robinia pseudocacia) black locust (Gleditschia tricauthrus)

Season: July-Aug.

impressipennis Uhler.

See lecontei Saunders

ineptus Horn

See inhabilis Kerremans

inhabilis Kerremans

1894 ineptus Horn p. 328, 378

1900 inhabilis n.n. for ineptus Horn (name preoccupied)
Kerremans p. 341

1903 Kerremans p. 286

1904 ineptus Horn, Schaeffer p. 211

Type locality: Sierra El Taste, Bajo California.

Distribution: Kansas? Lower (Bajo) California (Coral de Piedra, Sierra El Taste, Pescadero and Santa Rosa)

Host: Unknown.

Season:

interuptus Leconte

See obsoletoguttatus Gory

jacobinus Horn

1891 Horn p. 314

1901 Fall p. 120

1901 illictus Fall p. 120

1903 Kerremans p. 286

1903 illictus Fall, Kerremans p. 272

1907 illictus Fall = jacobinus Horn, Fall p. 176

1913 illictus Woodworth p. 195

Type locality: San Diego, California.

Distribution: Southern California.

So. California: Clearmont (16); Pomona (5) Pasadena VI, VII (5); Palm Springs IV (13); San Diego VIII-13 (4)

Host: Unknown.

juglandis Knull.

1920 Knull p. 7.

Type locality: Hummelstown, Pa. (VI-9).

Distribution: Pennsylvania and Connecticut.

Host: Butternut

Inglaus cinerea

knowsi Schaeffer

See oblinus Leconte

lacustris Leconte

1850 Leconte p. 227

1850 advena Leconte p. 227

1859 Leconte p. 250

1866 cunens Leconte p. 384

1870 Pettit p. 102

1873 pubiorutris Crotch p. 95

1878 Hubbard-Schwarz p. 636

1891 Horn p. 330

1894 var cunens Lec., Horn p. 328

1900 Chittenden p. 67

1907 Fall-Cockerell p. 181

1909 Blatchley p. 804

1913 Woodworth p. 195

Type locality: Lake Superior Region.

Distribution: Lake Superior Region to Kansas (McPherson)

New Jersey: DeCosta V-29 (2);

Kansas: Douglas Co. 900 ft. (4)

Florida: St. Augustine (2)

Arizona: Williams (16); Cochise Co. VII (16).

New Mexico: Santa Fe (13); Thornton VIII (13).

Texas: Beeville V-19 (10); Columbus VII-23 (10); Flotonia VII-30 (8); Fedor V (3), VI (2); Brownsville (8); Lurling (1);

California: Del Rio (14); Newhale (5)

Lower California: Santa Rosa (1).

Host: Bred from (C. eleaguifolium) (Croton copitatum) and taken on white oak (Quercus alba)

latebrus Laporte-Gory

See acutepennis Mannerheim

lateralis Say

1823 Say p. 159

1836 Say p. 162

1857 Lacordaire p. 84

1871 sayi Saunders p. 126

1876 Thomas p. 114

1891 Horn p. 290

1891 sayi Saunders = lateralis Say. Horn p. 287

1900 Chittenden p. 68

1903 Kerremans p. 287

1903 sayi Saund. Kerremans p. 287

1905 Schaeffer p. 150

1907 Fall-Cockerell p. 180

1909 Blatchley p. 798

1909 Smith p. 294

1913 Gibson p. 126

1915 Somer p. 14

1915 Johnson p. 312

1919 Nicolay p. 19

Type locality: Lake Superior Region

Distribution: Nova Scotia and New England States South to New Jersey west to Lake Superior Region, Missouri and New Mexico.

Nova Scotia: Port Midway VII-7 (14).

New York: Buffalo VI (4); Yakhauk VI-9 (19) Bellport VII-9 (19); Queens VII-16 (14).

New Jersey: Lakehurst V-22 (4); Atco VI-3 (2); Buena (2).

Host: Poplar (Populus sp.)

Season: July (Canada)

lecontei Saunders

1855 impressipennis Uhler (name preoccupied) p. 415

1859 subfasuatus Leconte (name preoccupied) p. 245

1871 lecontei Saunders p. 117 No. 110

1873 Crotch p. 93

1873 subfasuatus Lec. Crotch p. 93

1884 Lugger p. 203

1891 Horn p. 324

1894 Stormberg p. 36

1895 Hamilton p. 364

1900 Chittenden p. 68

1903 Kerremans p. 224

1903 subfasuatus Lec. Kerremans p. 224

1904 Schaeffer p. 211

1906 Felt p. 736

1909 Blatchley p. 804

1909 Smith p. 295

1920 Knull p. 11

Type locality: Illinois

Distribution: Canada to Louisiana, West Illinois and Texas. Arizona.

New Jersey: Anglesea (8)

Penn. Lemoyne (14); Hummelstown (10); Lemoyne Iv-16 (17); Harrisburg (c).

Michigan: Marquette.

D. of C. Washington (10).

Tenn: Elmwood (13);

Illinois: Riverside VII-2 (9);

Louisiana: Oplelousus IV-24 (8)

Texas: Dallas (4); Carmal Co. (1); Brownsville (16); Round Mt. (8); Davis Mt. (8) Chisos Mts. VII-19 (8); Beeville (10); San Diego IV-27 (17); New Brunsfels (16).

Hosts: Hackberry (Celtus occidentalis) Dogwood (Cornus florida)

Season: June-July

lucana Fall

1906 Fall p. 167

Type locality: El Taste Lower (Bajo) California.

Distribution: Reported only from the type locality.

Host: Unknown.

macer Leconte

1858 Leconte p. 70

1859 Leconte p. 248

1891 Horn p. 298

1896 Hamilton p. 292

1896 Hamilton p. 263

1900 Chittenden p. 68

1903 Kerremans p. 268

1905 Schaeffer p. 131

Type locality: Eagle Pass, Texas.

Distribution: Pennsylvania, Southwestern Texas, Kentucky, Kentucky (4).

(Penn. record is doubtful)

Texas: Carmal Co. (1); Chisos Mts. VII-28 (c); Brownsville VI-13 (c).

Host: Hackberry (Celtes occidentalis)?

Season:

masculinus Horn

1891 Horn p. 295

1892 Slosson p. 6

1894 Stormberg p. 36

1900 Chittenden p. 68

1903 Kerremans p. 270

1909 Blatchley p. 799

1915 Weiss p. 101

1917 Chagnon p. 219

1920 Knull p. 10

Type locality: Illinois.

Distribution: Quebec to New Jersey, west to Illinois and New Mexico.

Canada: Montreal, Que. (2)

Connecticut: Paratype "Conn." (17)

New Jersey: Newport (2);

Pennsylvania: Harrisburg IV-14 (Knull)

New York: Potsdam (2); Buffalo VI-21 (4); Stanton Isl (4).

Missouri: St. Louis V-12 (c)

Illinois: Galesburg (1) Lectotype "Ill." (17). Wisconsin: Beaver Dam VI-23 (c).

Ohio: Cincinnati, VI-1, VII-2 (11); Columbia (c)

New Mexico: Demming VII-17 (17).

Host: Box elder (Acea negundo),

Season: July

mercurius Wickham

1903 Wickham p. 70

1907 Fall-Cockerell p. 181

Type locality: Dunning, New Mexico.

Distribution: Reported only from type locality 178

Host:

Season:

muticus Leconte

1858 Leconte p. 70

1859 Leconte p. 248

1891 Horn p. 314

1903 Kerremans p. 296

1906 Tucker p. 11

Type locality: Kansas

Distribution: Kansas, Colorado, Texas.

Kansas: Wallace Co. VII (1); Grove Co. 2500 ft. (9)

Texas: Fedor V (3), VI-7 (7); Tyler Co. (9).

nevadensis Horn

1891 Horn p. 303

1903 Kerremans p. 288

1905 Schaeffer p. 131

1917 Chamberlin p. 169

Type locality: Nevada

Distribution: Western Nevada and California

California: Cole VII (13); Tulare Co. (16); Yosemite (15).

Host: Aspen (Populus tremuloides)

Season:

negricans Gory

See geminatus Say

niveiventris Horn

1891 Horn p. 304

1894 Horn p. 328

1894 Fall p. 98

1898 Wickham p. 305

1901 Fall p. 120

1903 Kerremans p. 270

1906 Fall p. 168

1913 Woodworth p. 195

1917 Burke p. 331

Type locality: Western Nevada.

Distribution: California, Nevada, Arizona, New Mexico, and Lower California.

California: Los Gatos, Placerville V-15; Sonoma Co. (4); Yreka (4); Azura VI-6 (9), Bishop VI-2 (13); Cole VI-1 (13); Los Angeles (c), Pasadena (1), Palo Alto (c).

Arizona: Yuma (4)

New Mexico: Bulah (1)

Lower California: San Pedro Mts.

Nevada: Parotype Nev. (17).

Host: Lombardy Poplar (Populus nigra-italica), Black cottonwood (P. trichocarpa), Willow (Salix sp.), western black willow (S. lasiandra) and California live oak (Quercus agrifolia)

oboliguus Leconte

See fulgens-arcuatus

obolinus Leconte

1859 Leconte p. 248

1870 Pettit p. 102

1891 Horn p. 313

1901 Fall p. 120

1903 Kerremans p. 288

1909 Knausi Schaeffer p. 376

1910 Knausi Sch= obolinus Lec., Fall p. 138

1913 Woodworth p. 195

Type locality: Kansas

Distribution: Canada (Ontario), Kansas, California and Texas.

Kansas: Belvidere V1-21 (16).

obsoletoguttatus Gory

1841 Gory p. 256, pl. 43, fig. 249

1837 Dejean p. 93

1848 White p. 38

1857 Leconte p. 9

1859 interuptus Leconte p. 246

1873 Crotch p. 93

1880 interuptus Lec. Zesch-Reinecke p. V11

1889 interuptus Lec., Blanchard p. 33

1889 Chittenden p. 221

1891 Horn p. 317

1894 Stormberg p. 36

1895 Slosson p. 319

1895 Hamilton p. 364

1895 interuptus Lec. = obsoletoguttatus Gory, Henshaw (Suppl) p. 2

1896 Bowditch p. 6

1897 interruptus Lec. Harrington p.7

1897 Cockerell p. 151

1898 Hopkins p. 103

1900 Chittenden p. 68

1903 Kerremans p. 272

1903 interruptus Lec. Kerremans p. 286

1906 Felt p. 701

1907 Fall-Cockerell p. 181

1907 Harrington p. 71

1909 Blatchley p. 802

1909 Smith p. 295

1909 Wickham p. 23

1912 Frost p. 248

1917 Chagnon p. 219

1917 Morris p. 22

1919 Nicolay p. 20

1920 Knull p. 10

Type locality:

Distribution: Southeastern Canada, New England States to North Carolina, west to Iowa and New Mexico.

Massachusetts VI-10 (4); Framingham VI-9 (c); Sherborn V-30 (c) New York: Common on Long Island (19); Stanton Isl (4); Buffalo VI-7 (4).

New Jersey: South Orange Vl-23 (4)

Virginia: Great Falls (10); Jannette (13):

Penn: Philadelphia V-30 (8) Jannette VII-2 (0).

Louisiana: Opalusus IV-29 (8)

Kansas: Douglas Co. 900 ft. (4)

Illinois: Riverside V-12 (c)

Iowa: Iowa City (W); Elmo (W); Fairfax (W)

Ohio: Cedar Point VII-5 (c).

Hosts: Beech (Fagus americana), Birch (Betula sp.), Red oak (Quercus rubra) Shingle oak (Q. imbricaria) blue birch (Carpinus caroliniana), iron wood (Ostrya virginiana) and hickory (Hickoria sp.)

obtusus Horn

1891 Horn p. 288

Type locality: Texas (Near the lower Rio Grande)

Distribution: Southwestern Texas.

Texas: Lectotype and Paratype "Tex" (17); Chisos VII-20 (8).

Host: Unknown

Season:

occidentalis Uhler

See difficilis Gory

ornatulus Horn

1891 Horn p. 319

1903 K

T estern Texas. (Exact locality unknown)

I stern Texas.

T Paratype "Tex" (17); Carmal Co. (1);

ia farnesiana)

378.26
1918 - #1 & 3
1920 #1 & 5
1921 # 1 - 7
Faust

otiosus Say

1836 Buprestis Say p. 163

1841 virens Gory (Suppl) p. 259, pl. 43, fig. 252

1857 virens Gory. Leconte p. 9

1859 Leconte p. 244

1859 defectus Leconte p. 244

1870 Pettit p. 102

1873 defectus Lec. = otiosus Say Crotch p. 92

1873 pusillus Say = otiosus Say Crotch p. 92

1873 geminatus Say = otiosus Say Crotch p. 92

1874 Henshaw p. 17

1877 Provancher p. 359

1878 defectus Lec., Hubbard-Schwarz p. 656

1880 Zesch-Reinicke p. VII

1884 Harrington p. 45

1884 Harrington p. 101

1885 Harrington p. 31

1889 Townsend p. 233

1889 Blanchard p. 32

1890 Packard p. 362

1891 defectus Lec., Horn p. 293

1891 Horn p. 291

1893 Hopkins p. 183

1893 Townsend p. 202

1894 Stormberg p. 36

1894 Chittenden p. Ins life VII

1895 Hamilton p. 364

1896 Walcott p. 236

1897 Slosson p. 238

1900 Chittenden p. 65

1902 Young p. 157

1903 Kerremans p. 272

1903 defectus Lec. Kerremans p. 271

1903 virens Gory, Kerremans p. 272

1906 Felt p. 502, 518, 729.

1909 Smith p. 295

1909 Easton p. 50

1909 Blatchley p. 798

1909 Wickham p. 23

1912 Frost p. 252

1915 Johnson p. 312

1917 Chagnon p. 219

1919 Nicolay p. 20

1919 defectus Nicolay p. 19

1920 Knull p. 8

1920 defectus Knull p. 10

Type locality: Kansas.

Distribution: Canada and the New England States south to Georgia, west to Iowa, Kansas and Texas.

Vermont (4)

Mass: Sherborn VI-9 (14); Brookline (13); Framingham V-31 (c)

Conn: New Haven V-10 (14);

New York: Stanton (4); Buffalo VI-10 (4); Peekskill (7); common on Long Island V-VII (19)

New Jersey: Ft. Lee VI-18 (4);

Penn: Bear Lake (4); Castle Rock V-21 (17). Jannette V (0)

No. Carolina: Tyron (10)

W. Virginia: Kanawha (10)

Virginia: Falls Church II-(10).

Georgia: Clayton 3000 ft. (4);

Ohio: Cincinnati (11)

Tenn: Elmwood (13)

Iowa: Iowa City (W); Elmo (W)

Missouri: St. Charles V-23 (2).

Illinois: Galesburg (2). Riverside VI-6 (c). Edgebrook VI-30 (O)

Wisconsin: Beaver Dam VII-5 (c).

Kansas: Baldwin V (O)

Hosts: Reported from Maple, locust, butternut and box elder. Bred from black walnut (Juglans nigra) Flowering dogwood (Cornus florida), redbud (Cercis canadensis), hazel (Corylus americana), hickory (Hickoria sp.) persimmon (Diospyros virginiana), and white oak (Quercus alba).

Variety pusillus Say

1825 Buprestis pusilla Say p. 252

1836 Buprestis Say p. 162

1859 Leconte p. 244

1871 parvus Saunders p.

1873 pusillus Say = otiosus Say, Crotch p. 92

1891 Horn p. 333

1891 parvus Saund. = pusilla Say, Horn p. 287

1898 Wickham p. 305

1903 Kerremans p. 271

1903 parvus Saund. Kerremans p. 271

1909 Wickham p. 23

1909 Smith p. 295

1909 Blatchley p. 805

Type locality: "On the Missouri River".

Distribution: New Jersey to So. Dakota, Colorado and Arizona.

Kansas: Salina (17); Medora (7);

Missouri: St. Louis VI-16 (2).

Arizona: Pinal Mts. (W)

Iowa: Iowa City VI-15 (c)

Texas: Beeville V-2 (10)

Illinois: Garland VII-17 (c).

So. Dakota: Volga (2)

Colorado: Littleton VI-22 (c)

palmacollis Horn

1891 Horn p. 326

1900 Chittenden p. 68

1900 Griffith p. 568

1903 palmaticollis Horn, Kerremams 288

1909 Fall-Cockerell p. 181

Type locality: Western Texas (Exact locality not known)

Distribution: New Mexico, Arizona, Texas and California.

Pinal Mts. Ariz. (4), Brownsville, Tex. (16). Yuma Cal.(C).

Host: Mesquite (Prosopis juliflora), Huisache (Acacia farnesiana).

Season: July.

parvus Saunders

See pusillus Say

pensus Horn

1891 Horn p. 305

1903 Kerremans p. 289

1913 Gibson p. 126

1919 Nicolay p. 277

Type locality: Massachusetts.

Distribution: Nova Scotia to New Jersey.

Nova Scotia: Greenfield VII; Port Midway VIII-14

Massachusetts: Lectotype and paratype "Mass."

Maine: Monmouth VI-27 (14); Wales VI-23 (14).

New Jersey: Newfoundland VII-24 (19).

New Hampshire: White Face Mt. (2)

Illinois: Galesburg (2).

Host: Black alder (alnus incana). Taken on horubeam (Ostrya virginiana)

Season: July, August (Nova Scotia).

pinalicus Wickham

1903 Wickham p. 69

1907 Fall Cockerell p. 180

Type locality: Parker's Well, Organ Mts., New Mexico.

Distribution: Arizona (Pinal Mts.) and New Mexico.

Host: Unknown

Season: June-Oct.

plumbeus Leconte

See politus Say

politus Say

1825 Buprestis polita Say p. 251

1836 Say p. 162

1857 polita Lacordaire p. 84

1859 Leconte p. 248

1859 plumbeus Leconte p. 247

1859 cupreolus Leconte p. 248

1859 desertus Leconte p. 249

1868 Horn p. 124

1869 solitarius Gemminger-Harold p. 1445

1870 plumbens Lec. = politus Say, Pettit p. 102

1871 Saunders p. 117

1877 Provancher p. 359

1878 plumbeus Lec., Hubbard-Schwarz p. 636, 656

1878 Hubbard-Schwarz p. 636, 656

1878 Glover pl. XI, fig. 2

1880 Zesch-Reinicke p. VII

1884 Lugger p. 203

1889 Chittenden p. 221

1889 Blanchard p. 32

1891 Horn p. 315

1894 Fall p. 98

1893 Hopkins p. 184

1895 Evans p. 146

1895 Hamilton p. 364

1898 Cockerell p.

1898 Chittenden p. Bul. 18

1899 Evans p. 321

1900 Chittenden p. 68

1901 Fall p. 120

1902 Skinner p. 40

1902 Young p. 157

1903 Kerremans p. 272

1903 cupreolus Lec. Kerremans p. 284

1906 Felt p. 729, 741

1906 Fall p. 168

1907 Fall-Cockerell p. 180

1909 Blatchley p. 801

1909 Easton p. 50

1909 Smith p. 295

1909 Wickham p. 23

1912 Frost p. 248

1913 Gibson p. 126

1913 Manee p. 170

1913 Woodworth p. 195

1914 Weiss p. 438

1914 Childs p. 150

1915 Essig p. 234

1916 Frost p. 386

1917 Nicolay p. 93

1917 desertus II Lec. = solitarius Harold, Fisher, p. 288

1917 Chagnon p. 219

1917 Fisher p. 288

1917 Chamberlin p. 168

1917 Burke p. 331

1917 solitarius G & H., Burke p. 331

1917a Burke pl. IX fig. 3

1918 Ruggles p. 15

1920 Knull p. 10

Type locality: Distribution: Nova Scotia to Carolina west to the Pacific Coast.

Canada: Toronto, Que. (2); Manitoba (2); Victoria B.C. (4);

Huntsville, Ont. (8), Halifax, N. 3.

Maine: Paris VI-9, VII-16 (14);

Mass: Sherborn VI-9 (14);

Penn: Fox Chase VII-14 (8);

New York: Kalawak VI (9); West Point VI-3 (c)

New Jersey: Boonton (2)

N. Carolina: Cranbury VI-9 (8); Black Mts. VI-25 (9).

Illinois: Galesburg (2); Riverside VII-11 (c); La Grange VII-28 (c), Edgebrook VII-3 (c).

Ohio: Cincinnati: VII-15 (11);

Iowa: Fairfax (W); Iowa City (W); Eastport (W)

Kansas: Riley Co. (2); Baldwin VIII (0)

Wisconsin: Bayfield (2)

Washington: Spokane (7)

Oregon: Josephine Co. (9); Hoover VIII (c) Marys Peak VII (0); Corvallis VIII-30 (c)

Idaho: Loisen (10)

Montana: Bitter Root Mts. (1)

California: Yreka (4) San Bernardino Mts. (5) Sierra Madra Mts. VII (7); San Francisco, Cal. (8); Lake Takoe 6200 ft.VII-10 (9); Santa Rosa (13) McCloud VI-22 (13); Cole (13); Contra Costa Co. V-21 (c) Castle Crag VII (13) Los Gatos (13).

New Mexico: Ft. Wingate VII (4)

Arizona: Huachuca VII-10 (8) Tempe VI-9 (9); St. Catalina Mts. (10); Palmerlee VII-22 (c).

Nevada: (17) Utah (17); Texas (17).

Colorado: Mt. Lookout (Golden) 7000 ft. VII-10 (c).

Hosts: Mountain willow (Salix monticola), nuttalis willow (S. nuttalli) arroyo willow (S. lasiolepis) weeping willow (S. babylonica) Introduced willow (S. obtusifolia), Honey locust (Robinia pseudocacia) California live oak (Quercus agrifolia), Mountain alder (Alnus tenuifolia) Oregon alder (A. oregona), California buckeye (Aesculus californica), Dwarf Maple (Aces glabrum) striped maple (A. pennsylvanicum), Hazel (Corylus rostratus) and (C. americana), Rose (Rosa sp.)

Season: June-July (Me.), May-Aug. (Calif). June-Sept. (Ore.), July (Nova Scotia), July (Ariz. 8000 ft.)

pubiventris Crotch

See lacustris Leconte

puncticeps Leconte

Variety of egenus Gory

pusillus Say

Variety of otiosus Say

putillus Say

1836 Say p. 163

1857 Lacordaire p. 84

1873 Crotch p. 96

1878 Hubbard-Schwarz p. 656

1884 Harrington p. 71

1891 Horn p. 323

1903 Kerremans p. 289

1909 Blatchley p. 894

Type locality: Posey County, Indiana.

Distribution: Canada, Indiana, and Illinois, Ohio.

Host:

Season: Cincinnati, Ohio, June 10.

quadriguttatus Gory

See granulatus Say

quadri-impressa (4 impressa) Zeigler

See acutipennis Mannerheim

quercus Schaeffer.

1905 Schaeffer p. 150

Type locality: Palmarlee, Huachucae Mts., Arizona.

Distribution: Reported only from type locality

Host:

Season: June-July.

ruficollis Fabricii

1787 Buprestis Fabricii p. 184 No. 85

1793 Oliver (gen. 32) p. 78, pl. 9, fig. 101

1792 Fabricii p. 214 No. 121

1801 Herbst p. 249, pl. 155, fig. 9

1801 Buprestis Fabricii p. 213 No. 152

1817 Schonherr p. 260

1836 Say p. 161

1837 Dejean p. 93

1840 Erichson p. 240

1841 Gory p. 60, pl. 13, fig. 78

1846 Holdman p. 300

1846 Holdman p. 373

1848 White p. 37

1859 Leconte p. 243

1868 Riley p. 92

1869 Glover p. 92 fig. 107

1870 Riley p. 103

1870 Pettit p. 102

1870 Walsh p. 103

1870 Carpenter p. 128

1871 Glover p. 65

1873 Crotch p. 92

1874 Saunders p. 8 fig. 3,4

1874 Le Baron p. 96

1876 Thomas p. 114

1878 Glover pl. XI fig. 4, pl. 41 fig. 9

1878 Schwarz p. 452

1878 Hubbard-Schwarz p. 656

1880 Linter p. 215

1880 Zesch-Reinicke p. VII

1880 Riley p. 107

1883 Saunders p. 307

1884 Harrington p. 44

1886 Horn p. 137

1889 Harrington p. 54

1889 Blanchard p. 32

1889 Treat p. 213

1890 Linter p. 123

1890 Hopkins p. 19

1891 Hopkins p. 160

1891 Smith p. 4-8

1891 Smith p. 28

1891 Hopkins p. 435

1891 Horn p. 289

1891 Smith p. 373

1891 Hopkins p. 1-6 pl. 1

1892 Hopkins p. 257

1892 Smith p. 456

1892 Webster p. 191-193

1892 Marten p. 1

1892 Laurent p. 37

1893 Townsend p. 202

1893 Laurent p. 37

1893 McCarty p. 129

1894 Davis p. 78

1894 Harrington p. 44

1894 Webster p. 203

1894 Webster p. 29-30

1894 Webster p. 357

1894 Linter p. 406

1895 Davis p. 56 fig. 1

1895 Hamilton p. 364

1896 Castle-Laurent p. 303

1896 Smith J. B. p. 69

1897 Castle p. 8

1897 Harrington p. 70

1898 Lugger p. 85

1898 Lugger p. 164

1899 Felt p. 579

1899 Lugger p. 58

1900 Harrington p. 51

1900 Felt p. 109

1900 Felt p. 14

1900 Smith p. 477

1901 Felt p. 839, 874

1901 Smith p. 461, 587

1902 Smith p. 71

1902 Young p. 157

1903 Kerremans p. 270

1907 Jarvis p. 66

1908 Bethume p. 97

1909 Wickham p. 23

1909 Easton p. 50

1909 Blatchley p. 798

1909 Smith p. 294 fig. 112-113

1911 Treherue p. 24

1912 Gibson p. 24

1913 Manee p. 170

1914 Comstock p. 550 fig. 664

1915 Somes p. 13-14

1915 Grant p. 16

1915 Johnson p. 312

1917 Nicolay p. 93

1917 Chagnon p. 219

1918 Blackburn II p. 124

Type locality:

Distribution: Canada (Ottawa, Quebec), Atlantic Coast States, west to Iowa & Missouri.

Host: Dewberry, raspberry, blackberry (Rubus spp.) Willow (Salix sp.), Oak (Quercus sp.)

Season:

sayi Saunders

See lateralis Say

scitulus Horn

1891 Horn p. 318

1903 Kerremans p. 290

Type locality: Waco, Texas

Distribution: Waco and New Brunsfels Texas (16) (17).

Host: Huisache (Acacia farnesiana).

Season:

sinuatus Oliver

(Introduced species)

1790 Buprestis Oliver gen. 32 p. 74 No. 100 pl. X fig 111.

1801 Buprestis Herbst p. 253 pl. 153 fig. 1

1817 Schonherr p. 245 No. 155

1833 sinuata Solier p. 305

1841 Laporte-Gory p. 43

1857 Lacordaire p. 610

1859 Leconte p.

1863 Marseul p. 445

1880 Horn p. 148

1892 Smith p. 363-364, 448, fig. 60

1892 Smith p. 10

1894 Smith p. 490, 550, 561

1894 Smith p. 258-260

1894 Smith p. 311, 323

1895 Smith p. 85 fig. 1

1905 Smith p. 13-24. fig. 5

1897 Webster p. 42-45

1898 Lugger p. 85

1899 Lugger p. 61

1900 Chittenden p. 64-65

1902 Felt p. 122

1906 Felt p. 504

1909 Smith p. 295

1918 Weiss p. 5-8 fig. 2,3

Type locality: Europe

Distribution: General in Europe. Introduced into the United States. Reported from New Jersey to Ohio.

New Jersey: Essex, Union and Middlesex Counties (Weiss)

Host: In Europe: White thorn, medlar and Mt. oak.

In U. S. cultivated pear (Pyrus commins) red oak (Quercus rubra) and Haw (Crataegus)

solitarius Gemminger-Harold.

See politus Say

solitarium Fisher

See politus Say

strigicollis Fall

1912 Fall p. 41

Type locality: Huachuca Mts., Arizona.

Distribution: Huachuca Mts. Arizona.

Host: Unknown.

subaeratus Horn

See obsoletoguttatus Gory

subbalteata Leconte

1863 Leconte p. 82

Type locality: San Lucus, Bajo California.

Distribution: Same

Host: Unknown

subcinctus Gory

1841 Gory IV p. 252 pl. 42, fig. 245

1857 Leconte p. 9

1859 Leconte p. 246

1873 Crotch p. 93

1891 Horn p. 322

1895 Hamilton p. 364

1903 Kerremans p. 291

1909 Smith p. 295

1909 Blatchley p. 803

1920 Knull p. 11

Type locality:

Distribution: New Jersey, North Carolina, Pennsylvania, and Indiana and Illinois, Southeastern Canada.

Penn: Jannette (13) Castle Rock VI-13 (c) Missouri: St. Charls V-18 (2) Arlington (c)

Illinois: St. Clair Co. VI (2).

Host: Poison ivy (Rhus taxicodendron)

subfasuatus Lec.

See lecontei Saunders.

subtropicus Schaeffer

1905 Schaeffer p. 131

Type locality: Brownsville, Texas.

Distribution: Same.

Host:

texanus Crotch

See cavatus Chevrolat

torpidus Leconte

See anxius Gory

torquatus Leconte

See arcuatus Say

townsendi Fall

1907 Fall p. 181

1907 Fall p. 234

Type locality: Rio Ruidoso, Arizona

Distribution: Reported only from Rio Rendoro (6500 ft.) Arizona.

Host: Gambell oak (Quercus gambellii)

trivittatus Horn

See bilineatus

umbratus Harold

1869 Harold Col. Heft. Vol 5 (Etats-Unis) Kerremans (1903) p.268

ventralis Horn

1891 Horn p. 320

1907 Fall-Cockerell p. 181

Type locality: New Mexico (Exact locality unknown)

Distribution: New Mexico. (Lectotype and paratype New Mex. (17).

Host:

Season:

vittaticollis Randall

1838 Randall p. 38

1841 frenatus Gory VI, p. 139 pl. 40 fig. 231

1857 Lacordaire p. 85

1857 frenatus Gory, Leconte p. 9

1859 frenatus Gory = vittaticollis Rand., Leconte p.

1871 Saunders p. 117

1873 Crotch p. 96

1875 Sprague-Austin p. 276

1878 Glover pl. 42 fig. 2

1878 Schwarz p. 451

1878 Hubbard-Schwarz p. 636

1889 Blanchard p. 32

1891 Horn p. 299

1895 Hamilton p. 364

1903 frenatus Gory, Kerremans p. 272

1903 Kerremans p. 272

1906 Fall p. 168

1906 Felt p. 720

1909 Smith p. 295

1909 Blatchley p. 799

1913 Manee p. 170

1914 Brooks pl 179-186 Plates.

1914 frenatus Gory, Brooks p. 179

1917 Nicolay p. 93

1917 Chamberlin p. 169

1918 Fisher p. 68

1920 Knull p. 10

Type locality: Cambridge, Massachusetts.

Distribution: Canada to Carolina west through Michigan, Illinois, Indiana, to Oregon and California & Nevada.

Mass: Tyngsboro VI-21 (2)

Rhode Island: Providence IV-12 (2)

New Jersey: Buena VI-8 (2); Clementon VI-7 (2); Jamesburg VII-4 (2) Lakehurst VII-12 (4); Newfoundland VII-6 (4); Hewitt VI-2 (4); Atco (8); Ft. Lee (16);

Penn: Inglebrook VI-11 (2); Dauphin (knull)

New York: West Point VI-9 (c)

N. Carolina: Tyron VI (10)

Virginia: Winchester, Hayfield, Stanton (Brooks)

West Virginia: French Creek, Springfield, Moorefield, Romney, Keyser, Elkino (Brooks)

Oregon: Corvallis V-29 (c); Josephine Co. V-8

California: Carrville VI-1

Hosts: Bred from service berry (Amalanchier canadensis) apple (Pyrus malus), Pear (Pyrus communis), Sweet Crab (Pyrus coronaria), Wild thorn (Crataegus sp.)

viridis Fabricii

(Introduced species)

1817 Schonherr, Fabricii p. 244

1833 Solier p. 305

1840 Erichson p. 241

1863 Marseul p. 488

1914 Weiss p. 278, 426

1916 Weiss p. 278, 426

Type locality: Europe

Distribution: Widely distributed in Europe, introduced into New Jersey.

Host: In U.S. Bred from(Rosa rugosa) cultivated rose

walsinghami Crotch

1873 Crotch p. 95

1891 Horn p. 311

1894 Horn p. 379

1901 Fall p. 120

1903 Kerremans p. 269

1905 Fall p. 271

1906 Fall p. 168

1907 Fall-Cockerell p. 180

1917 Chamberlin p. 169

1919 Van Dyke p. 10

Type locality: Yreka, California.

Distribution: Oregon, California, Idaho, Arizona, New Mexico.

Oregon: Josephine Co.

California: Siskiyou, California Inyo (15) Independence VII-17 (13); Type No. 2714 "Cal" (17)

Idaho: Boise

Arizona: Winslow (4)

New Mexico: Santa Fe VIII (13); Luna, Tseque (13)

Hosts:

Season:

zemes Gory

See fallax Say

Genus Ampheruemas Fall.

1917 Fall p. 68

Type of the Genus Ampheruemas cylindricollis Fall.

cylindricollis Fall.

1917 Fall p. 69

Type locality: Palm Springs, California.

Distribution: Desert regions of Southeastern California.

Genus Anthaxia Esch.

1829 Eschscholtz p. 9

Type of the Genus

aeneogaster Lap.-Gory

1837 Buprestis Laporte-Gory p. 32 pl. 7 fig. 44

1838 Buprestis inornata Randell p. 4

1843 Mannerheim p. 237, No. 133

1857 Leconte p. 9

1857 expansa Leconte p. 44

1859 Leconte p. 71

1859 strigata Leconte p. 71

1859 strigata Leconte p. 215

1859 inornata Leconte p. 216

1859 foveicollis Leconte p. 215

1859 imperfecta Leconte p. 215

1859 retifera Leconte p. 215

1873 Leconte p. 331

1873 aerico Crotch p. 89

1873 expansa is foveicollis Leconte p. 331

1882 Horn p. 108

1882 prasina Horn p. 108

1882 inornata Rand. Horn p. 108

1882 foveicollis Lec. Horn p. 108

1882 impesfecta Lec. Horn p. 108

1882 retifera Lec. Horn p. 108

1882 expansa Lec. Horn p. 108

1882 strigata Lec. Horn p. 108

1884 inornata Harrington p. 71

1885 nanula Casey p. 174

1885 sinuala Casey p. 175

1885 aenescens Casey p. 175

1885 Casey p. 172

1886 inornata Gurguard p. 47

1886 Roberts p. 16

1889 Blanchard p. 31

1890 Harrington p. 159

1890 inornata Harrington p. 159

1892 Kerremans p. 116

1892 Coquillett p. 260

1893 Hopkins p. 182

1894 var. strigata Horn p. 327

1894 Fall p. 98

1894 Harrington p. 47

1895 Evans p. 146

1896 Bowditch p. 2

1897 Cockerell p. 150

1898 Cockerell (28)

1899 Wickham p. 7

1901 Fall p. 117

1903 Kerremans p. 173

1903 anescens Cas. Kerremans p. 176

1903 inornata Rand., Kerremans p.173

1903 expansa Lec., Kerremans p. 173

1903 imperfecta Lec., Kerremans p. 173

1903 retifera Lec., Kerremans p. 173

1903 foveicollis Lec., Kerremans p. 173

1903 strigata Lec., Kerremans p. 173

1903 Knaus p. 175

1907 Fall-Cockerell p. 197

1908 Wright-Coolidge p. 67

1909 Smith p. 292

1909 Blatchley p. 786

1911 Watson p. 77

1913 Woodworth p. 195

1916 Morris p. 19

1917 Burke p. 328

1917a Burke pl. III fig. 2

1917 Chamberlin p. 135

Type locality: California.

Distribution: Transcontinental, Maine to Washington; Hudson Bay to Mexico and Lower California.

Canada: Aylmer, Que. VI-24 (14); Emerald Lake B.C. (13); Field B.C. VI-2 (17); Fraser B.C. (2); Oseyeos, B.C. (2)

Washington: Spokane (4); Seattle (2); Olympia (2);

Oregon: Dilly (4); Sumpter VII-21 (c); Hideway (10); Hood River (10); Corvallis IV-21 (C) Ashland VI-20 (C); Horse Lake VI-25 (C);

California: Tejon; Bishop (13); Cole (13); Tallac (13); Mill Valley (13); Pasadena (13); Pac. Grove (13); Sierra Madra Mts. 5000 ft. VII-10 (7); King's River Can. VII-11 (7); San Francisco (8); Mendecino Co. (9); Yosemite 5000 VII-14 (9) San Diego (10); St. Clara Co. (10); Los Angeles (2).

New Mexico: Cloudcraft VI-18 (17); Beula (1); Aztec V-5 (10);

Texas: Fedor IV (3)

Montana: Bitter Root Mts. (1); Helena (10);

Colorado: Denver (3); Manitou 6100 ft. VI-5 (4); Colo.Springs VI (10);

Idaho: Cascade VI-22 (c); Beaver Can. VII-20 (10); Priest Lake (2).

Arizona: Grand Canyon VI-17 (9); Phoenix (4); Prescott VI-18 (4); Williams (10); Yuma 150 ft. (10).

So. Dakota: Black Hills (10);

New York: Buffalo (1)

New Hampshire: Mt. Washington VII-2 (14);

Michigan: Eagle Harbor L.S. (10);

Nebraska: Pine Ridge (10); War Bonnett Can. VII (10)

Indiana: Jollette (3)

Penn: Castle Rock V-30 (8)

Wyoming: Yellow Stone Park (10)

Illinois: La Grange VII-18 (c)

Lower California: Ensenada (1);

Hosts: Redwood (Sequoia sempervirens), Lodgepole pine (Pinus contorta) Douglas fir (Pseudotsugae taxifolia), Weeping willow (Salix babylonica), Mountain mahogany (Cercocarpus parifolius), Sugar pine (Pinus lambertiana), pinion (P. edulis), yellow pine (P. ponderosa), jeffrey pine (P. jeffreyi), knobcome pine (P. attenuata), Digger Pine (P. sabiniana), pitch pine (P. rigida), Monterey pine (P. radiata), California walnut (Juglans californica), hickory (Hickoria sp.), California white oak (Quercus californica), Garry oak (Quercus garryana), (Rosa neomexicana), service berry (Amelanchier alnifolia) red bud (Cercis occidentalis) and Rhodendron (Rhodendron occidentalis).

Adults feed on the pollen and leaves of primrose, dandelion (Taraxacum officanale) butter cup (Rosa fendleri) ladies slipper (pubescens) and (Antennaria sp.)

Season: March-September.

aenescens Casey

See aeneogaster Laporte-Gory

aerico Crotch

See aeneogaster Laporte-Gory

bivittata Gory

See quercata Fabricii

californica Obenberger

1914 Obenberger p. 26

Type locality: California

caseyi Obenberger

1914 Obenberger p. 26

Type locality: Pa.

cunaifrons

cuneiformis Gory

See quercata Fabricii

cyanella Gory

See quercata Fabricii

deleta Leconte

1878 Leconte p. 459

1882 Horn p. 109

1892 Kerremans p. 120

1894 Fall p. 98

1901 Fall p. 117

1903 Kerremans p. 174

1911 Gibson p. 114

1913 Woodworth p. 195

1917 Chamberlin p. 135

Type locality: American Fork Canyon, Utah 9,500 ft. VI-29

Distribution: British Columbia south through the Rocky Mountain and Pacific Coast States to Arizona.

British Columbia: Peachland VII-23 (Wallis)

Oregon: Portland V-28 (10); Corvallis VII-17 (c); Ashland VII-2 (C)

California: Tulare (1); Siskiyou (1); King's River Can. VII (7); Yosemite 4000 ft. V-18, VI-22 (9); Dunsmire (4); McCloud VI-25 (9); Tahoe (10) Los Angeles (10); Tehama Co. (10) Castle Crag (13); Mt. Lowe (13) Sylvania (13);

Arizona: Walnut (4); Williams (4); Prescott VI-19 (10); Bright Angle C. C. VII 10 (10);

Idaho: Coer d'Alene (17)

Utah: American Fork Can. 9500 ft. VII-11 (17).

Host: Willow (Salix sp.)

expansa Lec.

See aeneogaster Laporte-Gory

flavimana Gory

1837 Dejean p. 91

1841 Gory IV p. 291 pl. 49 fig. 285

1846 gracilis Melsheimer p. 148

1857 Leconte p. 9

1859 Leconte p. 218

1873 Leconte p. 331

1878 Schwarz p. 451

1882 Horn p. 108

1882 gracilis Mels. = flavimana Gory Horn p. 112

1892 Kerremans p. 120

1893 Hopkins p. 181

1895 Hamilton p. 364

1898 Cockerell p.

1898 Wickham p. 305

1903 Knaus p. 175

1907 Fall-Cockerell p. 179

1909 Blotchley p. 787

1909 Wickham p. 305

1909 Smith p. 293

1913 Manee p. 170

1920 Knull p. 6.

Type locality: North America (Exact locality not recorded)

Distribution: New England to Florida west to Texas and Arizona.

Pennsylvania; Hummelstown VII-4 (c)

Georgia: Clayton 3700 (4); Macon (10)

Virginia: E. Falls Church V-28 (9)

Louisiana: Vernon Parish (4);

Florida: Capron III-5 (4); Tampa IV-17 (4);

Arizona: Huachuca VII, VIII (1); Pinal Mts. (4); Palmerlee VII (9); St. Rita Mts. VI-12, Cochise Co. VII-5 (c)

Missouri: St. Louis (4);

Kansas: Ft. Scott V-23 (10)

Texas: Fedor (13); Sabinal IV (10); Calvert IV-8 (10); New Boston V-3 (10) Wolff City III-27, Columbus V-24 (4); LaVaca (10); Burnette Co. (10); Dallas V-8 (10)

Indian Territory: Andmore V-3 (10);

Host: Plum (Prunus sp.) Scrub oak (Quercus) and white oak (Q. alba)

Season:

var. arizonae* new variety.

Type locality: Huachuca Mts. Arizona.

Distribution: Arizona, and Texas and Missouri

Arizona: Carr Canyon VIII (17); St. Catalina Mts. VII (10)

Texas: Round Mt. (8) Missouri: Cliffs (8)

Host: Arizona oak (Q. arizonica)

* Anthaxia flavimana variety arizonae new variety. Form of flavimana Gory, but differs as follows: Front and antennae black, not green; tarsi of front pair of legs black not yellow; last ventral segment more angulated, shoulders coppery. Length 7 mm.

*-continued

Type locality: Huachuca Mts. Arizona.

A large series would doubtless establish this species distinct by its large size, black antennae and tarsi. I have adapted the name arizonae from the fact that Mr. Chas. Shaffer had applied this name to the species in his cabinet.

foveicollis Leconte

See aeneogaster Laporte-Gory.

gracilis Mannerheim

See flavimana Gory

imperfecta Leconte

See aeneogaster Laporte-Gory

inornata Randell

See aeneogaster Laporte-Gory

nanula Casey

See aeneogaster Laporte-Gory

pensylvanica Oben.

1914 Obenberger p. 26

Type locality: Pennsylvania.

quercata Fabricii

1801 Buprestis quercata Fabricii p. 216

1817 Buprestis Schonherr p. 263

1825 Say p. 249

1834 viridicornis var. Say p. 161

1837 cuneiformis Dejean p. 91

1837 Mannerheim p. 91

1837 cyanella Mannerheim p. 91

1837 cuneiformis Gory, Mannerheim p. 91

1841 Laporte-Gory II p. 21 pl. 5 fig. 28

1841 cunaiformis Gory IV, p. 290 pl. 48 fig. 284

1841 cyanella Gory IV, p. 290 pl. 47 fig. 278

1841 bivittata Gory IV, p. 292 pl. 49 fig. 286

1846 scoriacea Melsheimer, p. 148

1848 White p. 41

1857 scoriacca Mels. = cyanella Gory Leconte p. 9

1847 cuneiformis Gory Leconte p. 9

1857 bivittata Gory Leconte p. 9

1857 Agrilus Lacordaire p. 84

1859 Leconte p. 210, 217

1859 cyanella Leconte p. 216

1870 Pettit p.102

1873 cuneiformis Gory = quercata Fab. Crotch p. 89

1873 bivittatus Gory Leconte p. 331

1878 Schwarz p. 451

1878 Hubbard-Schwarz p. 656

1878 cyanella Hubbard-Schwarz p. 656

1880 Zesch-Reinecke p. VII

1880 cyanella Zesch-Reinecke p. VII

1882 Horn p. 110

1886 cyanella Gory = quercata Fab. Roberts p. 16

1889 Chittenden p. 220

1889 Blanchard p. 31

1890 Packard p. 354

1892 Kerremans p. 126

1895 Hamilton p. 364

1896 Castle-Laurent p. 303

1901 Fall p. 117

1903 Kerremans p. 174

1903 viridicornis var. Say, Kerremans p. 174

1903 cuneiformis Gory, Kerremans p. 174

1903 bivittata Gory, Kerremans, p. 174

1903 cyanella Gory, Kerremans p. 176

1903 scoriacea Mels, Kerremans p. 176

1909 Blatchley p. 789

1909 cyanella Wickham p. 23

1909 Smith p. 293

1913 Manee p. 170

1913 Woodworth p. 195

1916 Van Dyke p. 405

1917 Chagnon p. 218

1918 Dozier p. 331

1918 Blackburn pt. I, p. 20, 36, 85 pl. 7 fig. 22.

1919 Nicolay p. 18

1920 Knull p. 6

Type locality: North America:

Distribution: Massachusetts to Florida, west to Montana and Texas.

Connecticut, Pleasant Valley VII-1 (c).

Massachusetts: Framingham X-28 (c); West Port VII-30 (c)

New York: Stanton Isl (4); Long Island VI-VII (19)

New Jersey DeCosta (4); Lakehurst (4); Ft. Lee V-25 (4); Palisades (4); Stotwood (4) Cleumontor VII-15 (8); Cape May V-28 (8)

Penn: Jannette (3) Allegany (13); Hummelstown V-30 (20)

Maryland: Blandsburg (10); Gt. Falls V-18 (10);

D. of C. Washington V-20 (10) Rhode Island, Barrington VI-25 (c)

Virginia: Norfolk VI-12 (9); Carters Bridge V-25 (10); Falls Church (10)

N. Carolina: Tyron (10); Herford Co. VI-9 (9)

Georgia: Fifton (8); Macon (10)

Florida: Enterprise V-20 (8); Kissimmee (9); TampaIV-5 (10); Monticello (10), Gainsville III-27, IV-15 (Dozier)

Alabama: Spring Hill V-29 (11)

Louisiana: Opelonsus IV-24 (8)

Texas: Columbus III-6 (10)

Arkansas:

Missouri: St. Louis V-19 (10)

Kentucky

Ohio: Cincinnati VI-25 (11)

Illinois: Edgebrook VI-25 ( ); Riverside V-14 (c)

Iowa:

Montana: Columbia Falls VIII-13 (10).

Host: Bred from oak and chestnut twigs, Black oak (Q. velutina) lodgepole pine (P. murryana) grape (Vitis sp.) red bud (Carcis canodensis), white pine (P. strobus) and (Crataegus coceinea)

retifer Leconte

See aeneogaster Laporte-Gory

salicis Fabricii

(Introduced species)

1781 Buprestis Fabricii p. 237

1790 Buprestis Oliver p. 79 pl. 2 fig. 13

1801 Buprestis Fabricii p. 216 No. 163

1801 Buprestis Herbst p. 240 pl. 147 fig. 6-7

1805 Illiger p. 95 No. 163

1817 Schonherr p. 253, 262

1833 Solier p. 298

1841 Laporte-Gory II p. 12, pl. 3, fig. 14

1865 Marseul p. 242

1882 Horn p. 107

Type locality: Europe.

Distribution: In the United States this species has been taken only at Smoky Hill, Kansas.

Host: Taken on the flowers of Malvaceous plant.

Note: This is an introduced species and there has been no attempt to give a complete list of the European references. See Schonherr 1817 p. 262 for a list of the early references.

scoriacea Mannerheim

See quercata Fabricii

sinuala Casey

See aeneogaster Laporte-Gory

strigata Leconte

See aeneogaster Laporte-Gory

subaenea Leconte

See viridifrons Gory

sublaevis Van Dyke

1916 Van Dyke p. 416

1917 Chamberlin p. 135

Type locality: Tuolumne Co., California.

Distribution: Northern California. (Siskiyou, Shasta, Tuolumne and Tulare Counties).

Hosts: Unknown.

viridicornis Say

1823 Say p. 162

1836 Say p. 161

1837 Dejean p. 91

1837 Say p. 127 No. 7

1841 Laporte-Gory II, p. 19 pl. 5, fig. 25.

1857 Leconte p. 9

1859 Leconte p. 216

1877 Hubbard p. 40

1878 Schwarz p. 451

1878 Hubbard-Schwarz p. 656

1882 Horn p. 110

1884 Harrington p. 71, 101

1884 Harrington p. 45

1885 Harrington p. 31

1886 Roberts p. 16

1889 Tolman p. 343

1889 Chittenden p. 220

1890 Packard p. 293

1892 Kerremans p. 129

1892 Hopkins p. 258

1893 Hopkins p. 181

1895 Hamilton p. 364

1902 Young p. 157

1903 Kerremans p. 173

1908 Knaus p. 91

1909 Smith p. 292

1909 Wickham p. 23

1912 Frost p. 305

1917 Chagnon p. 218

Type locality: Missouri

Distribution: Ontario to North Carolina west to Colorado and Texas.

Maine: Paris (15)

New York: New Port (Young); Stanton Island (4); Buffalo (4); West Point VII-7 (c)

Penn: Jannette VI-10, VIII-4 (3)

New Jersey: Spotwood (4); Ft. Lee VI-18 (c)

N. Carolina: Southern Pines V-14 (c)

D. of C. Washington V-25 (10), VI-11 (4)

So. Carolina: Beaufort V-6 (9).

Illinois: McBride (4)

Arkansas: Murfreesboro (9)

Ohio: Cincinnati (11)

Michigan: Detroit VI (10);

Iowa: Iowa City (W); Fairfax (10)

Missouri: St. Louis V-19 (10)

Texas (1)

Medicin Bow Nat. Forest Dug from Douglas Fir VI-17 (10).

Colorado.

Hosts: Willow (Salix sp.) and Elm (Ulmus sp.). Adults taken feeding on Elm, Willow and hickory.

Season: May (N.C.) June (Kan.)

viridifrons Gory

1837 Dejean p. 91

1841 Gory IV p. 284 pl. 47, fig. 277

1857 Leconte p. 9

1859 Leconte p. 217

1859 subaenea Leconte p. 216

1870 Pettit p. 102

1873 subaenea Lec. = viridifrons Gory, Crotch p. 89

1877 Agrilus Provancher p. 360

1878 Leconte p. 459

1878 Hubbard-Schwarz p. 656

1882 Horn p. 109

1884 Harrington p. 71

1884 Harrington p. 45

1886 Roberts p. 16

1889 Chittenden p. 220

1889 Blanchard p. 31

1890 Packard p. 229, 292

1892 Kerremans p. 129

1895 Hamilton p. 364

1897 Slosson p. 238

1902 Webster-Newell p. 84

1903 Kerremans p. 172

1906 Felt p. 227

1909 Wickham p. 23

1909 Blatchley p. 787

1909 Smith p. 292

1912 Gibson p. 100

1912 Frost p. 305

1916 Van Dyke p. 406

1917 Gibson p. 149

1917 Chagnon p. 218

1920 Knull p. 6

Type locality:

Distribution: Ontario and New England States west to Indiana and Iowa (Peachland B.C. July, Gibson p. 149)

Conn: Wallingford IV-24 (14); West Rock IV-29, V-1 (14)

New York: Stanton Island (4) Buffalo (4); West Point VI-7 (c)

New Jersey: Spotswood (4)

Penn: Shiremantown (10); Harrisburg (10); Jannette V-30 (3)

Maryland: Gt. Falls V-8 (10)

D. of C. Washington V (10)

N. Carolina: Tyron (10)

W. Virginia: Kanawha (10)

Florida: Tampa IV-19 (10)

Ohio: Cincinnati VI-1 (11)

Iowa: Iowa City (W); Fairfax (W); Ames VI-24 (c)

Michigan: Detroit VI (10)

Illinois: Edgebrook VII-20 (9); Chicago VI-30 (13); Riverside VI-19 (c).

Missouri: St. Louis (13)

Texas: Columbus V-20 (10)

California: Sierra Madra (13); Castle Crag (13); Mt. Lowe (13) McCloud (13); San Rafel V-7 (9);

Canada: Montreal, Que. VI-6 (c); Peachland, B.C. VII-Gibson.

Hosts: Bred from Shag bark hickory (Hickoria ovata) and elm (Ulnus americana), and reported from willow (Salix sp.) and grape (Vitis sp.)

Genus Brachys Solier.

1833 Solier, p. 312

Type of the genus:

aerosa Melsheimer

1841 terminans L. & G. (name preoccupied) II, p. 3 pl. 1, fig. 3.

1846 Melsheimer, p. 148

1859 Leconte p. 252

1869 terminans, Glover p. 92

1869 Glover p. 92

1870 terminans, Pettit, p. 102

1873 Crotch, p. 96

1874 LeBaron p. 96

1874 aerosa Mels., = terminans Gory Henshaw, p. 17

1878 aerosa, terminans, Glover, pl. XI fig. 36

1878 Hubbard-Schwarz, p. 656

1880 Zesch-Reinecke, p. VII

1884 Smith, p. 76

1887 Cock, p. 59

1887 Gillette, p. 138

1889 Chittenden, p. 221

1890 Packard, p. 205, 469

1892 Laurent, p. 37

1893 Townsend, p. 202

1894 Harrington p. 15

1897 Harrington, p. 71

1897 terminans Gory Harrington, p. 71

1898 Cockerell, p. 152.

1903 Evans, p. 291

1903 Knaus, p. 176

1903 Kerremans, p. 325

1903 aerosus Mels., = terminans Gory Kerremans, p. 325

1904 Gibson p. 52

1906 Felt, p. 512

1907 Fall-Cockerell, p. 181

1909 Easton, p. 50

1909 Smith, p. 296

1909 Schaeffer p. 377

1909 Wickham p. 23

1909 Blatchley p. 806

1911 Morris, p. 49

1911 Watson, p. 100

1913 Manee, p. 170

1915 Johnson, p. 312

1916 Morris p. 19

1917 Chagnon, p. 218

1917a Burke, pl. VI Fig. 3

1918 Weiss-Nicolay, p. 128-130

1919 Nicolay p. 20.

1919 Weiss-Nicolay p. 86-88

Type locality:

Distribution: Canada to Carolina, west to the Rocky Mountains.

Montreal Que. (2).

New Jersey: Englewood (8); Hewitt (4); Framingham, Mass. VI-1 (14).

New York: West Point VII-4 (c); Kolonah VI (8); Stanton Isl. (4); Long Isl. (19).

Penn. Angora (2); Levington (7); Portage V-16 (8).

Hammelstown V-11 (8); Charter Oak (10).

Maryland: Baltimore (o) -

N. Carolina: Black Mts. VI-20 (8); Tyron V-15 (10);

Virginia: Round Hill X-2 (10);

Indiana: New Judson V-30 (17);

Illinois: Galesburg (2).

Wisconsin: Polk Co. VII (3);

Minnesota: Duluth (7).

Missouri: St. Louis V-10 (2). Kansas (4). Michigan (4).

Iowa: Fairfax (W)

Colorado: Durango VI-8 (2) Montana (16).

New Mexico: Near Albuquerque (Watson).

Texas: La Grande (10)

Utah: North Springs, Iron Co. VI-10 (16).

Host: Bred from the leaves of basswood (Tilia americana), hazel (Corylus rostrata), elm (Ulmus americana), poplar (Populus sp.), oak (Quercus prinus), beech (Fagus sp.) grape (Vitus sp.), hickory (Hickoria sp.), iron wood (Carpinus caroliniane), chestnut (Castenea dentata) and Huckleberry tree (Vaccinium arboreum)

Season: May to July.

aeruginosa Gory.

1841 Gory, IV, p. 335, pl. 56, fig. 329

1857 Leconte p. 9

1859 Leconte p. 252

1870 Pettie, p. 102

1872 Chambers, p. 124

1873 Packard p. 247

1881 Packard, p. 130

1889 Walsingham, p. 77

1889 Townsend p. 233

1890 Packard, p. 519

1893 Townsend, p. 202

1895 Hamilton, p.364

1896 Horn, p. 247

1896 horni Kerr., = aeruginosa Gory, Horn, p. 247

1896 horni Kerremans p. 324

1897 Castle, p. 8

1897 H arrington p. 70

1902 Young p. 158

1903 Kerremans p. 326

1906 Felt, p. 703

1909 Blatchley, p. 806

1909 Smith, p. 296

1909 Easton, p. 50

1911 Gibson, p. 100

1917 Chagnon, p. 218

1919 Nicolay p. 20

Type locality:

Distribution: Manitoba to Florida, Indiana and Michigan to Texas.

New York: Long Island VI, VII (19).

N. Jersey: Atco VII-4 (8)

Penn. Abington (2); Phila. VI-19 (8); Jannette VI-10 (3).

Illinois: Beverly Hills VI-29 (c); Galesburg (2)

Alabama: Mobile VI-10 (2). Virginia: Cobhorn (16)

D. of C. Washington (10)

aurulenta Kirby

See ovata Weber

cephalica Schaeffer.

1909 Schaeffer, p. 377

Type locality: Huachuca Mountains, Arizona.

Distribution: Arizona.

Arizona: Nogalis VIII-17 (16); Huachuca Mts. VII-9 (c).

corvina Gory

See tesselata Fabricii

cuprescens Blatchley.

1913 Blatchley, p. 23

Type locality: Sanford and Ormond, Florida.

Distribution: Florida

Florida: Tampa IV (4); Hanlover III-19 (4)

Host: Taken on flowers of huckleberry (Vaccinium arboreum).

Season: March and April.

fascifera Schwarz.

1878 Schwarz, p. 363, 452

1896 Castle-Laurent, p. 303

1903 farciferus, Kerremans, p. 326

1909 Schaeffer, p. 377

Type locality: Tampa, Florida.

Distribution: Georgia, Florida and Alabama.

Florida: St. Augustine IV, (2); Enterprise IV-20 (2);
Marion Co. (C); Kinimmee (8);
Tampa IV-26 (11); Orange Co. (10); Cedar Key (10);
Jacksonville VI-6 (10).
Lake Mary (2)

Alabama: Mobile IV-23 (2)

flaccosa Mannerheim

1837 Mannerheim, p. 118

1909 Schaeffer, p. 377

Type locality: Arizona?

Distribution: Arizona and Mexico.

Arizona: Huachuca Mts. June, July, Aug. (8) (1);
Palmerlee, VI-27 (c).

Host: Oak.

floricola Kerremans.

1900 Kerremans, p. 347

Type locality: Florida.

Distribution: Florida: Enterprise (c)

Host: Unknown.

horni Kerremans.

See aeruginosa Gory.

laevicauda Leconte

Variety of ovata Weber

lugubris Leconte.

See tessellate Fabrecii

molesta Gory.

See ovata Weber.

ovata Weber

1801 Buprestis ovata Weber, p. 76 #8

1801 Herbst, p. 245 #163, pl. 156, fig. 1

1802 Illiger, p. 248

1825 Trachus Say, p. 252

1836 Metonius ovatus Say p. 164

1837 Trachys aurulenta Kirby, p. 162

1841 molesta Gory IV p. 332 pl. 55 fig. 325

1846 Strum p. 63

1857 Trachys ovata Lecordaire, p. 87

1857 molesta Gory Leconte p. 9

1859 Leconte, p. 251

1870 Pettie, p. 102

1872 Trachys aurulenta, Bethune, p. 35

1873 laevicauda Lec. = ovata Web. Crotch p. 96

1873 punctata Gory = M. ovatus Say. Crotch p. 10

1874 Henshaw, p. 17

1874 Le Baron, p. 96

1877 Provancher, p. 361

1878 Schwarz, p. 363, 452

1878 Hubbard-Schwarz, p. 656

1879 Harrington, p. 119

1880 Zesch-Reinecke, p. VII

1884 Smith p. 76

1887 Gillette, p. 138

1887 Cook, p. 59

1889 Chittenden, p. 221

1889 Waterhouse p. 132

1890 Packard, p. 205

1893 Townsend, p. 202

1896 Bowditch, p. 6

1896 Castle-Laurent, p. 303

1897 Harrington, p. 70

1897 Castle, p. 8

1902 Young p. 157

1903 Kerremans, p. 325

1903 aurulenta Kby. Kerremans, p. 325

1903 molestus Gory., Kerremans p. 325

1903 Pachyscelus ovatus Web. Kerremans, p. 320

1903 P. lavagatus Say = ovata Weber, Kerremans, p. 320

1903 P. punctatae = ovatus Web. Kerremans, p. 320

1906 Felt, p. 506, 513

1907 Fall-Cockerell, p. 181

1909 Blatchley p. 806

1909 Easton, p. 50

1909 Wickham, p. 23

1909 Smith, p. 296

1909 Schaeffer p. 377

1912 Leng. p. 193

1912 Davis, p. 305

1913 Manee, p. 171

1913 Blatchley, p. 23

1914 Davis, p. 267

1915 Johnson, p. 312

1916 Morris, p. 19

1917 Chagnon, p. 218

1918 Weiss-Nicolay, p. 128-130

1919 Davis p. 112

1919 Nicolay p. 20

Type locality:

Distribution: Quebec to Florida, west to the Rocky Mountains and Texas.

Mass. Brookline (13); Framingham V-31 (14)

New York: West Point V-28 (c); Buffalo (4)

New Jersey: Lakewood (4); Orange (4)

N. Carolina: So. Pines (Manee)

Georgia: Clayton 3700 ft. (4)

Florida: Kissimmee VI-20 (10); Jacksonville (4); St. Augustine (2) Lake Mary (2).

Iowa: Ames (W); Iowa City (W); Elmo (W).

Indiana: North Judson VI-30 (10)

Montana: Bitter Root Nat. Forest (1)

Colorado: Glenwood Springs VIII (13);

Arizona: Prescott (10); Williams VII-17 (10);

New Mexico: Beula (1)

Host: Scrub or Turkey oak (Quercus castesbaei), beech (Fegas sp.).

Variety l*aevicauda* Leconte

1859 Leconte p. 252

1873 Crotch, p. 96

1873 laevicauda Lec. = tesselata Fab. (Gory) Leconte p. 333

1906 Felt, p. 512

Type locality: Pennsylvania.

Distribution: Northeastern states, west to Wisconsin.

Pennsylvania: Angora (2); Chestnut VIII (2); Virginia (4)

Florida: Jacksonville (2); St. Augustine (2)

Boston, Mass. (2); St. Louis Mo. (2) Beaver Dam, Wis.VI-10 (c)

Host: Taken on pine.

praetexta Gory.

1841 Gory, p. 332

1873 Leconte p. 333

Type locality:

Distribution: St. Louis, Mo. (10); Jannette, Pa. VI (3).

Host:

schwarzi Kerremans

5 specimens marked "type" Tampa V-30, IX-25, Sumpter Co. Fla. Capron Fla. IV-22 (10).

terminans Gory

See aerosa Melsheimer.

tessellate Fabrecii.

1801 Trachys tessellate Fabrecii, p. 218 #1

1805 Illiger, p. 96 #1

1805 Trachys, Illiger, p. 196 #1

1817 Schonherr, p. 265 #1

1821 Trachys, Dejean, p. 30

1833 Trachys Solier, p. 313

1836 Say. p. 164

1841 Laporte-Gory, II, p. 3 pl. 1 fig. 2

1841 corvina Gory

1844 Taphrocerus tessellate, Melsheimer, p. 148

1846 Strum p. 63

1857 Leconte p. 9

1859 lugubris Leconte, p. 251

1873 lugubris Lec. = tesselate Fab. Crotch p. 96

1873 corvina Gory = lugubris Lec. Leconte p. 333

1878 Schwarz, p. 364, 452

1881 Packard, p. 130

1884 Leng. p. 76

1894 Hamilton, p. 252

1895 Hamilton, p. 364

1897 Castle, p. 8

1903 Kerremans, 325

1903 lugubris Lec. Kerremans p. 326

1903 lavicauda, Kerremans, p. 325

1909 Smith, p. 296

1919 Davis p. 112.

1919 lugubris, Blatchley, p. 30

Type locality:

Distribution: New Jersey to Florida.

Florida: Jacksonville (2); Lake Mary (C); Miami (8);

N. Carolina: So. Pines V-4 (X); Manley (4); Wellington VIII-1 (4)

Georgia: Savannah (2); Jessup IV-29 (10);

Host: Scrub oak (Quercus castesbaei)

Genus Buprestis Linn.

1760 Linne p. 408

Type of the Genus Buprestis octoguttata Linn.

aciculata Dejean.

See apricans Herbst.

acomana Casey

See rusticorum Kirby

adjecta Lec.

1854 Leconte p. 17

1857 Leconte p. 43

1857 Lacordaire p. 41

1859 Leconte p. 210

1873 Crotch p. 88

1890 Packard p. 681

1898 adjectus Cockerell p. 151

1899 Wickham p. 7

1901 Fall p. 116

1902 Kerremans p. 141

1907 Fall-Cockerell p. 179

1909 Casey p. 118

1909 intricata Casey p. 119

1909 brevis Casey p. 118

1911 adjectus Gibson p. 114

1917 Chamberlin p. 133

1918 Nicolay -Weiss p. 84

1918 Burke p. 337

Type locality: Oregon

Distribution: British Columbia, south through the Rocky Mountains and Pacific Coast States to New Mexico.

British Columbia: Vancouver, Field VIII-1(17), Peachland.

Washington: Key Port VII (10); Olympia (2).

Oregon: Rogue Riv. Val. 2000 ft (13); Josephine Co. VIII-2 0 (10); No. Powder (10) Battle Ax Mt. VIII 20 (c); Pt. Orford (10); N ewberg (4); Dilly (4); Ft. Klamath (17) Corvallis VIII 16 (c).

California: Weed 7-20 (c); McCloud VIII-14 (13); Vade (10); Bray (10); Pyramid R.S. (10) Yosemite (10); Tahoe (10); Mineral King VIII-6 (11); Talloc 6300 VIII-16; Deer Park (13);

Colorado: Leadville VI (2) Manitou, Colorado Springs, Bullion Peak VIII-19 (3).

New Mexico: Gallinas Can. (20);

Wyoming: Yellowstone N.P. VIII-1 (10).

Utah Beaver Foot Range Can. (4). Nevada (17).

Hosts: Yellow Pine (Pinus ponderosa), jeffreyi pine (P. jeffreyi), Lodge pole pine (P. contorta?), Douglas Fir (Pseudotsugae taxifolia) (10), Red Fir (Abies magnifica) (10).

adjectus Gibson

See adjecta Leconte.

adonea Casey

See subornata Lec.

adducta Casey

See rusticorum Leconte

adulans Casey

See aurulenta Linne

aemula Casey

See aurulenta Linne

affinis Casey

See aurulenta Linne

augusta Casey

See fasciata Fabricii

alternans Leconte

Variety of nuttalli Kirby

apricans Hbst.

1801 Herbst p. 125, pl. 67, fig. 9

1817 Schonherr p. 250

1826 nigricornis Strum p. 105

1837 aciculata Dejean p. 88

1841 bosci Laporte et Gory II p. 146, pl. 36, fig. 201

1846 Anchylocheira bosci Wht., Strum p. 59

1848 boscii White p. 24

1857 bosci L-G., Leconte p. 8

1859 Leconte p. 210, pl. 36 fig. 201

1873 Leconte p. 331.

1884 Lugger p. 203

1902 Kerremans p. 141

1904 Hopkins p. 39

1909 Burke p. 411

1909 Casey p. 128

1909 cribripennis Casey p. 127

1909 Hopkins p. 62

1909 Smith, J. p. 291

1913 Manee, p. 162

1913 Woodworth p. 195

1918 Nicolay-Weiss p. 88

1919 Burke, p.

Type locality:

Distribution: New Jersey to Florida, west to Texas.

Note: Leconte p. 331 (1873) "A specimen was collected in California by Lorquin."

Mass: A specimen collected in a piano factory (Coll. Bost. Soc. Nat. Hist).

N. Carolina: Raleigh (10) Boardman (10); So.Pines IV-25, V-25 (c);

S. Carolina: Nichels IV-26 (10);

Alabama: Grand Bay III-(2)

Georgia: Okefenohee Swamp VI (4).

Florida: Deep Lake IV-20 (4); Jacksonville (10);

Louisiana: Vowell's Mills (4)

Nebraska: Lincoln (10)

Texas: Doucette, Tyler Co. (9)

Hosts: Short-leaf pine (Pinus echinata), pitch pine (P. rigida), loblolly pine (P. teada) and long-leaf pine (P. palustris).

aurulenta Linn.

1767 Linne, p. 661

1788 Linne, p. 1933 #10.

1790 Rossius, p. 168 #461

1790 Oliver, p. 18, pl. 9, fig. 98

1801 Herbst p. 129

1805 B. aurulenta Rossius is Baustrica Illiger p. 91

1805 Illiger p. 93

1809 Panzer Heft. 101, R 10.

1817 Schronherr, p. 221, 223, 240

1823 Say p. 160

1837 bicostata Dejean p. 88

1841 Laporte et Gory II p. 146, plate 36, fig. 200

1848 White p. 24

1854 radians Leconte p. 17

1857 Leconte p. 44

1857 Leconte p. 8

1857 Lacordaire p. 41

1857 radians Lacordaire p. 41

1857 lauta Lacordaire p. 41

bicostata Leconte p.

1858 Fitch p. 703

1859 Leconte p. 210

1866 aurulentum Walker p. 310

1869 Harris p. 224-225

1873 Crotch p. 88

1873 lauta Crotch p. 88

1873 radians Crotch p. 88

1873 villosa Leconte p. 331

1878 lauta, radians Glover plate 44, fig. 37 & plate 20, fig. 4.

1886 Horn p. 137

1888 Holland p. 91

1888 lauta Holland p. 91

1890 Packard p. 681

1898 lautus Cockerell p. 151

1901 Fall p. 116

1902 Kerremans p. 141

1902 lauta Lec. Kerr. p. 141

1902 radians Lec. Kerr. p. 141

1902 adjecta Lec., Kerr. p. 141

1903 villosa Lec. Kerremans p. 143

1904 Hopkins p. 39

1906 Evans p. 98

1907 Fall-Cockerell p. 179

1908 Heyne - Taschenberg p. 138

1908 lauta Wright-Coolidge p. 67

1909 Casey p. 120

1909 adulans Casey p. 123

1909 aemula Casey p. 121

1909 villosa Lec. Casey p. 114

1909 venusta Casey p. 122

1909 radians Lec. Casey p. 120

1909 tacomae Casey p. 121

1909 affinis Casey p. 123

1909 nupta Casey p. 122

1909 prospera Casey p. 123

1909 Burke p. 412

1911 lauta Watson p. 81

1913 lauta Woodworth p. 195

1915 Huguenin p. 364

1917 Burke p. 87

1917 Chamberlin p. 133

1918 Nicolay-Weis p. 82

1918 Burke 337

1918 villosa Lec. Burke p. 337

1918 lauta

Type locality: "Boreal America"

British Columbia: Kamloops (4); Priest River VI-21 (c); Victoria VIII-20 Vancouver Island VIII-17, Calspooia Mts. 1600 ft. VIII-11; Beaver Mouth VII-14.

Wash: Key Port VII (10); Hoquiam VII-20 (10); Kent VI-29 (10); Tacoma (4) Port Townsend VII (10); Seattle VII

Oregon: Rogue River VII (c); Upper Klamath (10); Zena IX-7 (c); Newberg VII (c); Corvallis, Ontario, Roseberg, Sumpter, Divide, Ashland, Mary's Peak, Sulphur Springs, Dilly, Astoria, Rainier (c) Very common in western Oregon

California: Mt. Baldy IV-22 (7); Sequoia Park VII (7); Pacific Grove (13); Mt. Lowe (13); Deer Park (13);

Yreka (4); San Jose (10); Summerdale (10); Bray (10); Los Angeles (10); Carrville VII-1 (15) Tulare Co. 4700 ft. VIII-1, Sylvania, McCloud VIII-2 (15).

New Mexico: Santa Fe (13); Sandia Mts. (Watson); Los Vegas (10); Gallinas Canyon.

Arizona: Flagstaff (10); Montozuma N.F. (10); Tuscon VI-3 (4);

Utah:

Nevada:

Wyoming: Yellowstone Park VI-21 (19);

Idaho: Centerville VII (10); Atlanta 7800 ft. VI (4); Cascade VI-22 (c).

Montana: Bitter Root Mts. (1);

Hosts: Yellow pine (Pinus ponderosa), jeffrey pine (P. jeffreyi) sugar pine (P. lambertiana), lodgepole pine (P. contorta), Monterey pine (P. sabiniana) douglas fir (Pseudotsugae taxifolia), Western red cedar (Thuja plicata)

bicostata Leconte

See aurulenta Linne

bistrinotata Casey

See fasciata Fabricii

bosci Leporte-Gory

See apricans Herbst.

boulderensis Casey

See alternans Leconte

brevis Casey

See adjecta Leconte.

caliginosa Casey

See subornata Leconte.

callida Casey

See fasciata Fabricii

canadensis Casey

See impedita Say

confluenta Say

1823 Say p. 159

1824 Say p. 60

1857 Lacordaire p. 41

1859 confluens Leconte p. 206

1878 confluens Glover pl. 42 fig. 9

1903 Kerremans p. 142

1906 confluens Evans p. 98

1908 confluens Gibson p.125

1909 Casey p. 104

1909 tessellata Casey p. 104

1909 Wickham p. 23

1913 Woodworth p. 195

1915 Kiviat p. 237

1917 Burke p. 87

1917 Burke p. 327

1917 Chamberlin p. 133

1918 Burke p. 335

1918 Nicolay-Weiss p. 98

1919

Type locality: Missouri.

Distribution: Vancouver to Ontario in Canada. Indiana to Wyoming, California and Texas. Florida[1].

Canada: Wabamun, Alta. VIII-3; Quebec. (19); Mokinak, Man.; Oweme Man. VII (2); Vancouver, B.C. (1);

Wisconsin: Beaver Dam VII-2 (c); Milwaukee (7);

Illinois: Peoria (17)

Indiana: Millers VII-6

Michigan: Detroit VI-17 (3)

Dakota: Buff Gap (10).

Nebraska: Badger (10)

Kansas: Wallace Co. 3000 ft (10);

Iowa: Ames (W)

Wyoming: Lusk VII (10)

Colorado: Littleton VI-24, VI-7 (14); Ft. Lupton (8); Denver VIII-7 (9)

Utah: Pangvitch VII-3 (10); Carabou (1).

California: Lake Tahoe (15); Placerville (10); Phillips Sta. (15); Clear Creek July; Myers (10);

Florida: Kissemmee V-1 (9)

Texas (8)

1. The specimen in Mr. Frank Mason's collection labeled Kissimmee, Florida May 1, is the true confluens but is probably mislabled.

Hosts: Populus tremuloides, P. deltoides

conicicauda Casey

See nuttalli variety alternans Kirby

contorta Casey

See alternans Leconte

consularis Gory

Variety of nuttalli Kirby

connexa Horn

1875 Horn p. 148

1901 Fall p. 116

1903 Kerremans p. 142

1909 Casey p. 111

1913 Woodworth p. 195

1917 Chamberlin p. 131

1917 Nicolay p. 88

1918 Dozier p. 331

1918 Nicolay-Weiss p . 102

1918 Burke p. 336

Type locality: Owens Valley, Calif.

Oregon: Ida (10); A lbee VII, VIII (10); Sparta VIII-6 (c)

California: Donner Lake (15); Owens Valley (5); Weed

VII-18, 28 (c)

Idaho: Centerville (10); Emmet (10)

Host: Yellow pine (Pinus ponderosa), jeffrey pine (P. jeffreyi)

crenata Motschulsky.

See fasciata Fabricii

cribripennis Casey

See apricans Herbst

davisii N. & W.

Variety of lineata Fabricii

decora Fab.

1775 Fabricii p. 217 #6

1781 Fabricii p. 274

1787 Fabricii p. 176

1788 Linne p. 1927

1791 Oliver p. 18 pl. 8 fig. 82

1792 Fabricii p. 189

1801 Herbst p. 128 pl. 149 fig. 8

1801 Fabricii p. 189

1805 Illiger p. 86 #19

1817 Schonherr p. 218, 223

1833 Solier p. 281

1835 Say p. 160

1837 Dejean p. 88

1841 Laporte-Gory p. 145 pl. 36 fig. 199

1846 Anchylocheira Strum p. 59

1848 White p. 24

1857 Leconte p. 8

1859 Leconte p. 210

1867 Cheverlot p. 578

1878 Glover plate XI fig. 14

1886 Horn p. 137

1893 Gundlach p. 161

1894 Gundlach p.

1902 Kerremans p. 141

1908 Wenzel p. 343

1909 Casey p. 127

1909 Smith p. 291

1909 Wenzel p. 45

1910 Casey p. 110

1913 Manee p. 168

1914 Davis p. 267

1914 Leng-Mutchler p. 430

1917 Leng-Mutchler p. 205

1918 Dozier p. 331

1918 Nicolay-Weiss p. 88

Type locality:

Distribution: Stanton Island, New York, south to Florida, west to Arkansas and Texas. Cuba and Porto Rico.

Virginia: Cobleam (16);

N. Carolina: Wilmington (10); So. Pines IV-6, V-7 (c); Wrightsville (10); S. Carolina.

Alabama: Grand Bay III, IV, V (1) (2); Tyler Co. (10);
Mobile III (10)

Georgia: Thomasville IV-1 (19).

Florida: St. Augustine (2); Steinhatchet (4); Crescent City (10); Gainesville VI-1(c); Jacksonville (10); Big Pine Key (10); Orlando (19);

Louisiana: Vowell's Mills (4);

Arkansas: Little Rock (4)

Texas: Trinity VII-2 (10); Doucetti, Tyler Co. (9)

Host: Longleaf pine (Pinus palustris) and probably the other common southern pines.

deficiens Casey

See maculipennis Gory

delatata Motschulsky

See laeviventris Leconte.

depressa Casey

See fasciata Fabricii

diruptauns Casey

See alternans Leconte

elongata Casey

See rufipes Oliver

fasciata Fab.

1787 Fabricii p. 177

1788 Linne p. 1927

1788 ornata Linne p. 1931 #64

1789 Linne p. 327, 340.

1790 Oliver p. 21 pl. 9 fig. 92

1792 Fabricii p. 191 #23

1801 Fabricii p. 191 #31

1801 Herbst p. 162 (90) pl. 145 fig. 12

1801 sexmaculata Herbst p. 163 pl. 148 fig. 5

1805 Illiger p. 87 #31

sexmaculata Hausmann p. 30

1817 Schonherr p. 220

1817 sexmaculata Schonherr p. 220

1825 Say p. 59

1837 Dejean p. 88

1837 var. sexmaculata Dejean p. 88

1837 anaplis Kirby p. 153

1838 Chevrolat p. 68

1838 lherminieri Chevrolat p. 68

1841 Laporte-Gory p. 144, pl. 35, fig. 198

1841 ornata Gory IV, p. 93, pl. 16, fig. 90

1843 langii Mannerheim p. 237

1846 Anchylocheira Strum p. 59

1857 Leconte p. 8

1857 ornata Gory, Leconte p. 8

1857 langii Leconte p. 42

1857 langii Lacordaire p. 41

1857 Leconte p. 42

1859 sexptigata Leconte p. 205

1859 langii Leconte p. 206

1866 ornata Walker p. 324

1870 Pettit p. 102

1870 Jones p. 9

1871 Anoplis Bethune p. 23

1872 Ancylocheira Clementi p. 37

1873 langii Crotch p. 88

1873 6 plegata Crotch p. 88

1873 Crotch p. 88

1873 A. crenata Motsch. = langii Mann., Leconte p. 331

1877 Provancher p. 350

1877 sexpligata Provancher p. 351

1878 Hubbard-Schwarz p. 636

1878 var langii Hubbard-Schwarz p. 656

1878 Glover pl XX fig. 1,2,3

1878 var langi pl. 42 fig. 13, 14, 15

1880 Zesch-Reinecke p. VIII.

1880 Horn p. 137

1882 Leconte List #1

1883 Fletcher p. 203

1884 Fletcher p. 16

1889 Blanchard p. 30

?1889 Harrington p. 51

1890 Harrington p. 159

1890 langii Harrington p. 159

1890 Packard p. 438, 559, 599

?1890 Harrington 51

1892 Slosson p. 6

1893 Hamilton p. 274

1894 Wickham p. 2

1894 Fall p. 98

1894 Linter p. 516

1894 Kilman p. 49

1894 langii Hamilton p. 29

1894 Hamilton p. 187

1895 Hamilton p. 364

1895 Fall, p. 98

1895 Evans p. 146

1896 Bowditch p. 6

1898 Cockerell p. 151

1899 langii Wickham p. 7

1901 Fall p. 116

1901 Felt, p. 874

1902 var. langii Van Dyke p. 172

1902 langii Skinner p. 40

1903 Kerremans p. 142

1903 sexmaculata Herbst, Kerremans p. 142

1903 lherminieri Chev., Kerremans p. 142

1903 langii Mann. Kerremans p. 142

1903 sexplegata Lec. Kerremans p. 142

1903 ornata Walk., Kerremans p. 142

1903 Wickham p. 51

1906 Felt p. 458, 751

1907 Fall-Cockerell p. 179

1908 Wright-Coolidge p. 67

1908 Heyne-Taschenberg p. 138

1909 langii Gibson p. 121

1909 Blatchley p. 784

1909 Smith p. 291

1909 Casey p. 107

1909 depressa Casey p. 111

1909 sexplegata Lec., Casey p. 106

1909 fortuna Casey p. 107

1909 ornata Walk., Casey p. 112

1909 incolumis Casey p. 112

1909 oregona Casey p. 112

1909 fastidiosa Casey p. 109

1909 fulgens Casey p. 106

1909 obliqua Casey p. 113

1909 patruelis Casey p. 113

1909 leviceps Casey p. 110

1909 viridimicans Casey p. 111

1909 graminea Casey p. 114

1909 mediocris Casey p. 109

1909 seditiosa Casey p. 110

1909 saturata Casey p. 114

1909 agusta Casey p. 108

1909 bistrinotata Casey p.

1909 callida Casey p. 109

1909 crenata Casey (male) p. 110

1911 langii Gibson p. 122

1913 Manee p. 168

1913 Woodworth p. 195

1914 Sherman p. 337

1914 fulgens Casey = fasceata Fab. Casey p. 155

1914 incolumis Casey = langii Mann. Casey p. 155

1914 oregona Cas. = langii Mann. Casey p. 155

1914 Leng-Mutchler p. 430

1914 lherminieri Chev. Leng & Mutchler p. 430

1917 Chagnon p. 218

1917 Chamberlin p. 132

1917 langii Chamberlin p. 132

1918 langii Mann. Burke p. 337

1918 Nicolay-Weiss p. 102

1918 langii Nicolay & Weiss p. 103

1920 Knull p. 5

Type locality:

Distribution: Nova Scotia to Georgia, from the Atlantic to the Pacific, Hudson Bay to New Mexico.

Maine: Monmouth (14);

New Jersey: Glocester Co. (8);

New York: Binghamton (9); Keene Valley IX-8 (1); Wilmington VII-6; Lake George VIII-25 (9); Ithica (4)

Penn: Pocono Lake VII-10, Endeavor VII-12 (20) Pittsburg (3)

Virginia: Grand Beach VI-2 (14); Cobham (1); Pennington Gap (10); Arkny Springs (10)

N. Carolina: Cranberry (17); So. Pines VIII

Georgia: Clayton 3700 ft (4);

Wisconsin: Douglas Co. VIII-16 (14); Keshena VII (14);

Michigan: Boroga Co. (17); Detroit (3); Marquette VI-28, VII-9 (9); Escanaba VII-17 (10); Pt. Huron VI (10); Isl. Royal (10);

Minn: Waldo (17); Duluth (7);

Ohio: Cincinnati (4)

Dakota (1) Kentucky (16) Nevada (c); Montana (Evendon); Indiana (c)

Utah: Salt Lake City V-18

New Mexico: Gallinas Can. (20); Beulah (1);

Nebraska: War Bonnett Canyon (10);

Wyoming: Cody VII (9); National Park (10);

Colorado: Manitou VI-28 (17); Glenwood Springs VIII (13);

Arizona: Senator VII (4);

Idaho: Atlanta (19); Cascade VI-22 (c).

Washington: Tacoma (4); Hoquiam VIII-1 (10); Key Port VII (10); Des Moines(10) Seattle VI-10 (19);

Oregon: New Port VII (c); Dilly (4); Alder VIII-20 (10); Douglas Co. IX-8 (c); Corvallis V, VI, VII, VIII (c); Rainier VI (c), Astoria V (c); Detroit VIII (c)

California: San Bernardino Mts. 5000 ft. VII (4); Yreka (4); Alma (4); Sylvania (4) Castle Crag VII (13); Mowhawk VII (13); Onion Valley VIII-10 (10); Humbolt Co. 3000 ft. VII-18 (7); Quincy VI-10 (19); St. Helena, McCloud VII-2, Weed VI-7 (c) Tulare (16).

Canada: Kearney Ont. VII-26; Toronto Ont., Quebec, Alberta (17); Vancouver Isl. B.C. (17); Beavermouth B.C. (17); Huntsville, Ont. (8); Victoria, B.C. (9); Beaverfoot Range, B.C. (9); Mt. Robinson B.C. VII-7 (9); Kamloops B.C. (4); Telegraph Co. B.C. (4); Walcott Sta. B.C. (10); Golden B.C. (17); Manitoba (17); Stikino River, B.C. Hudson Bay, Peachland, B.C. Nova Scotia (Kirby).

Hosts: Breeds in Poplulus, Acer, Salix Oregon alder (Alnus oregona) (Probably breeds in Douglas Fir (Pseudotsugae taxifolia) Abies and some Pines)

fastidiosa Casey

See fasciata Fabricii

flavopicta Casey

See consularis Gory

fortunata Casey

See fasciata Fabricii

fulgens Casey

See fasciata Fabricii

fusca Casey

See subornata Leconte

fusiformis Casey

See maculipennis Gory

graminea Casey

See fasciata Fabricii

gravidula Casey

See alternans Leconte

gibbsii Lec.

1857 Leconte p. 42

1859 Leconte p. 205

1901 Fall p. 116

1902 Van Dyke p. 172

1903 Kerremans p. 142

1908 Wright-Coolidge p. 67

1909 Casey p. 108

1913 Woodworth p. 195

1917 Chamberlin p. 131

1918 Nicolay-Weiss p. 101

1918 Burke p. 335

1920 Garnette p. 17

Type locality: Steilacoom, Washington.

Distribution: Washington, Oregon, California.

Washington: Steilacoom (Leconte).

Oregon: Corvallis VIII-15 (c); Philomath VIII-17 (c); Dilly (4)

California: Garberville VII-11 (c); Tuolumne Co. (15); Nevada City (15); San Diego Co.* (15) Sonoma Co. (15); Sequia Sta. Tulare Co.* (9); Yolo Co. (5); Yosemite Valley 4500 ft. VI-14 (10);

Colorado: Manitou VII-6

---

*Probably Buprestis viridisuturalis N. and W.

Hosts: Taken on Oregon alder (Alnus oregona), Black cottonwood (Populus trichocarpa) and bred from Calif. live oak (Quercus californica)

historia Casey

See subornata Lec.

impideta

Variety of striata

inconstans Melsheimer

See lineata Fabricii

incolumis Casey

See fasciata Fabricii

intricata Casey

See adjecta Leconte

laeviventris Lec.

1857 Leconte p. 43

1859 Leconte p. 207

1873 Crotch p. 88

1873 A. delatata Mots. = laeviventris Lec. Leconte p. 331

1894 Fall p. 98

1901 Fall p. 116

1902 Van Dyke p. 172

1903 Kerremans p. 142

1906 Evans p. 98

1909 Casey p. 93

1909 pugetana Casey 94

1913 Woodworth p. 195

1917 Burke p. 87

1917 Chamberlin p. 132

1918 Burke p. 336

1918 Nicolay & Weiss p. 98

Type locality: Oregon.

Distribution: British Columbia south through the Pacific Coast & Rocky Mountain States.

Washington: Tacoma VIII (4)

Oregon: Albee (10); Sumpter VII (c) Sparta VIII (c)

California: McCloud VII-2 (15); Weed VII, VIII (c); Tehachapi VII (7); Placerville (10); Vade (10); Shasta (1); Taloc (13); Castle Crag (13) Truskee 5000 ft. VIII (4)

Arizona: Flagstaff (10);

Idaho: Moscow (1); Nevada (2); Montana (4).

Hosts: Pseudotsugae taxifolia, Pinus ponderosa, P. lambertiana, P. contorta, P. sabiniana and P. radiata

Season: May-October.

langii Leconte

See fasciata Fabricii

lateralis

See sulcicollis Leconte

lauta Leconte

See aurulenta Linne

lecontei

See rusticorum Kirby

leporina Casey

See maculipennis Gory

leviceps Casey

See fasciata Fabricii

lherminieri Chev.

See fasciata Fabricii

lineata Fab.

1775 Fabricii p. 217 #10

1781 Fabricii p. 275 #13

1787 Fabricii p. 177 #18

1788 Linne p. 1928 #46

1790 Oliver p. 25 pl. 8 fig. 80

1798 Fabricii p. 192 #29

1801 Fabricii p. 192 #37

1801 Herbst p. 159 #89 pl. 146 fig. 5

1805 Illiger p. 87 #37

1817 Schonherr p. 127, 224

1833 Solier p. 281

1837 Anoplis Kirby p. 153

1837 Dejean p. 88

1841 Laporte-Gory p. 143 pl. 35 fig. 196

1844 Melsheimer p. 146

1846 Ancylocheira Strum p. 59

1848 White p. 24

1850 Leconte p. 227

1857 Fitch p. 705

1859 Leconte p. 206

1867 Cheverlot p. 578

1869 Glover p. 91

1871 Bethane p. 230

1873 Crotch p. 88

1877 Provancher p. 351

1878 Schwarz p. 451

1878 Glover pl. XVI fig. 13

1878 Hubbard-Schwarz p. 636

1886 Horn p. 137

1889 Blanchard p. 30

1890 Packard p. 683

1893 Gundlach p. 161

1893 Hopkins p. 182

1894 Gundlach p. 309

1894 Hamilton p. 252

1903 Kerremans p. 141

1903 inconstans Mels. = lineata Fab. Kerremans p. 141

1909 Blatchley p. 784

1909 Casey p. 89

1909 Smith p. 291

1909 scripta Casey p. 91

1909 leporina Casey p. 92

1912 Grossbeak p. 135

1913 Manee p. 168

1914 Leng-Mutchler p. 430

1917 Leng-Mutchler p. 205

1917 Chagnon p. 218

1918 Burke p. 335

1918 Dozier p. 331

1918 Nicolay-Weiss p. 94

1919 Nicolay p. 18

1920 Knull p. 5

Type locality: Georgia.

Distribution: Nova Scotia to Florida west to Michigan, and Texas. Cuba and Guadslupe Islands.

Canada: Brookland B.C. (10); Terrebonne Co. Que., Toronto, Ont.

Mass: Framingham (14); Lowell VII-2 (14); Dartmouth VI-13.

New Jersey: Jamesburg VIII-4; Angle sea (8); DeCosta VII-28 (8); Newark (8); Malaga VIII-4 (8); Lakehurst VII-28 (21); Atlantic City (8).

New York: Belport, L.I. VII-23, VIII-8 (9); Yaphauk, L.I. (21) Bayshore VII-22.

Penn: Miami VI-26 (3); Ingle Rock VII-3; Lehigh Gap VII-3 (c); Rockville (20)

Rhode Island: Providence. Washington V-29, VII-20 (10).

W. Virginia: West Sulphur Springs VII-19

N. Carolina: So. Pines VI-7 (21); Wilmington (8); Pendleton VI-7 (9); Tyron VII-23 (10).

Virginia: East Falls Church VIII-30 (10); Newport News (10); Cobham (17); Gt. Falls (10).

Georgia: Wayne Co. IX-1 (17); Jessup IX-1, Okefenokee Swamp (4).

Florida: Ft. Copson (18); Jacksonville (12); Gainsville VI (c); Tampa (10) Crescent City (10); Quincy VII-7 (10); La Grange IX (4); Lakeland V-6 (4); Pt. Orange (4); Enterprise (17); Paridise Key (10).

Indiana: Lake Co. VI, VII-29

Minnesota: Baxterville (10)

Texas: Willis VI-3 (c). Louisiana: Opelika VIII-2 (18); Covington VI-24 (10); Vowells Mills (4); Vernon Parish (4)

Alabama: Grand Bay V-25, Mobile VIII-4 (4).

Hosts: White pine (Pinus strobus), pitch pine (P. rigida), Loblolly pine (P. taeda), long-leaf pine (P. palustris) and scrub pine (P. virginiana)

Variety davisii Nicolay-Weiss

1918 Nicolay-Weiss p. 94

Type locality: Big Pine Key, Florida

Distribution: Florida: Cocoanut Grove IX-14 (19).

lyrata Casey

See rusticorum Kirby

maculipennis Gory

1841 Gory IV, p. 119, pl. 21 fig. 117

1844 Gory p. 146

1846 inconstans Melsheimer p. 146

1857 Leconte p. 8

1857 inconstans Mels. Leconte p. 8

1857 Fitch p. 705

1857 inconstans Lacordaire p. 41

1867 Chevrolat p. 578

1903 Kerremans p. 141

1909 Casey p. 90

1909 inconstans Mels. Casey p. 91

1909 reducta Casey p. 90

1909 deficiens Casey p. 90

1909 fusiformis Casey p. 91

1909 scripta Casey p. 91

1909 leporina Casey p. 92

1914 inconstans Mels = maculipennis Gory Casey p. 155

1914 deficiens Cas. = maculipennis Gory Casey p. 155

1914 fusiformis Cas. = maculipennis Gory Casey p. 155

1918 Nicolay-Weiss p. 93

1919 Nicolay p. 18

Type locality:

Distribution: Maine to Florida, west to Michigan and Missouri

Maine: Paris VII-18 (14); Massachusetts: Lynn (3).

New York: Bellport L.I. VII-23, VIII-30 (19); White Face Mt. VI (4).

New Jersey: Jamesburg VII-2 (8); Lakehurst VII-11 (20);

Virginia: Cape Henry W. Virginia: White Sulphur Springs VII-18.

Florida: January (4); Big Pine Key (21).

Louisiana: Vowell's Mill VI (4).

Indiana: Millers VII-28; Mineral Springs VII-4

Michigan: Pentwater VII-24

Missouri (19).

maculativentris Say.

1824 Say p. 178

1836 Say p. 272

1838 Colobogaster Cheverlot p. 73

1841 sexnotata Laporte - Gory p. 129 pl. 32 fig. 178

1848 White p. 24

1850 Leconte p. 227

1857 sexnotata Gory = maculativentris Say. Leconte p. 7

1859 Leconte p. 208

1869 Gemminger and Harold p. 1378

1870 Pettit, p. 102

1870 Jones p. 9

1873 Crotch p. 88

1874 Austin p. 209

1877 Provancher p. 352

1878 Hubbard and Schwarz p. 636, 655.

1878 Glover pl. XI fig. 6

1879 Gardner p. 212

1881 Harrington p. 30

1882 Leconte List II & V.

1883 Leconte p. 178

1884 Harrington p. 218

1885 Harrington p. 23

1889 Blanchard p. 30

1890 Packard p. 682

1890 Harrington p. 159

1893 Cockerell p. 329

1894 Slosson p. 2.

1894 Fall p. 98

1895 Townsend p. 43

1896 Bowditch p. 6

1897 Harvey-Knight p. 78

1898 Cockerell p. 329

1899 Wickham p. 7

1901 Fall p. 116

1902 Young p. 153

1903 Kerremans p. 142

1903 sexnotata Kerremans p. 142

1906 Felt p. 650, 674

1907 Fall-Cockerell p. 178

1909 Casey p. 100

1909 Smith p. 291

1911 Watson p. 73

1912 Frost p. 305

1913 Woodworth p. 195

1917 Chagnon p. 218

1918 Nicolay-Weiss p. 90

1918 Burke p. 336

Type locality:

Distribution: Hudson Bay to Manitoba and Quebec, Maine to Oregon south in the Rocky Mountains to New Mexico

Canada: "Hudson Bay (Horn); Cape Bretton H.B.T., Halifax, N.S., MacNabs Island N.S., Montreal VI-14, Toronto, Port Credit Ont., VIII-22, Gremsby, Ont. VII-7, Oweme Manitoba, Winnipeg, Manitoba VIII-7

Maine: Jackman, Harrison VII, Monmouth VI-24, Redding VII-14, Wales VII-4 Paris VII-12 (c).

New Hampshire: Mt. Wash. 6290 ft. VII-2 White Mts., Sanborn VII, VIII, Jefferson VIII-1 (4). Pike VII-8 (c).

Mass: Monterey VII-10 (14); Lowell, Filchburg (10);

Vermont: Bengton Co. (4)

New York: Buffalo (4); Pequaming VIII-14; Keens Valley VII-VIII (1). Lake Placid VII-10, Saranac Lake, Wilmington VIII.

Indiana: Pulnam Co. Illinois (4).

Minn: Duluth (4);

Wisconsin: Keshena

Michigan: Marquette VI-26, VI-27 (10), White Fish Pt. L.S. (10); Escanaba (10); Isl Royal L.S. (10)

S. Dakota: Elmore (10); Black Hills (Burke).

Colorado: Colorado Springs VI-10 (10).

Montana: Helena IV-8 (10). Oregon (Burke)

New Mexico: Sandia Mts. (Watson) Arizona (Burke)

Hosts: Balsam Fir (Abies balsamae), Pinus sp.(eastern), yellow pine (P. ponderosa). Taken on Hemlock and Spruce.

var. subornata Lec.

1859 Leconte p. 208

1899 Wickham p. 7

1902 Van Dyke p. 172

1903 Kerremans p. 142

1907 Fall-Cockerell, p. 179

1909 Casey p. 98

1909 rubronotans Casey p. 97

1909 punctiventris Casey p. 99

1909 violescens Casey p. 99

1909 adonea Casey p. 97

1909 histrio Casey p. 98

1913 Woodworth p. 195

1914 punctiventris Cas. = subornata Lec. Casey p. 155

1915 Gibson p. 137

1918 Nicolay & Weiss p. 92

1918 Burke p. 336

Type locality:

Distribution: Washington to California and New Mexico, east to Kansas. (Reported by Germain from Ottawa, Canada; this is doubtless an error, the eastern species is maculativentris Say.)

Washington: Mt. Rainier VII-14 (9); Olympia (2);

Oregon: Wasco (17); Corvallis VI-12 (c)

California: Palo Alto (10); Pyramid R.S. (10); Helt (10); Placerville (10); Yreka (10) Weed VI, VII, VIII (c);

Colorado: Colorado Springs (13) Cheyene Can. (2).

New Mexico: Los Vegos VI-8, VII-8 (10)

Arizona: Grand Canyon (10)

Michigan: Isl Royal L.I. (2)

Utah (Burke)

Kansas (10).

Host: Pinus ponderosa yellow pine, Douglas Fir (Pseudotsugae taxifolia) Garnette.

Season: June-October.

var. rusticorum Kirby

1837 Anoplis rusticorum Kirby p. 151

1837 A. paganorum Kirby p. 152

1841 Laporte-Gory IV p. 117,pl. 20, fig. 115

1843 Mannerheim p. 237 #131

1848 White p. 23

1848 paganorum White p. 23

1850 Leconte p. 227

1857 Leconte p. 8

1859 Leconte p. 208

1859 paganorum Kby Leconte p. 208

1866 Walker p. 310

1871 Anoplis Bethune p. 230

1871 Anopolis paganorum Kby. Bethune p. 230

1871 lecontei Saunders p. 40 #17

1877 Packard p. 589, 810

1877 Packard p. 22-27

1878 Glover pl. 42. fig. 10

1882 Leconte List I, III & VI

1890 Harrington p. 159

1890 Packard p. 683

1893 Hamilton p. 274

1902 Skinner p. 40

1912 Van Dyke p. 172

1903 Kerremans p. 142

1903 pagonarum Kerremans p. 142

1903 Knaus p. 175

1907 Fall-Cockerell p. 179

1909 Casey p. 99

1909 sublivida Casey p. 102

1909 morosa Casey p. 101

1909 paganorum Kby. Casey p. 100

1909 nigricans Casey p. 102

1909 adducta Casey p. 103

1909 acomana Casey p. 101

1909 caliginosa Casey p. 102

1909 fusca Casey p. 101

1909 lyrata Casey p. 103

1913 Woodworth p. 195

1917 Gibson p. 149

1917 Chamberlin p. 132

1918 Nicolay-Weiss p. 91

1918 Burke p. 336

Type locality: "Lat. 54°" (Rocky Mountains)

Distribution: British Columbia to California and New Mexico east through the Rocky Mountain States.

Saskatchewan: Cumberland House (Leconte)

British Columbia: Golden VIII (4); Peachland VIII-3; Glacier (17); Field VIII-1 (17), Stampede (17); Beavermouth VII-14 (17);

Washington: King Co. 2800 ft. VIII-5 (17) Tacoma IX-14, Seattle, Port Townsend (4)

Oregon: Rainier VII (c); Astoria (c); Sedalia (c); Dilly (4); Blue Mts. VII, VIII (c); Divide, Douglas Co. (17)

California: Weed VI, VII, VIII (c); Pyramid R.S. (10); Yreka (10); Vade (10); Onion Valley (10); Taho (10) Fresno Co. (4);

Montana: Helena VII-10

Wyoming: Nat. Park VII-30 (10);

New Mexico: Los Vegas VIII-7 (10); Ft. McLeod (10) Cloudcraft VII-17 (10); Albuquerque (4); High Rolls V-31 (10); Ft. Wingate VIII (17); Beulah (17)

Arizona: Bright Angle VIII (10); Los Vegas Hot Springs (10);

Utah: Scofield VIII-24 (10) Kansas

Idaho: Moscow (10); Nevada (4)

Colorado: Arbolos VII-6 (10); Monetan VIII-16 (4); Boulder VII-13; Creede 8844 ft. VIII.

Hosts: Pseudotsuga taxifolia, Abies grandis, Abies lasiocarpa. Abies concolor, Pinus ponderosa

Season: April-October.

mediocris Casey

See fasciata Fabricii

morosa Casey

See rusticorum Kirby

nigricans Casey

See rusticorum Kirby

nigricornis Strum

See apricans Herbst.

nupta Casey

See aurulenta Linne

nutalli Kirby

1837 Anoplis nutalli Kirby p. 152

1848 White p. 24

1850 Leconte p. 227

1857 Leconte p. 8

1859 Leconte p. 207

1871 Bethune p. 230 - ?

1877 Provancher p. 352

1878 Hubbard-Schwarz p. 636

1879 Anchylochira Harrington p. 52

1882 Leconte Lists 6, 8, 9

1889 Blanchard p. 30

1890 Harrington p. 159

1893 Cockerell p. 329

1895 Evans p. 146

1895 Townsend p. 43

1898 Cockerell p. 151

1902 Van Dyke p. 172

1903 Kerremans p. 142

1907 Fall-Cockerell p. 179

1909 Casey p. 92

1917 Chagnon p. 218

1909 Smith p. 291

1918 Nicolay-Weiss p. 96

1918 Burke p. 336

Type locality: Latitude 65° Rocky Mountains

Distribution: Alaska, British Columbia and Alberta south through the Rocky Mountain and Pacific Coast States to Arizona and New Mexico.

Alaska: Port Yucon, Salmon River, Alaska (c);

Alberta: Edmonton VII-3 (c); Bnaff VII-1 (17);

Dawson Y. Ter.

British Columbia: Telegraph Creek (4)

Oregon: Willowa Co. (c); Ft. Klamath VIII-25 (10)

Wyoming (10) Montana (c).

Colorado: Waldo Canyon VIII-2; Eldora (17); Bailey VIII (13); Leadville, 10,5000 ft. VII-6 (10);

Idaho: Evergreen 3600 ft. VIII (17); Moscow (10)

Arizona: Williams VII-29 (10); Flagstaff VII-6 (10);
Grand Canyon (10);

Host: Probably Yellow Pine (Pinus ponderosa)

var. alternans Lec.

1859 Leconte p. 207

1866 Ancylocleira Leconte p. 348

1873 alternans Lec. = nuttalli Kby., Crotch p. 88

1903 alternans Lec. = nuttalli Kby., Kerremans p. 142

1909 boulderensis Casey p. 96

1909 torva Casey p. 96

1909 conicicanda Casey p. 93

1909 Casey p. 93

1909 diruptauns Casey p. 94

1909 contorta Casey p. 95

1909 gravidula Casey p. 95

1918 var. alternans Nicolay-Weiss p. 97

Type locality:

Distribution: Washington, Oregon, Colorado, California,
Arizona and New Mexico.

var. consularis Gory

1837 Dejean p. 88

1841 Gory p. 120, pl. 21 fig. 118

1850 Leconte p. 227

1857 Leconte p. 8

1859 Leconte p. 209

1873 Crotch p. 88

1878 Hubbard-Schwarz p. 636, 655

1878 Glover plate 42 fig. 12

1879 Harrington p. 35

1881 Harrington p. 33

1882 Leconte List #1

1884 Harrington p. 101

1885 Harrington p. 30

1889 Blanchard p. 30

1890 Packard p. 809

1890 Harington p. 159

1895 Evans p. 146

1898 Cockerell p. 151

1899 Wickham p. 7

1902 Van Dyke p. 172

1903 Kerremans p. 142

1906 Felt p. 751

1907 Fall-Cockerell p. 189

1909 Casey p. 96

1909 Smith p. 291

1909 flavopicta Casey p. 96

1911 Gibson p. 114

1912 Frost p. 305

1914 flavopicta Cas. = consularis Gory, Casey p. 155

1915 Frost p. 142

1917 Chagnon p. 218

1918 var. consularis Nicolay-Weiss p. 97

1918 Burke p. 336

1920 Knull p. 5

Type locality:

Distribution: Ontario, Canada to New Jersey west through Lake Superior Region Colorado, Oregon, north to Yukon Territory.

Canada: Montreal Isl, St. Lawrence River VII; Gory Ont.; Sudbury, Ont. Priest River, B.C. (10);

Maine: Paris VII-18 (14); Monmouth VI-17 (14);

Mass: Lowell VII-VIII (19). D. of C. Washington (17).

New York: Lehaway VII-5, Keene Valley (1) New Jersey: Lakehurst VII-22 (8)

Pennsylvania: Harrisburg VII-31; Hazleton (3); Charter Oak (20)

Virginia: Gt. Falls VII-4. W. Virginia White Sulphur Springs VII, VIII

Michigan: Waldo (17); Houghton Lake (17); Escanaba (10); Marquette VII-27 (10)

Minnesota: Duluth (17);

Ohio: Cincinnati (11) Iowa: Ames (c)

South Dakota: Black Hills (c)

Idaho: Centerville (10); Montana: Bitter Root Mts. (1)

Colorado: Cheyenne Canyon (10); Bailey VIII (13).

Hosts: Pitch pine (Pinus rigida), yellow pine (P. ponderosa) Douglas Fir (Pseudotsugae taxifolia), Balsam fir (Abies balsamea) and scrub pine (P. virginiana)

obliqua Casey

See fasciata Fabricii

obscura Casey

See striata Fabricii

oregona Casey

See fasciata Fabricii

ornata Walker

See fasciata Fabricii

paganorum Kirby

See rusticorum Kirby

patruelis Casey

See fasciata Fabricii

prospera Casey

See aurulenta Linne

pugetana Casey

See laeviventris Leconte

punctiventris

See subornata Leconte

radians Leconte

See aurulenta Linne

ruducta Casey

See maculipennis Gory

rubronotans Casey

See maculiventris variety subornata Leconte

rufipes Oliv.

1790 Oliver p. 16 pl. 7 fig. 73

1792 Fabricii p. 188

1801 Herbst p. 79 pl. 140 fig. 3, p. 210

1801 Fabricii p. 188

1805 Illiger p. 86 #13

1817 Schonherr p. 216

1824 Say p. 26

1825 Say p. 58

1837 Dejean p. 88

1841 Laporte-Gory II, p. 139 pl. 34 fig. 191

1846 Ancylocheira Strum p. 59

1848 White p. 24

1857 Leconte p. 8

1859 Leconte p. 210

1878 Schwarz p. 451

1886 Horn p. 137

1893 Hopkins p. 181

1895 Hamilton p. 364

1905 Terremans p. 142

1906 Felt p. 701

1909 Blatchley p. 784

1909 Smith p. 291

1909 Casey p. 105

1909 virens Casey p. 105

1909 elongata Casey p. 106

1913 Manee p. 168

1914 virens Cas. = rufipes Oliv. (Fab.) Casey p. 155

1918 Nicolay-Weiss p. 99

1918 Burke p. 355

1920 Knull p. 4

Type locality: "Bar. Amer."

Distribution: New York to Florida west, Kansas and Texas.

New York: Babylon (9)

New Jersey: Cape May, Anglesea VII, Smile Beach VII (8)

Maryland: Senica (10); Prince George Co. (10); Gerwyn VII-5 (10); Smith's Island (10)

Penn: Hummelstown VII, Harrisburg VI-13, Ardmore VIII-14, Angora VIII-18, Overbrook VII-28, Frankford VII-1, VIII-14 (c); Pittsburg (3); Lancaster VII-4 (7); Mt. Hope VIII-4 (7); Philadelphia VIII (8);

Virginia: Cobham VI-9 (16); Newport News (10); Fall's Church (10)

N. Carolina: So. Pines W. Virginia: Kanawha (10)

Mississippi: Jackson (10)

Georgia: Okefenokee Swamp VI (4); Thunderbal (10);

Florida: Enterprise V-2 (10); Crescent City (11); Steinhatchet (4);

Louisiana: New Orleans (10); Covington VI (4) Vowell's Mills VIII-(4)

Kansas: Douglas Co. 900 ft. (20); Ohio: Cincinnati VI-20, VII-29 (11)

Texas: Carmel Co. (4); Plane VII (10); New Brunsfels V-5 (16); Brownsville VIII-17 (9).

Hosts: Hickory (Hickoria sp.), beech (Fagus atropunicea), and (F. americana), horse chestnut (Castenea dentata) white oak (Quercus alba), live oak (Q. virginiana), tulip tree (Liriodendron tulepifera), and maple (Acer sp), elm (Ulmus americana) sour gum (Nyssa sylvatica).

rusticorum Kirby

Variety of maculativentris Say

salisburensis Herbst.

1801 Herbst p. 174 #98 pl. 141 fig. 8

1801 Weber p. 73

1817 Schonherr p. 223

1836 ultramarina Say p. 160

1857 ultramarina Lacordaire p. 41

1857 ultramarina Fitch p. 704

1859 ultramarina Leconte p. 210

1889 ultramarina Tolman p. 343

1889 ultramarina Blanchard p. 30

1890 ultramarina Packard p. 681

1895 ultramarina Hamilton p. 364

1903 ultramarina Say = Salisburensis Herb., Kerremans p. 141

1906 ultramarina Felt p. 751

1908 ultramarina Wenzel p. 343

1909 ultramarina Wenzel p. 45

1909 ultramarina Casey p. 291

1911 ultramarina Wenzel p. 384

1918 ultramarina Say = Salisburensis Herb., Nicolay-Weiss p. 89

Type locality: Near Saulisburg North Carolina.

Distribution: Massachusetts and Pennsylvania south to Georgia.

New York: On Sable Fork VI (4); White Face Mt. (4)

New Jersey: Sumner V-13; Lakehurst IV-30, Sea Isle V-24, Westville IV-19; Atlantic City VI-28, Gloucester IV-20, V-5 (8). Redbank V-10 (8) Maluga III-23, V-24 (8), DaCosta VIII-4 (8)

Penn: Philadelphia (2); Carlisle VIII-9,

Virginia: Pennington Gap VI-26 (10);

N. Carolina: Southern Pines III-26 (4) Wisconsin (16).

Michigan: White Fish Pt. L.S. (10).

Hosts: Pinus rigida: probably other southern pines.

saturata Casey

See fasciata Fabricii

scripta Casey

See maculipennis Gory

seditiosa Casey

See fasciata Fabricii

sexmaculata Herbst

See fasciata Linne

sexnotota

See maculativentris Say

sexpligata Leconte

See fasciata Linne

striata Fab.

1775 Fabricii p. 217

1787 Fabricii p. 177

1781 Fabricii p. 274

1788 Linne p. 1927

1790 Oliver p. 15 pl. 7 fig. 77

1791 Fabricii p. 191

1801 Fabricii p. 192 #34

1801 Herbst, p. 187 pl. 140 fig. 8

1805 Illiger p. 87 #34

1817 Schonherr p. 220

1837 Dejean p. 88

1841 Laporte-Gory II, p. 147, pl. 37, fig. 202

1846 Ancylocheira Strum p. 59

1848 White p. 24

1850 Leconte p. 227

1857 Leconte p. 8

1857 Leconte p. 43

1857 Fitch p. 704

1859 Leconte p. 209

1869 Glover p. 91 fig. 95

1870 Pettit p. 102

1873 Crotch p. 88

1877 Provancher p. 353

1878 Glover pl. XI fig. 12

1878 Hubbard-Schwarz p. 636, 656

1879 Harrington p. 119

1880 Zesch-Reinecke p. VII

1881 Harrington p. 30

1882 Harrington p. 7

1884 Saunders p. 54

1886 Horn p. 137

1889 Blanchard p. 30

1889 Chittenden p. 217

1890 Harris p. 369

1890 Packard p. 680

1892 Slosson p. 6

1895 Evans p. 146

1895 Hamilton p. 364

1903 Kerremans p. 141

1906 Felt p. 648, 655

1909 Blatchley p. 784

1909 Smith p. 291

1909 Casey p. 125

1909 <u>obscura</u> Casey p.

1910 Wenzel p. 259

1911 Morris p. 45

1913 Manee p. 168

1915 Kiviat p. 237

1917 Nicolay p. 136

1917 Chagnon p. 218

1918 Nicolay-Weiss p. 85

1918 Burke p. 337

1920 Knull p. 5

Type locality: Pennsylvania

Distribution: Quebec to Florida west to Illinois, Missouri and Louisiana.

Canada: Levis Co., Terrebonne Co., Montreal Island, Vandreuil Co. VII, Sudbury, Ontario (4);

New Hampshire: Sanborn. Mass: Hubbardstown VIII-4 (14)

New York: Keen Valley VI, IX (1); Greenwood Lake (16).

New Jersey: Lakehurst, Newark, Westville DeCosta V-30, Alloway VII, Minnewaska VII-27 (19); Valhalla IV-11 (c); Ft. Lee (4).

Pennsylvania: Hummelstown V-5 (c); Philadelphia IV-23 (9); Allegheny (10).

Virginia: Cobham (16); Va. Beach (10)

N. Carolina: So. Pines V-IX (Hanee).

Florida: La Grange, Jacksonville, Archer V-(10).

Louisiana: Vowell's Mill (4). Ohio: Cincinnati (11).

Indiana: Millers VII-2, VIII-15 (c).

Illinois: Cook Co., Mineral Springs VII-4

Michigan: Pentwater VIII-20, Pequaming VIII-10 (8); Pt. Heron VI (c); Marquette VII-8, VIII-7 (10); White Fish Pt. L.S. (10); Detroit (10).

Missouri: St. Louis XI-27.

Hosts: White pine (Pinus strobus), Virginia pine (P. virginiana) pitch pine (P. rigida), Hemlock (Tsuga canadensis) and Larch (Wolcott)

var. impedita Say

1836 Say p. 160

1841 Laporte et Gory II, p. 148 pl. 26 fig. 203

1848 White p. 24

1857 Fitch p. 704

1857 Leconte p. 8

1903 Kerremans p. 141

1909 Casey p. 124

1909 canadensis Casey p. 124

1912 Frost p. 305

1915 Frost p. 142

1917 Nicolay p. 136

1917 Var. impedita Nicolay p. 92

1918 var. impedita Nicolay-Weiss p. 87

1919 Nicolay

Type locality:

Distribution: Ontario to New Jersey to Michigan.

Ontario: Sudbury, Hymens IX-1

Maine: Paris (14); Waterford VI-8 (19); Monmouth (14).

New York: Bayshore, L.I. (19); Calskill Mts.

New Jersey: Ft. Lee (4);

Pennsylvania: Hummelstown IV-1 (3); Rockville.

Michigan: Marquette VI-25 (10).

Hosts: White Pine (Pinus strobus), pitch pine (P. rigida)

sublivida Casey

See maculativentris variety rusticorum Kirby.

subornata Leconte

Variety of maculativentris Say

sulcicollis Lec.

1859 Leconte p. 209

1878 Hubbard-Schwarz p. 636

1889 Blanchard p. 30

1895 Evans p. 146

1903 Kerremans p. 143

1906 Felt p. 751

1909 Casey p. 119

1909 lateralis Casey p. 119

1912 Frost p. 305

1914 Blatchley p. 89

1915 Gibson p. 137

1917 Notman p. 145

1918 Nicolay-Weiss p. 85

Type locality: Lake Superior.

Distribution: New Foundland, Ontario south to New York and Pennsylvania, west to Michigan. Florida? New Mexico?

Ontario: Godbout, Colandar VII-20 (8)

Maine: Monmouth VI-24 (14); Paris (14).

New Hampshire: Hampton (16). Massachusetts: Concord (8).

New York: Keene Valley, Essex Co. VII (1). Pennsylvania (11).

Michigan: Marquette 1000 ft. VI-27 (9); Marquette on the beach (10); White Fish Point (10); Huron Mt. Club VI (c).

Florida (Blatchley)* New Mexico (Kerremans)*

*Probably an error in determination or locality.

Hosts: Unknown.

tacomae Casey

See aurulenta Linne

tessellata Casey

See confluens Say

torva Casey

See alternans Leconte

ultramarina Say

See salisburensis

venusta Casey

See aurulenta Linne

villosa Leconte

See aurulenta Linne

violescens Casey

See var. subornata Leconte

virens Casey

See rufipes Oliv.

viridimicans Casey

See fasciata Fabricii

viridesutuvalis Nicolay-Weiss

1918 Nicolay Weiss p. 100

1920 Garnett p. 17

Type locality: Tulare County, California.

Distribution: Washington, Oregon, California.

Washington (17)

Oregon: Dilly (4); Corvallis XII (0); Salem (9).

California: Tulare Co. Paratype (16). Allotype (c); Palm Springs XX-24, V-20 (10) VI-20 (c); White Water; Three Rivers (10); San Dugo (10); Oro Grande, San Bernardino Co. ( ).

Hosts: Black cottonwood (Populus trichocarpa), Oregon alder (Alnus oregona)?

Genus Chalcophora Sol.

1833 Solier p. 278, pl. 10 fig.9

Type of the Genus Buprestis mariana Linn.

angulicollis Lec.

1857 Buprestis angulicollis, Leconte, p.44

1857 B.oregonensis Fitch p. 702

1859 Leconte p. 192

1866 Walker p. 310

1869 Gemminger-Harold p.

1873 Crotch p. 84

1878 angulicollis, and oregonensis Glover plate 41 fig.31.

1888 Holland p. 91

1889 oregonensis Hamilton p. 138

1890 Packard p. 678

1893 Hopkins p. 181

1898 Cockerell p. 151

1901 Fall p. 115

1906 Evans p. 98

1907 Fall-Cockerell p. 179

1908 Wright-Coolidge p. 67

1909 Casey, p.80

1909 montana Casey, p. 80

1909 oregonensis Casey p. 80

1909 Casey p. 80

1909 Kerremans p.31,78

1909 oregonensis Kerremans p. 33,78

1913 angusticollis Woodworth p. 195

1913 var. montana Cas. Buttrick p. 456

1914 montana Cas. = angulicollis Lec. Casey p. 155

1917a Burke plate 1 fig. 1

1917 Chamberlin p. 129

Type locality: Sacramento, California

Distribution: British Columbia to Arizona and New Mexico, East to the Black Hills of Dakota.

Washington: Pullman VII-6 (10); Deep Creek VII-12 (0).

Oregon: Talent VIII (10); Dilly (4); Josephine Co. (C); Corvallis III-24, VI-11 (C); Detroit VIII (c); Sumpter VI, VII (c) Sporta VIII (c); Baker City VIII (c) Astoria V (c), Klamath Falls VI (c); Rickreall VII-23 (0); Baker (0).

California: Onion Valley (10); Summerdale (10); Placerville VII-1 (c); Pyramid R.S. (10) Yreka (4); Castle Crag (13); Deer Park (13); Mt. Wilson (13); Tallac VII (13); Siskiyou (4); Weed VII, VIII (c).

Idaho: Centerville (10); Atlanta 7,800 ft. VII (10); Moscow VIII-8 (9) Cascade VI-22 (c).

New Mexico: Ft. Wingate (10) Gallinas Can. (24).

Colorado: Manitou VIII-18 (9).

Arizona: Bright Angle, G.C. (10); Flagstaff VII-7 (10).

Nebraska: Hat Creek VIII (10);

South Dakota: Black Hills (10); Lead V-29 (10); Elmore IX-10

Texas: Willis V(0)

Note: Mr. C. A. Frost informs me that there is a specimen of C. angulicollis in his collection from Ottawa, Ontario VII-22.

Host: Yellow pine (Pinus ponderosa), Douglas Fir (Pseudotsugae taxifolia), Grand fir (Abies grandis) and White fir (A. concolor).

borealis Lap. et. Gory.

See liberta Germar.

brevicollis Casey

See virginensis Drury.

cupreomaculata Goeze.

See virginensis Drury.

fortis Lec.

1859 Leconte p. 191

1880 Zesch-Reinecke p. VII.

1881 Harrington p. 28

1883 Harrington p. 79

1884 Harrington p. 35

1889 Blanchard p. 29

1889 Chittenden p. 217

1890 Packard p. 679

1895 Hamilton, p. 364

1902 MacGillivery-Houghton p. 251

1903 Harrington p. 114

1906 Fyles p. 58

1906 Felt p. 751

1909 laurentica Casey p. 82

1909 Casey p. 82

1909 laurentica Cas. Kerremans p. 40

1909 Kerremans p. 38

1909

1910 Muttkowski, p. 136

1914 laurentica Cas. = fortis Lec. Casey p. 155

1915 Frost p. 142

1917 Nicolay p. 92

1919 Nicolay p. 277

Type locality: Pennsylvania.

Distribution: Ottawa Canada, south through the New England States to New York, west to Pennsylvania. (This species has been reported from Kansas, probably an error in determination)

Ottawa (4); Lennox,Mass. (9), Beaver Falls, N.Y. IX-5 (10); West Point, N.Y. (16), New Brunswick, N.J. VI-16 (19), Charter Oak, Pa. VII-14 (10); Marquette, Mich. (10); Ames, Ia. (c).

Host: Reared from white pine (P. strobus)

georgiana Lec.

1841 Buprestis liberta (name preoccupied) Laporte et Gory 11, pl. 2, fig. 6.

1857 Buprestis georgiana Leconte, p. 7

1857 B. liberta L. et. G. = georgiana Leconte p. 7.

1878 Schwarz p. 451

1897 Castle p. 8

1902 Kerremans p. 78

1902 liberta H. L. et. G., Kerremans, p. 78

1909 Casey p. 81

1909 irridescens Casey p. 82

1909 parviceps, Casey p. 82

1909 prominens Casey, p. 82

1909 Kerremans p. 36

1909 prominens Cas. Kerremans p. 34

1909 irridescens Cas. Kerremans p. 37

1909 parviceps Cas. Kerremans, p. 43

1913 Manee, p. 167

1914 irridescens Cas. = georgiana Lec. Casey p. 155

1914 prominens Casey p. 155

1918 Dozier p. 331

Type locality: Georgia.

Distribution: South Atlantic States. Carolinas to Florida, West to Lousiana.

Virginia: Virginia Beach (10)

N. Carolina: Wilmington (10); Southern Pines X-8 (c)

Florida: Buena Vista (10); Lemon City (10); Crescent City (10); Little River (10); Big Key Ix-28 (4); Gainsville (Dozier)

Host: Larvae in the wood of the southern pines. Long leaf pine (Pinus palustris), Cuban pine (P. heterophylla) Shortleaf pine (P. echinata) and loblolly pine (P. taeda).

irridescens Casey

See georgiana Leconte

lacustris Leconte

A variety of virginensis Drury

laurentica Casey

See fortis Leconte

liberata Laporte et Gory

The liberta of Gory is not the liberta of Germar but is the species later described by Leconte as georgiana.

liberta Germ.

1824 Buprestis liberta Germar p. 38

1836 Buprestis Say p. 157

1841 B. borealis Laporte-Gory II, p. 13, pl. II, fig. 9

1843 Strum p. 59

1852 Fitch, p. 192

1857 Fitch, p. 700.

1857 novaeboracensis Fitch p. 701

1857 obscura Fitch, p. 697

1857 var. obscura Fitch p. 701

1857 B. borealis L. et. G. = liberta Germ. Leconte p. 7.

1868 Glover p. 91

1878 Glover plate XI, fig. 16

1878 Provancher, p. 7

1879a * Saunders, p. 182

1879c * Saunders, p. 182

1879 Harrington p. 119

1880 Zesch-Reinecke, p. VII

1880 Saunders, p. 5

1881 Harrington, p. 28

1882 Harrington, p. 25.

1883 Harrington, p. 79

1883 Harrington p. 35

1884 Saunders, p. 54

1884 Harrington p. 218

1885 Harrington p. 23

1889 Chittenden, p. 217

1889 Blanchard, p. 29

1889 Townsend, p. 233.

1890 Packard, p. 678

1891 Treat, p. 63

1895 Evans, p. 146

1899 Hopkins p. 436

1899 Hamilton, p. 138

1899 obscura Fitch, Hamilton p. 138

1899 novaeboracencia Fitch. Hamilton p. 138

1901 Felt p. 874

1902 Felt p. 164

1903 Harrington p. 114

1903 novaeboracencia Kerremans p. 78

1903 Kerremans p. 78

1903 obscurata Kerremans p. 78

1906 Felt p. 648, 654

1909 Blatchley p. 780

1909 Kerremans p. 41

1909 Smith p. 291

1909 Casey p. 83

1912 Frost p. 305

1915 Frost p. 142

1917 Nicolay p. 92

Type locality:

Distribution: Ottawa to Florida west to Indiana and Texas.

Canada: Gerdrian Bay (10);

Maine: Paris VI-14 (14); Rockland VII (4); Lewiston (10);

N. Hampshire: Chocorua (c).

New York: Long Island (19); Ithica (10), Indiana: Millers VII-8 (c).

Michigan: White Fish Point, L.S. VII (10).

Texas: Galveston VI-II (c).

Host: Pitch pine (Pinus resinosa), White pine (P: strobus).

mariana Linn.

C. mariana Linn. is an European species not found in America although there are a few references to it in our literature.

melanotum Muttkowski

See verginensis Drury

Montana Casey

See angulicollis Leconte

novaeboracencia Fitch

See liberta Germar

obliterata Casey

See virginensis Drury

obscura Fitch

See liberta Germar

oregonensis Fitch

See angulicollis Leconte

parviceps Casey

See georgiana Leconte

prominens Casey

See georgiana Leconte

virginensis Drury

1770 Buprestis virginensis Drury, p. 66, pl. 30, fig. 3

1777 B. cupreomaculata Goeze p. 596

1788 B. virginica Linne p. 1940 #110

1801 Buprestis Herbst p. 114, #63; pl. 148, fig. 1

1817 Buprestis Schonherr p. 229, 230.

1821 Buprestis Dejean p. 24

1834 B. virginica Say p. 157

1837 Buprestis Dejean p. 87

1841 Laporte-Gory II, p. 11, pl. 2, fig. 7.

1843 Strum p. 59

1848 White p. 15.

1857 Leconte p. 7.

virginensis Drury

1770 Buprestis virginensis Drury, p. 66, pl. 30, fig. 3

1777 B. cupreomaculata Goeze p. 596

1788 B. virginica Linne p. 1940 #110

1801 Buprestis Herbst p. 114, #63; pl. 148, fig. 1

1817 Buprestis Schonherr p. 229, 230.

1821 Buprestis Dejean p. 24

1834 B. virginica Say p. 157

1837 Buprestis Dejean p. 87

1841 Laporte-Gory II, p. 11, pl. 2, fig. 7.

1843 Strum p. 59

1848 White p. 15.

1857 Leconte p. 7

1857 virginica Fitch p.

1857 Lecordaire, p. 22

1859 Leconte, p. 190

1862 Harris p. 48

1867 Cheverlot, p. 573

1868 Horn p. 124

1869 Glover p. 91, 868, fig. 89

1869 Harris, p. 357

1869 virginica Harris p. 221

1870 B. virginica Pettit, p. 67

1870 mariana Linne Jones, p. 9

1872 Clementi p. 37

1873 Crotch p. 84

1874 LeBaron, p. 94

1876 Thomas p. 112

1877 Provancher p. 364 fig. 33

1878 Hubbard-Schwarz p. 636, 655

1857 virginica Fitch p. 695

1857 Lecordaire, p. 22

1859 Leconte, p. 190

1862 Harris p. 48

1867 Cheverlot, p. 573

1868 Horn p. 124

1869 Glover p. 91, 868, fig. 89

1869 Harris, p. 357

1869 virginica Harris p. 221

1870 B. virginica Pettit, p. 67

1870 mariana Linne Jones, p. 9

1872 Clementi p. 37

1873 Crotch p. 84

1874 LeBaron, p. 94

1876 Thomas p. 112

1877 Provancher p. 364 fig. 33

1878 Hubbard-Schwarz p. 636, 655

1878 Schwarz p. 451

1878 Glover, plate XI fig. 19

1879 Harrington p. 119

1880 Zesch-Reinecke, p. VII

1881 Harrington p. 28

1882 Waterhouse, p. 2

1882 Harrington p. 825

1882 Leconte, List. #1

1882 Bowditch, p. 27

1883 Packard, p. 25

1883 Harrington p. 79

1884 Saunders p. 54

1884 Harrington p. 35

1889 Chittenden p. 217

1889 Blanchard, p. 29

1890 Harrington p. 159

1890 Packard, p. 675

1891 Treat, p. 62

1891 *virginica* Hamilton, p. 138

1893 Gundlach, p. 155

1893 Cockerell p. 328

1895 Hamilton p. 364

1895 Evans p. 146

1899 Hopkins p. 436

1901 Felt p. 874

1902 Felt p. 164

1902 Felt p. 63

1903 Harrington p. 114

1904 Hopkins p. 39

1906 Fyles p. 58

1906 Felt p. 648, 653, 655.

1908 Heyne-Taschenberg, p. 133

1909 Burke, p. 412

1909 Blatchley p. 780

1909 Casey p. 77

1909 *brevicollis* Casey p. 79

1909 *obliterata* Casey p. 79

1909 Easton p. 50

1909 Herremans p. 26

1909 Smith p. 291

1910 *brevicollis* Muttkowski p. 136

1910 *melanotum* Muttkowski p. 135

1912 Davis-Leng p. 120

1912 brevicollis Cas., Frost p. 305

1913 Manee p. 167

1913 Butterick p. 458

1914 Comstock p. 549

1914 obliterata Cas. = virginensis Dru. Casey p. 355 ?

1914 brevicollis Casey p. 355

1914 ingens Casey p. 360

1914 ateunalis Casey p. 360

1915 Frost p. 141

1915 Johnson p. 312

1917 Nicolay p. 92

1918 Dozier p. 331

Type locality: Virginia.

Distribution: Ontario to Florida west Louisiana, Iowa, Illinois and Michigan, (Cockerell reports virginensis from Castor Co., Colo.; this was probably angulicollis)

Mexico: San Geronimo Guatamalia, (1800 ft.); Introduced into Cuba.

Maine: Paris VII (14).

Mass: Framingham VII (14).

New York. Ithica (4);

New Jersey: Medford VII (16); Lakehurst V-24 (4);

Virginia: Cobham (16); Falls Crurch IV-25 (10); Va. Beach VI-9 (10); Fairfax (10);

N. Carolina: Black Mts. (9); Clarkton (10); S. Pines (c).

Georgia: Thomas IV (10);

So. Carolina: Clemson College (c).

Florida: Crescent City (10); Haw Cr. (10); Tampa V-4 (10); Lemon City (10); Steinhatchet (10) Gainsville (Dozier)

Mississippi: Baxterville VII-18 (10).

Louisiana: Covington (10); Vowell's Mill VIII (4).

Alabama: Auburn (4).

Minnesota: Waldo (17).

Hosts: White pine (Pinus strobus), pitch pine (P. rigida), short leaf pine (P. echinata), loblolly pine (P. taeda), long-leaf pine (P. palustris) and bald cypress (Taxodium disticum)

var. lacustris Lec.

1859 Leconte p. 190

1870 Pettit p. 102

1873 Crotch p. 84

1889 Hamilton p. 139

1903 Kerremans p. 78

1909 Casey p. 79

1909 Kerremans p. 29

1910 Muttkowski p. 136

1914 Casey p. 255

Type locality: Lake Superior Region

Distribution: Ontario, south through the New England States, west to Wisconsin.

Maine: Cumberland Co. IX-24 (c).

Genus Chalcophorella Kerr.

1903 Kerremans p. 79

Type of the genus Buprestis campestris Say

bisinuata Casey

See fulleri Horn

campestris Say

1823 Buprestis campestris Say p. 165

1825 Buprestis Say p. 60

1837 Chalcophora prinoptera Dejean p. 87

1841 Buprestis Laporte et Gory II, p. 13

1841 B. substrigosa Laporte-Gory II p. 13, pl. 3, fig. 10

1853 Chalcophora langeri Cheverlot p. 308, 396 pl. 6, fig. 1

1854 C. langeri Chev. = C. prinoptera Dej. = B. campestris Say Cheverlot p. 71.

1857 Chalcophora langeri Lacordaire p. 23

1857 Chalcophora Lacordaire p. 23

1857 B. substrigosa L & G = B. campestris Say. Leconte p. 7

1857 C. langeri Chev. = B. campestris Say Leconte p. 7

1859 C. langeri Leconte p. 192

1870 Chalcophora Pettit p. 102

1873 Chalcophora langeri = C. campestris Say., Crotch p.84

1878 Chalcophora Hubbard-Schwarz p. 655

1880 Chalcophora Zesch & Reinecke p. VII

1889 Chalcophora Smith J.B. p. 71

1890 Chalcophora Packard p. 642

1892 Kerremans p.

1895 Chalcophora Hamilton p. 364

1903 Chalcophorella Kerremans p. 80

1903 C. substrigosa L. & G. Kerremans p. 80

1903 C. langeri Chev. Kerremans p. 80

1905 Chalcophora Knaus p. 351

1909 Texania Smith p. 291

1909 Kerremans p. 74

1909 serriger Casey, Kerremans p. 77

1909 Chalcophora Burke p. 414, fig. 36

1909 Chalcophora Blatchley p. 780

1909 Texania Casey p. 85

1909 Texania langeri Casey p. 87

1909 B. substrigosa L & G = B. campestris Say, Casey p. 85

1909 Texania serriger Casey p. 86

1914 obsolescens Casey p. 360

1914 langeri Casey p. 360

1914 Casey p. 360

1917a Burke pl. I, fig. 2.

1920 Knull p. 4.

Type locality: "Arkansas River"

Distribution: Pennsylvania to Louisiana west to Missouri and Texas.

Penn: Pittsburgh (9); North Cumberland VII-6 (c); Hummelstown VI-10 (c);

Maryland: Plumers Island IX-17 (8)

N. Carolina: Tyron IV (10)

D. of C. Washington, VI-5, VII-7 (10); Blagden Road

III-2, IV-18 (10)

W. Virginia: White Sulphur Springs VII-8 (10)

Louisiana: Vowell's Mill (4)

Ohio: Cincinnati (9)

Tennessee: Elmwood (13)

Texas: Bethage VII-10 (9)

Host: Maple (Acer), Sycamore (Plantanus) Tulip (Liriodendron), Beech (Fagus atropunicea), (F. americana) black willow (Salix nigra) and button wood (Platanus occidentalis)

fulleri Horn

1875 Chalcophora fulleri Horn p. 147

1889 Chalcophora Smith H.B. p. 71

1909 Chalcophorella Kerremans p. 71

1909 C. bisinuata Cas., Kerremans p. 73

1909 Texania Casey p. 86

1909 T. bisinuata Casey p. 87

Type locality: Texas

Distribution: Texas, Ohio, Virginia.

Texas: Hockley (9); Kerrville V-10 (9) Carmal Co. (4)

Burnette Co. VI

Hosts:

langeri Cheverlot

See campestris Say

obsolescens Casey

See *campestris* Say

prinoptera Dejean

See *campestris* Say

substrigosa Laporte-Gory

See *campestris* Say

Genus Chrysobothris Esch.

1829 Eschscholtz, p. 9

Type of the genus Buprestis affinis Fab.

acuminata Lec.

See acutipennis Chev.

acutipennis Chev.

1835 Chevrolat p. 190

1859 Leconte p. 237

1837 cupreo-aenea, Lap-G., p. 39 pl. 7 fig. 55

1860 acuminata, Leconte p. 237

1878 cupreo-signata, Thoms p. 80

1886 Horn p. 107 pl. 6 fig. 188-192

1889 Waterhouse p. 184

1894 Horn p. 328

1905 Schaeffer p. 130

Type locality: Mexico.

Distribution: Texas: San Diego III-4 (10) Arizona Lower California (San Jose del Cabo); Mexico (Tuspan, Tamaulipas to Matamoras, Cerro de Plumas,) British Honduras, Guatamala, Chocoj in Vera Paz, Torola (1000 ft.), Pantaleon (1700 ft.), Volcan de Antitlan (3500 ft.) Yucatan, Durango, Nicaragua, Venezuela, Panama, Guiana and Cayenne.

Host: Unknown

adelpha Gemminger-Harold.

See femorata Fab.

aeneola Lec.

1859 Leconte p. 239

1865 purpurata Bland, p. 166

1871 Saunders, p. 96

1873 purpurata Bl. = aeneola Lec., Crotch p. 90

1886 Horn p. 113, pl. 7, fig. 322-326.

1903 Kerremans p. 189

1903 purpurata, Kerremans, p. 189

1901 Fall p. 117

1907 Fall-Cockerell p. 180

1913 Woodworth, p. 195

Type locality: Nebraska (17).

Distribution: Kansas, Nebraska, Wyoming, New Mexico, Nevada, Arizona, Texas and California.

Talloc, Cal. (13); Siskiyou, Cal. VIII (10); Verdi, Nev. (4); Yellowstone Park, Wyo. VII-26 (10).

(Lectotype No. 3293 and allotype No. 3293 both labled "Neb" C. purpurata Bland. one also bears a lable aeneola Leconte (17).

Host: Unknown

aerea Chev.

1834 Chevrolat, #33.

1834 costifrons, Chevrolat,

1837 Laporte-Gory, p. 42 pl. 8 fig. 59

1837 mexicana Dejean, p. 376

1886 Horn, p. 104 pl. 6 fig. 173-177

1887 Waterhouse costifrons p. 44

1887 Waterhouse, p. 44

1887 aerea Horn = costifrons Chev., Waterhouse p. 44

1909 Schaeffer p. 376

Type locality: Mexico.

Distribution: Arizona and Mexico.

Arizona: Cochise Co. VII (c); Nogalis VIII-1 (4); Huachuca Mts. VII (c); Sabino Bodin, St. Catalina Mts. IX-25 (10); Carr Canyon (17); Oricle VII-4 (10)

Mexico: Oaxaca.

Host: Bred from Arizona oak (Quercus arizonica), Emory oak (Q. emoryi) and greaswood (Sarcobatus sp.)

alabamae Gory.

Variety of femorata Fab.

analis Lec.

1859 Leconte p. 238

1873 Crotch p. 90

1878 austinii, Thoms p. 78

1886 Horn p. 111, pl. 7 figs. 207-211.

1887 Waterhouse p. 40

1894 Horn p. 367

1903 Kerremans p. 189

1903 austinii Thoms., Kerremans p. 189

1905 Schaeffer, p. 148

Type locality: Texas (Rio Grande).

Distribution: Texas, Mexico (Matamoras, Orizaba, Yucatan), Guatuemala.

Texas: Brownsville IV-27 (c); Devil's River VII-27 (8); Columbus VI-6 (10), San Diego V-7 (10).

Host: Unknown

atabalipa Lap-Gory

1841 Laporte-Gory II, p. 43, pl. 8, fig. 60

1848 White p. 33

1857 Leconte p. 8

1858 basilis Leconte, p. 68

1859 Leconte, p. 230

1873 basalis Lec. = atabalipa L-G. Leconte p. 332

1886 Horn, p. 72, pl. 2, figs. 1-5.

1898 Cockerell, p. 152

1903 basalis Lec. Kerremans p. 186

1903 Kerremans p. 186

1907 Fall-Cockerell, p. 179

Type locality: Mexico.

Distribution: Arizona, New Mexico, California, Texas and Mexico.

Arizona: Yuma (4); Oracle (4); Hotsprings VI-24 (10);

Texas: Brownsville III-28 (10), V-19 (c); Laredo X-21 (10).

California: Placer Co., Death Valley IV (10).

New Mexico: Mesilla Valley (25)

Host: Unknown.

atrofasciata Lec.

1859 nigrofasciata 11 Leconte, p. 240

1873 atrofasciata n.n. for nigrofasciata (name preoccupied)
Leconte p. 332.

1886 Horn p. 116

1894 Horn, p. 368, pl. 7, figs. 237-242.

1898 Wickham p. 305

1898 Wickham, p. 235

1903 Kerremans p. 189

1903 nigrofasciata, Kerremans, p. 189

Type locality: Arizona (near Yuma)

Distribution: Arizona and New Mexico.

Arizona: Yuma (22).

Host: Unknown.

austinii Thoms.

See analis Lec.

axillaris Horn

1886 Horn p. 75, pl. 2; figs. 20-24.

1903 Kerremans p. 189

1918 Burke p. 210

Type locality: Southern Arizona.

Distribution: Arizona and Texas.

Host: Emory oak (Q. emoryi), Arizona white oak (Q. arizonica)

Arizona: Huachuca VI-28 (c); Williams VI-1, VII-1 (10);
Palmerlee VI-27 (16); Bear Canyon St. Catalina Mts. (10);

Catalina Springs IV-21 (10). Lectotype No. 3429

"Ariz" (17).

Texas: Chisos Mts. VII-24 (c); Paratype "Tex." (17).

azurea Lec.

1837 ultramarina Laporte-Gory p. 13 (name preoccupied).

1846 ultramarina L-G. Strum p. 61

1857 Leconte, p. 8

1859 azurea Leconte, p. 239

1880 Zesch-Renicke, p. VII

1884 Lugger, p. 203

1886 Horn, p. 112

1887 Leng. p. 231

1889 Chittenden, p. 220

1893 Hopkins, p. 181

1894 Stormberg, p. 37

1896 Bowditch, p. 34

1899 Hopkins p. 437

1906 Felt, p. 429, 463

1909 Blatchley p. 791

1909 Smith, p. 293

1912 Frost, p. 306

1915 Stoner, p. 126

1915 Kiviat, p. 237

1919 Nicolay, p. 19

Type locality:

Distribution: Main to Florida, west to Michigan, Indiana, Iowa and Texas.

Maine: Wales VI-13 (14).

Massachusetts: Framingham IV-3, V-30 (14).

New York: Stanton Island (4); N.Y.City (4); Palisades (4); Hastings VI-15 (4); Jamaca L.I. (19); Acqueduct VII (19); Montank VI-1, VII-2 (19) Rockland Co. (c).

New Jersey: Buena VI-10 (7); Lakehurst VII-5 (4)

Maryland: Blandsburg VI-8 (10); Washington D.C. (10).

W. Virginia: Ramney V-3 and Kancuolia V-15 (Hopkins)

Ohio: Cincinnati VI-1, VII-4 (11).

Michigan: Detroit VI (10).

Host: White birch (Betula alba), Scarlet oak (Quercus coccinea), Westaria (beech (Fagus sp.) willow (salix sp.) haw (Crataegus sp.) linden (Tilia americana) Hickory (Hickoria sp.) (Pinus sp.)

Taken on sumach (Rhus toxicodendron), (R. glabra), and pine (Pinus sp.)

basalis Lec.

See atabalipa Laporte-Gory

beyeri Schaeffer.

1904 Schaeffer p. 207

Type locality: San Felipe, Bajo-California.

Distribution: Lower California

Lower California: San Felipe (16) Santa Rosa (c)

Host: Taken on Willow (Salix sp.)

Season: May-June

bicolor Horn.

1894 Horn, p. 328, 366

1903 Kerremans p. 189

Type locality: San Jose, Del Cabo, Lower California.

Distribution: Lower California, Arizona and Texas.

Lower California, Topotype "San Jose Del Cabo" (17);

Santa Rosa (c).

Host:

biguttata Lap-G.

See pusilla Laporte-Gory.

bimarginicollis Sch.

1905 Schaeffer p. 148

Type locality: Arizona (Millers Canyon, Huachuca Mts.)

Distribution: Arizona.

Arizona: Palmerlee Cochise Co. VI-22, VII-2 (16).

Host: On live oak (Quercus chrysolepis)

bispinosa Sch.

1909 Schaeffer p. 376

Type locality: Nogalis, Arizona.

Distribution: Reported only from type locality.

Season: VIII-18 (16)

Host: Unknown.

blanchardi Horn

1886 Horn p. 93, pl. 4 figs. 115-119

1889 Blanchard p. 31

1890 Packard p.

1900

1903 Kerremans p. 190

1906 Felt p. 751

1909 Blatchley p. 790

1916 Frost, p. 386

1918 Blackburn, p. 16, 36, 37, 81 pl. 8 fig. 23, 24, 25

Type locality: Tyngsboro, Mass. July 17 '76 (17).

Distribution: Maine to Maryland, west to Dakota and Texas.

(A specimen in the National Museum labled capitan N.M. IV Yellow pine)

Maine: Paris VII-19 (14), V-15 (c).

Mass. Monterey VII-8 (14)

Washington D.C. (10). New York (4).

Texas: Davis Mts. IV-10 (10).

S. Dakota: Buffalo Gap. (10).

Host: Bred from white pine (Punis strobus), scrub pine (P. virginiana), and American larch (Larix amaricana).

breviloba Fall

1910 Fall, p. 51

1917 Gibson, p. 149

1918 Burke p. 211

Type locality: Colorado.

Distribution: British Columbia, Alberta and Colorado.

British Columbia: Fraser VII-4, 8000 ft. (9); Peachland (

Alberta: Bauff VII (Gibson)

Colorado: Glenwood Springs, Buena Vista, Boulder,

Floressent, Canyon City, Silver Plume 10,000 ft. June 20 (C).

californica Lec.

1858 Leconte, p. 255

1859 Motschulsky, p. 184

1861 vulcancia Leconte, p. 346

1873 Crotch p. 90

1882 vulcancia Leconte = californica Lec., Horn, p. 287

1886 Horn p. 93, pl. 4, figs. 110-114

1892 Blaisdell, p. 33

1894 Fall, p. 98

1898 Cockerell p. 152

1903 Kerremans p. 186

1903 vulcancia, Kerremans, p. 186

1907 Fall-Cockerell, p. 179

1908 Wright-Coolridge, p. 67

1910 Fall, p. 45, 47

1913 Woodworth, p. 195

1917 Chamberlin p. 135

Type locality: Type specimen labled "Cal".

Distribution: Oregon, California, Nevada (?), and New Mexico (?).

California: Sierra Co. VI-18 (c)

Host: Unknown. Reported from apple (Pyrus malus) (Blaisdell) and pine (Fall), the specimens later proved to be other than C. californica.

1873 Leconte p. 459

1886 Horn p. 91, pl. 4, figs. 100-105

1895 Townsend p. 43

1902 Cockerell p. 378

1903 Kerremans p. 186

1906 Evans, p. 98

1907 Fall-Cockerell p. 179

1910 Fall, p. 46, 49

1913 Gibson, p. 126

1913 Woodworth p. 195

1916 Van Dyke, p. 406, 408

Type locality: Utah (American Frok Canyon 9,500 ft.)

Distribution: British Columbia, south through the Pacific and Rocky Mountain states.

Washington: Spokane (4)

Oregon: Sumpter VI-VII (c); Sparta VIII (c)

Montana: Glacier Park VIII-22, 4500 ft. (9)

Colorado: Florescent VIII-12, 8000 ft. (14); Glenwood Springs (13).

California: Summerdale (10)

Nevada (10), (1). Michigan ? (10)

New Mexico: Ft. Wingate (9); Capitan (10) Utah: Panguitch (10)

Host: Yellow pine (Pinus ponderosa), sugar pine (P. lambertiana), lodge-pole pine (P. contorta), Pinion (P. edulis), western larch (Larix occidentalis), and Douglas fir (Pseudotsugae taxifolia).

Season: June to August.

carmilita Fall

1907 Fall, p. 236

Type locality: Arizona (Hot Springs).

Distribution: Reported only from type locality.

Host: Unknown

caurina Horn

1886 Horn, p. 92, pl. 4, figs. 105-109

1899 Wickham p. 7

1903 Kerremans p. 190

1910 Fall, p. 46, 50

1913 Woodworth p. 195

1914 Gibson p. 116

1917 Chamberlin p. 135

1918 Van Dyke p. 57

Type locality: Nevada.

Distribution: British Columbia, Washington, Oregon, California, Colorado, and Nevada.

Washington: Spokane.

Oregon: Paratype "Ore" (17); Alsea VIII (10); Hideway VII (10); Sparta VIII (c); Sumpter VII (c); Ashland VII-3 (10)

California: Weed VII-VIII (c); Placeville VII (c) Strawberry VII-4 (c); Truckee 5800 ft. VIII (13).

Nevada: Type "Nevada" (17); Verdi (4);

Arizona: Holotype "Ariz" (17) Flagstaff VII (c).

Colorado: Bartlett Springs VII (13).

Host: Western larch (Larix occidentalis), lodge-pole pine (Pinus contorta) yellow pine (P. ponderosa), juniper (?)

Douglas fir (Pseudotsugae taxifolia) (10).

Season: June to August.

ceanothi Schwarz.

Schwarz. Manuscript name

Type locality: Oricle, Arizona VII-5 (10).

chalcophoroides Horn.

1886 Horn p. 110, pl. 6, figs. 203-206

1888 Schwarz, p. 93

1889 Schwarz, p. 39

1890 Packard p. 69

1903 Kerremans, p. 190

Type locality: Arizona.

Distribution: Arizona,

Arizona: Senator VI-1 (4); Huachuca Mts. V (17); Holotype "Ariz" (17).

Host: Reported form Arizona white oak (Quercus arizonica)

characteristica Harris

See dentipes Germar.

chlorocephala Gory

See harrisii Hentz.

chrysoela Illiger

1800 Illiger, p. 122

1801 hybernata, Fabricii, p. 209

1821 melicula Dejean p. 90

1841 Laporte-Gory II p. 16

1841 viridipunctata Laporte-Gory II, p. 21 pl. 4 fig. 31

1841 hybernata Fab. Laporte-Gory II, p.16, pl. 4, fig. 24,

1846 hybernata Fab. Strum p. 61

1857 Leconte p. 8

1859 Leconte p. 238

1873 viridifunctata Gory is a var. of hybernata Fab., Leconte p. 332.

1877 Provancher, p. 7, 312

1878 Schwarz, p. 451

1886 Horn, p. 114, pl. 7, figs. 227-231

1887 Schwarz, p. 93

1894 Horn, p. 367

1895 Hamilton, p. 318

1896 Castle-Laurent, p. 303

1897 Castle p. 8

1902 Fish, p. 68

1903 Kerremans, p. 185

1903 hybernata Kerremans p. 185

1903 viridipunctata, Kerremans, p. 185

1903 Wickham p. 69

1913 Manee, p. 303

1914 Blatchley, p. 89

1917 Blatchley p. 239

1918 Schaeffer p. 212

1918 Dozier p. 331

Type locality:

Distribution: Southern States, Virginia to Florida, west to Texas.

Cape Henry, Va. VI (10), Mobile, Ala. 1-3 (9); Wilmington, N. C. (8). Georgia (4). Willis Tex. (c). Florida; Lake Istakpoga II-25; Ft. Mayer III-10; Sanebel Island II-25; Crescent City (10); Miami Key (10); Paradise Beach III (10); Lake Worth, Houlover, Enterprise (9); Lake Ashby, Dunedin IX, III. Gainsville Nov. 1 (Dozier).

Host: Beaten from oak (Quercus sp.) and wax myrtle (Myrica cerifera). Bred from Florida buttonwood (Conocarpas erecta), (Lepostylus argentatus) and Pecan (Hickoria pecan) (10).

cicatricosa Mots.

See trinervia Kirby

concinnula L-G.

See scitula Gory

contigua Lec.

1859 Leconte, p. 255

1859 semisculpta, Leconte, p. 254.

1859 purpurifrons, Mots. p. 183.

1871 Saunders, p. 98

1873 Crotch, p. 90

1882 semisculpta, Lec. = contigua, Lec. Horn, p. 287.

1886 purpurifrons, Mots. = contigua, Lec., Horn p. 287

1886 Horn, p. 80, pl. 2, figs. 35-39

1892 semisculpta, Blaisdell, p. 33

1913 Woodworth, p. 195

1917 Chamberlin, p. 135

Type locality: California.

Distribution: Washington, Oregon, California and Nevada.

Oregon: Sumpter VI, VII (c); Sparta VIII (c).

California: Fallen Leaf Lake (10); Talloc VII (13); Carrville V-21 (13); Castle Crag VII (13); Miami VI, VII (13); Raymond V (13); McCloud VI (13); Weed VI- VII, VIII (c); Phillips VII-2 (c)

Colorado (4). Arizona: Phoenix (10); Prescott VI, VII (13), Idaho: Centerville VIII (10); Cascade VI-16 (c).

Nevada: Lake Tahoe VII-10 (10).

Host: Yellow pine (Pinus ponderosa), lodge-pole pine (P. contorta), and Live oak (Quercus californica), Sugar pine (P. lambertiana) Jeffreyi pine (P. jeffreyi)

convexa Fall.

1907 Fall, p. 179, 233

Type locality: New Mexico, (Alamogordo).

Distribution: New Mexico and Texas.

New Mexico: Lectotype alamogordo V-16 (17)

Texas: Chilsos Mts. VII-25 (8)

costifrons Chev.

See aerea Chevrolat

cribraria Dejean.

See femorata Fab.

cuprascens Lec.

1859 Leconte, p. 234

1873 Crotch, p. 90

1882 Horn, p. 287

1886 Horn p. 81

1891 Wickham, p. 132

1895 Fall, p. 98

1898 Cockerell, p. 152

1901 Fall p. 117

1903 Kerremans p. 186

1906 Knaus p. 331

1907 Fall, p. 179

1909 Wickham p. 305

Type locality: New Mexico (Santa Fe).

Distribution: Colorado, Arizona, New Mexico and Texas.
California?

Colorado: Salida (c); Boulder (8);

Arizona: Prescott (4); Pinal Mts. (4); Phoenix (7); Williams VII-17 (10); Bright Angle VII-10 (10); Palmerlee VIII-4 (8).

New Mexico: Santa Fe VIII (13); Coolidge (4); Los Vegas VIII-8 (10).

Texas: Davis Mts. VII-9 (8).

California: (Abundant on pine in San Bernardino Mts. July-Aug. Fall)

Host: Beaten from yellow pine (Pinus ponderosa).

cupreo-aenea L-G.

See acutipennis Chev.

cupreo-signata Thoms.

See acutipennis Chev.

cyanella Horn.

1886 Horn, p. 102, pl. 5, figs. 164-168

1901 Fall p. 117

1903 Kerremans p. 187

1904 Schaeffer, p. 208

1913 Woodworth p. 195

1916 Van Dyke, p. 411

1917 Chamberlin p. 139

Type locality: Type "Cal" (17) paratype Yreka, Calif. (17).

Distribution: California and Oregon.

California: Siskiyou, Shasta and El Dorado Counties (15); Pasadena VI (13); Bishop VII (13); Paradise Valley VII-16 (c).

Oregon: Ashland VI-12 (c).

Host: Taken on buckwheat (Erigonum) Probably breeds in yellow pine (Pinus ponderosa) twigs

debilis Lec.

1859 Leconte, p. 236

1859 disjuncta Leconte, p. 236

1873 disjuncta Lec. = debilis Lec. Crotch, p. 90

1886 Horn, p. 75, pl. 2, figs. 15-19.

1887 Waterhouse p. 47

1898 Cockerell, p. 152

1900 Griffith, p. 568

1901 Fall p. 117

1902 Cockerell p. 278

1902 Van Dyke p. 173

1903 Kerremans p. 187

1903 disjuncta Lec. Kerremans, p. 187

1907 Fall, p. 237

1907 Fall-Cockerell, p. 179

1918 Van Dyke, p. 58

1918 Burke, p. 210

Type locality: Ohio.

Type locality of disjuncta: Arizona.

Distribution: Texas, Arizona, New Mexico, Mexico, Utah, Colorado, California and Ohio.

Texas: El Paso IV (13); Ysleta (17); Aqua nigro V-19 (10); Chisos Mts. (8); Carmal Co. (1)

Arizona: Senator (4) Rincon Mts. 5000 ft. (1); Hot Springs VI-23 (10); Sabino Canyon V-13, VI-30 (10); Huachuca Mts. (17); San Bernardino Ranch St. Catalina Mts. 3750 (9); Catalina Springs IV-20 (10); St. Rita Mts. VII-12 (10); Phoenix (c); Yuma IV (13); Tuscon VI-4 (c).

New Mexico: Los Crucis: Mesilla Valley (25)

Utah: St. George (9)

Colorado: Florence VI-28 (8); Boulder (8)

California: San Diego Co. (10); Death Valley IV (10); Kings River VI-15, 6000 ft. (7); Palm Springs IV (13) Banning V-VII (c).

Lower California: Santa Rosa (1)

Host: Hackberry (Celtis reticulata), cats claw (Acacia greggii), palo verde (Cercidium torreyanum), emory oak (Quercus emoryi), mesquite (Prosopis grandelosa) and (P. juliflora)

Season: May to October.

deleta Lec.

1859 Leconte, p. 255

1859 subsylindrica Mots. p. 182 pl. 4 fig. 17

1871 Saunders, p. 97

1873 Crotch, p. 90

1886 Horn p. 99

1903 Kerremans p. 190

1903 subsylindrica Mors. Kerremans, p. 190

1907 Fall, p. 338

1913 Woodworth p. 195

1907 Chamberlin, P. 139

Type locality: Owens Valley, Calif.

Distribution: Washington, Oregon, California, Nevada and Utah.

California: Los Angeles (10); Palm Springs (13) Talloc (13); Freeman VII (13), Castella, Shasta, Lake Tahoe, San Diego VII (13), Azusa VI (13); Yuma V (13); Pasadena V (13)

Nevada: Reno VII (13).

Utah: Virginia River (4).

New Mexico: Silver City (14).

Oregon: Condon VII-8 (c).

Host: Mesquite (Prosopis juliflora).

denticollis L-G.

See tranquebarica Gmelin

dentipes Germar.

1824 Germar, p. 38

1829 characteristica Harris, p. 8

1835 Say, p. 159

1841 planata Laporte-Gory II, p. 56, pl. 10 fig. 77

1841 posticalis Laporte-Gory II, p. 56, pl. 10 fig. 76

1843 ruficornis, Strum p. 61

1850 Leconte, p. 227

1852 Harris, p. 49

1857 Fitch, p. 793

1857 planata L-G = dentipes Ger. Leconte p. 9

1857 posticollis L-G., Leconte p. 9

1859 Leconte, p. 235

1869 Glover, p. 91

1870 Pettit, p. 102

1873 Crotch, p. 90

1874 Austin, p. 269

1877 Provancher, p. 356

1878 Glover, pl. XI, fig. 18

1878 Hubbard-Schwarz, p. 636, 656

1878 Schwarz, p. 451

1878 Leconte p. 459

1880 Zesch-Reinecke, p. VII

1881 Packard, p. 12

1882 Leconte, List 1

1886 Horn, p. 87 pl. 3, fig. 75-79

1886 characteristica Har. = dentipes Germ., Horn p. 119

1886 planata L-G. = dentipes Germ., Horn p. 119

1886 posticollis L-G. = dentipes Germ., Horn p. 119

1889 Chittenden, p. 220

1889 Caulfield, p. 58

1889 Blanchard, p. 31

1890 Harrington, p. 159

1890 Packard, p. 60, 679

1890 Harrington, p. 58

1895 Slosson, p. 319

1895 Evans, p. 146

1896 Bowditch, p. 6

1898 Cockerell, p. 152

1899 Wickhamm p. 7

1903 Felt, p. 449

1903 Kerremans p. 187

1903 charicteristica Har., Kerremans, p. 187

1903 posticollis L-G., Kerremans, p. 187

1903 planata L-G., Kerremans, p. 187

1903 ruficornis Strum., Kerremans, p. 187

1904 Hopkins, p. 38

1904 Felt, p. 419

1906 Felt, p. 648, 657

1907 Fall-Cockerell, p. 179

1909 Blatchley, p. 790

1909 Easton, p. 50

1909 Wickham, p. 23

1909 Smith, p. 293

1910 Fall, p. 49

1912 Davis-Leng. p. 120

1912 Frost, p. 306

1913 Manee, p. 170

1916 Van Dyke, p. 412

1917 Nicolay, p. 93

1917 Chagnon, p. 218

1917 Chamberlin, p. 135

1918 Blackburn, p. 20, 36, 83 pl. 9 fig. 27

1919 Blackburn p.

Type locality:

Distribution: Southern Canada and entire United States.

Maine: Paris (14) Wales (14) Monmouth VIII-22 (c).

N. York: Buffalo (10)

Pennsylvania: Hummelstown (3)

N. Carolina: So. Pines V-18 (8)

Virginia: Nelson Co. V-7 (c)

Florida: Kissimmee (9)

Louisiana: Covington VI-14 (10).

Mississippi: Baxterville VII (10).

Ohio: Cincinnati (11)

Michigan: Marquette VII-24 (10).

Wisconsin: Bayfield (9)

S. Dakota: Elmore VIII (10)

Iowa: Ames (W); Iowa City (W)

Montana: Billings VII (c).

Idaho: Centerville VII (10); Cascade VI-26 (c).

Wyoming: Cheyene Can. (10)

Colorado : Waldo Can. (10)

Utah: Panguitch (10)

Arizona: Magdalina Mts. VIII (13). Williams (c) Flagstaff VI-7 (c).

Washington: Pullman (10)

Oregon: Bend: VI (c); Sparta VIII-2 (c).

California: Talloc (13); Weed (c); Strawberry VII (c)

The records given are merely to indicate the range and no attempt has been made to set down all records noted.

Host: The pines of the United States; Bred from American larch (Larix americana); Reported from oak (glover)

dentipes L-G.

See femorata Fab.

denticulata L-G.

See tranquebarica Gmelin.

deserta Horn.

1886 Horn, p. 100

1903 Kerremans p. 190

1907 Fall, p. 239

1913 Woodworth p. 196

Type locality: Mojave desert, California.

Distribution: Southern California, desert region.

California Lectotype, Mojave (17); San Diego (13);

Owens Lake VI[I]-19 (c).

Host:

disjuncta Lec.

See debilis Lec.

dissimilis Dejean.

See femorata Fab.

dolata Horn

1886 Horn p. 87, pl. 3, figs. 71-74

1901 Fall p. 117

1903 Kerremans p. 190

1913 Woodworth p. 196

1917 Chamberlin, p. 136

Type locality: Nevada.

Distribution: Oregon, California and Nevada.

Oregon: Cable Cove VI-27 (10); Ft. Klamath (17) Grant Co. VI, VII (c).

California: Weed VII (c); Yosemite (11); Fallen Leaf Lake (10)

Nevada: Type and paratype "Nev" (17)

Host: Yellow pine (Pinus ponderosa), lodge-pole pine (P. contorta), sugar pine (P. lambertina), and Jeffrey pine (P. jeffreyi)

edwarsii Horn

1886 Horn, p. 74, pl. 1, figs. 11-14

1894 Horn, p. 328

1903 Kerremans, p. 190

1905 Schaeffer, p. 129

1918 Burke p. 210

Type locality: Arizona (Tuscon).

Distribution: Lower California, Arizona and Texas

Texas: El Paso (4).

Lower California: San Jose del Cabo (1).

Arizona: Ft. Grant (8); Florence VIII-10, IX-4 (16);
Hot Springs VI-25 (10) Type No. 3428 Tuscon (17);
Palmerlee VII-10 (c).

Host: Ocotillo (Fouquieria splendens).

Season: August and September.

excavata Oliver

See tranquebarica Gmelin.

exesa Lec.

1858 Leconte, p. 68

1859 Leconte, p. 231

1882 Horn, p. 287

1886 Horn, p. 95, pl. 4, figs. 125-129

1887 Waterhouse p. 41

1898 Cockerell, p. 152

1903 Kerremans, p. 186

1907 Fall, p. 179

1918 Burke p. 211

1918 Van Dyke, p. 58

Type locality: Arizona,

Distribution: California, Colorado, Arizona, New Mexico and Mexico

California: Imperial Co. (15); Riverside Co. (15); Palm Springs IV (15).

California: Imperial Co. (15); Riverside Co. (15); Palm Springs IV (15).

Arizona: Sta. Catalina Mts. (10); Sta. Rita Mts. (17); Carr Canyon (17) Tuscon IV-29 (c) Huachuca Mts. (c).

Texas: Uvada V (10); Newcert IV-26 (10); Carmal Co. (1).

Mexico: Sonora

New Mexico: Messila Valley (25).

Host: Reared from Mesquite (Prosopis juliflora) and cat's claw (Acacia greggii)

falli Van Dyke

1918 Van Dyke, p. 56

Type locality: California (Donner Lake, Placer Co.).

Distribution: California

California: Independence VII-12 (15); Lake Tahoe VII-21 (15); Tuolumne, Meddows (15); Yosemite VII-18 (15) Forest Hill IV (15).

Host: Yellow pine (Pinus ponderosa), jeffrey pine (P. jeffreyi)

Season: July

fastidiosa Gory

See lesueuri Gory

femorata Fab.

1790 Oliver, p. 47, #60 pl. 11 fig. 121

1801 Fabricii, p. 208

1801 insculpta Herbst, p. 145 fig. 10, pl. 146

1801 Herbst, p. 226 #144 pl. 152 fig. 4

1805 Illiger, p. 93 #122

1817 Schonherr, p. 235

1817 insculpta Schonherr, p. 235

1829 Harris, p. 2

1837 dissimilis Dejean, p. 90

1837 cribraria, Dejean, p. 90

1837 Dejean, p. 90

1841 nigritule, Laporte-Gory II, p. 54 pl. 10, fig. 73

1841 cribraria Mannerheim p. 77

1841 quadri-impressa Laporte-Gory p. 48

1841 alabamae Gory IV, p. 185, pl. 32, fig. 183

1841 dissimilis, Gory, (Suppl) p. 181, pl. 31, fig. 177

1841 dentipes, Laporte-Gory, p. 52, pl. 9, fig. 64.

1844 viridiceps, Mels. p. 147

1844 rugosiceps, Mels. p. 147

1846 Strum p. 61

1848 White, p. 33

1848 lesuerui, White, p. 34

1850 Leconte, p. 227

1852 Harris, p. 50

1855 Fitch, p. 25, 31

1856 Fitch, p. 325

1856 Fitch, p. 207

1856 Fitch, 240, 241

1857 Leconte p. 8

1857 quadri-impressa L-G = femorata Fab., Leconte p. 8

1857 alabamae Gory-Leconte p. 8

1857 dissimilis 1859 Leconte, p. 231

1859 soror Leconte, p. 232

1859 obscura Leconte, p. 232

1859 misella Leconte, p. 233

1862 Walsh, p. 119

1866 Walsh, p. 26, 47

1868 Glover p. 91, fig. 97

1869 Walsh, p. 119

1869 adelpha Gemminger-Harold, p. 1423

1869 Harris, p. 36, 358

1869 Riley, p. 46

1869 Glover, p. 91

1869 Broadhead, p. 120

1869 Riley p.120

1869 Clemons, p. 168

1870 Elliott p. 309

1870 Pettit, p. 102

1870 quadri-impressa, Pettit, p. 102

1870 Weilandy, p. 146

1870 Riley, p. 309

1870 Bethume, p. 71

1871 Bethume, p. 6

1871 Glover, p. 65, 67

1872 Chambers, p. 124

1872 Clemente, p. 37

1873 Bethume, p.140

1873 alabamae Gory= femorata Fab. Leconte p. 331

1873 nigritula L-G = femorata Fab., Leconte p. 331

1873 difficilis = rugosiceps Mels., Leconte p. 331

1873 quadri-impressa Gory is missella Lec. Leconte p. 332

1873 sorar Lec. = femorata Fab. Crotch p. 90

1873 leseuri L-G = femorata Fab., Crotch p. 90

1873 obscura Lec. = femorata Fab. Crotch p. 90

1873 semisculpta = femorata Fab. Cr. p. 90

1873 mesilla Lec. = femorata Fab. Cr. p. 90

1874 Cook, p. 16

1874 Henshaw, p. 17

1875 Bethume, p.13

1875 Riley p. 71, 79, fig. 12, 13

1875 Bartlett, p.

1877 Bethume, p. 224

1877 Provancher, p. 356

1877 soror Lec., Provancher, p. 357

1877 Bethume, p. 25

1878 Hubbard-Schwarz, p. 636, 656

1878 Schwarz p. 451

1878 Glover, pl. XI fig. 15; pl. C. fig. 25 (larva)

1878 lesueri, Glover, pl. XI fig. 5,

1878 soror, Glover, pl. XI fig. 5

1878 mesilla, Glover, pl. XI, fig. 5

1880 Zesch-Reinecke, p. VII

1881 Packard, p. 77

1882 soror Lec. = exesa = cribraria, Horn, p. 286

1884 Harrington, p. 44

1884 Townsend, p. 221

1885 Linter, p. 27

1885 Ricksecker, p. 97

1886 Horn p. 119 Lists the following synonyms: insculpta Herb., quadri-impressa L-G., nigritula L-G., cribraria Mann., dessmelis Gory, viridiceps Mels., rugosiceps Mels. soror II Lec., adelpha G-H., var. alabamae Gory, soror Lec., lesueuri L-G. Var. nigritula L-G., obscura Lec., misella Lec.

1886 Horn, p. 137

1886 Horn, p. 77, pl. 2, figs. 30-34.

1887 Harrington, p. 31

1887 Bethume, p. 57, fig.

1888 Weed, p. 27, 28

1888 Harvy, p. 155,157

1888 Murtfeldt, p. 99

1888 McMillan, p. 85, 86, fig.

1888 Weed, p. 58

1889 Chittenden, p. 220

1889 Caulfield, p. 58

1889 Webster, p. 4

1889 Gillette, p. 177-178 fig.

1889 Blanchard, p. 31

1890 Harrington p. 58

1890 Clark, p. 161

1890 Washburn, p. 10, 11 fig.

1890 Forbes, p. 295

1890 Riley-Howard, p. 116, 412

1890 Osburn, p. 261

1890 Packard, pp. 62, 64, 291, 385, 424, 481, 520, 539, 669

1891 Harrington, p. 71

1892 Hopkins, p. 257

1892 Washburn, p. 7

1892 Osburn, p. 96, 127

1892 Blaisdell, p. 33

1893 McCarthy, p. 95, fig.

1893 Riley, p. 86, 89

1893 Chambliss, p. 8-9

1893 Riley p. 206

1893 Riley p. 92

1893 Bruner p. 166

1893 Atwood p. 9-10

1893 Schwarz, p. 136

1893 Chambers, p. 8-9

1893 Hopkins, p. 181

1894 Davis, p. 78

1894 Riley, p. 206

1894 Jack, p. 137

1894 Fall, p. 98

1895 Hamilton, p. 364

1895 Evans, p. 146

1895 Piper p. 66

1895 Strinson p. 71-72

1895 Davis, p. 22-23

1895 Card, p. 127-130

1895 Washburn p. 7

1896 Wolcott, p. 236

1896 Bowditch, p. 6

1896 Fletcher, p. 187

1896 Bowditch p. 387

1897 Chittenden p. 71

1897 Harrington p. 70

1897 Boque, p. 10 -12

1897 Cordley p. 108

1897 Perkins,p. 16

1897 Crow, p. 4

1897 Hillman, Bul. 36

1897 Linter, p. 307

1898 Cockerell p. 151

1898 Hopkins p. 46

1898 Stedman, p. 16-19

1898 Foville-Parrott, p. 47-49

1898 Chittenden, p. 12

1898 Butz, p. 13

1898 Brunner, p. 121

1899 Harvey, p. 107

1899 Lugger, p. 53

1899 Felt, p. 917

1900 Smith, Cir. 14

1900 Pettit, p. 28

1900 Close, p. 39

1900 Cooley, p. 64

1900 Anon, p.

1900 Chittenden p. 65

1901 Cox, p. 40

1901 Felt, p. 834

1901 Fall p. 117

1901 Fletcher, p. 197

1901 Johnson, p. 220

1901 Brunner, p. 51

1901 Walker, p.

1902 Gillette p. 40

1902 Fisk, p. 68

1902 Chittenden, p. 726

1903 Kerremans p. 187

1903 insculpta Herbst, Kerremans p. 187

1903 cribraria Mann. Kerremans p. 187

1903 quadri impressa L-G., Kerremans p. 187

1903 dentipes L-G., Kerremans p. 187

1903 nigritula L-G. Kerremans p. 187

1903 dissimilis Gory, Kerremans p. 187

1903 alabamae Gory, Kerremans p. 187

1903 viridiceps Mels., Kerremans p. 187

1903 rugosiceps Mels. Kerremans p. 187

1903 soror Lec., Kerremans p. 187

1903 obscura Lec. Kerremans p. 187

1903 misella Lec., Kerremans p. 187

1903 adelpha G & H., Kerremans p. 187

1903 Cooley p. 224-227 fig.

1903 McClatchie p. 307-310 fig.

1903 Felt p. 172

1903 Sherman p. 45

1903 McClatchie p. 1

1903 Kraus p. 176

1903 Pettit p. 7

1904 Patch-Johannsen p. 7

1904 Gibson p. 60

1904 Horsefall p. 31

1904 Smith p.

1904 Felt p. 91

1904 Hopkins p. 38

1905 Stevenson p. 92

1905 Felt p. 171

1905 Felt, p. 51, 86, 261

1905 Schaeffer, p. 130

1906 Tucker, p. 11

1906 Felt, p. 503

1907 Hitchings, p. 100

1907-Cockerell, p. 179

1908 Garcia, p. 48

1908 Germen p. 48

1908 Morris, p. 443

1909 Wickham, p. 23

1909 Easton, p. 50

1909 Smith, p. 293 fig. III

1909 Schaeffer, p. 376

1909 Blatchley p. 789

1909 Morris p. 58

1910 Fall, p. 48

1911 Swaine, p. 92

1911 Swaine, p. 62, 72, 100

1911 Douglas, p. 111

1912 Douglas, p. 59-60

1912 Walker, p. 62

1912 Bach p.

1912 Gibson, p. 100

1912 quadri-impressa, Gibson, p. 100

1912 Frost, p. 306

1913 Patch, p. 73

1913 Quaintance, p. 76

1914 Comstock, p. 549

1914 Wildon p.

1915 Essig, p. 234

1915 Somes, p. 13

1915 Patch, p. 71

1916 Van Dyke, p. 409

1917 Chagnon, p. 219

1917 Chamberlin, p. 135

1917 Burke, p. 328

1918 Dozier p. 331

1918 Matz p. 157-159 fig. 70.

1919 Burke, p. 326-330

1919 Nicolay p. 19

1919 Herbert, p. 333-337

1919 Brooks, p. 1-12, figs. 1-13.

Type locality: "Boreal America"

Distribution: Every state in the United States, also in Canada and Mexico.

Host: White oak (Quercus alba), gambel oak (Q. gambeli), live oak (Q. chrysolepis), California black oak (Q. californicia), California live oak (Q. agrifolia), black oak (Q. velutnia), interior live oak (Q. wislizeni), chestnut oak (Q. prinus), valley oak (Q. lobata) / blue oak (Q. douglasii), white pine (Pinus strobus), western white pine (P. monticolae), yellow pine (P. pinderosa), lombardy poplar (Populas nigraitalica), fremont poplar (P. fremontii), Carolina poplar

(P. deltoides), aspen (P. tremuloides), black cotton wood (P. trichocarpa), smooth leaf willow (Salix laevigata), arroyo willow (S. lasiolepis), imported maple (Acer dasycarpum) silver maple (A. saecharinum), soft maple (A. rubrum), birch (Betula alba), hickory (Hickoria sp.), beach (Fegas sp.) sycamore (Plantanus sp.), ash (Fraxinus americanus), mountain ash (F. velutina), chestnut (Castenia sp.), horse chestnut (C. dentata), box elder (Acer negundo), linden (Tilia americana) white alder (Alnus rhombifolia), black walnut (Juglans nigra) pecan (Hicoria pecan), hack berry (Celtis occidentalis) sweet gum (Liquidamber styraciflua), blue gum (Eucalyptus golbulus), Texas redbud (Cercis reniformis), wild plum (Prunis americana), domestic prune (P. domestica), peach (P. persica), apple (Pyrus malus), pear (P. communis), cherry (Prunis avium) currant (Ribes rubrum), apricot (Prunis armeniaca), rose (Rosa sp.) quince ( ), raspberry ( ).

Season: March to September.

Variety lesueri Laporte-Gory

1841 Laporte-Gory II, p. 49 pl. 9 fig. 66

1848 White, p. 34

1857 Leconte p. 8

1859 Leconte, p. 231

1873 lesueuri Gory is soror Lec. Leconte p. 332

1873 fastidiosa Gory is lesueuri Lec. Leconte p. 332

1878 Glover, pl. 11 fig. 5

1879 Gardner, p. 212

1903 Kerremans, p. 187

1906 Tucker p. 11

Robertson p.

Type locality: "Boreal America"

Distribution: New York and Texas.

Host:

Note: The distribution and hosts of lesueri are difficult to give since the variety is seldom differentiated in economic literature.

femorata Laporte-Gory

The femorata of Laporte-Gory is floricola Gory.

floricola Gory

1841 Gory (Suppl) p. 179 pl. 30 fig. 175

1841 femorata, Laporte-Gory, p. 48 pl. 9 fig. 65

1857 Leconte p. 9

1878 Schwarz, pl 45

1878 Hubbard-Schwarz, p. 636

1878 Glover, pl. XI fig. 7

1880 Zesch-Reineche, p. VII

1884 Harrington, p. 71

1886 Horn p. 81

1886 calcarata Mels. = floricola Gory-Horn p. 119

1889 Blanchard, p. 31

1889 Chittenden p. 217

1894 Hamilton p. 252

1895 Hamilton, p. 364

1895 Evans, p. 146

1897 Castle p. 8

1903 Kerremans p. 187

1903 Felt. p.

1904 Felt, p. 419

1906 Felt, p. 658, 649, 657

1909 Blatchley, p. 790

1909 Smith, p. 293

1912 Grossbeck, p. 135

1912 Davis-Leng. p. 120

1913 Manee, p. 170

1915 Johnson, p. 312

1917 Chagnon, p. 218

1919 Nicolay p. 19

Type locality: Florida

Distribution: Canada to Florida, west to Indiana.

Mass: Tyngsboro (10);

N. York: West Point VII (4); Yaphauk VII (19); Bellport VI-11 (19).

New Jersey: Malaga V-17 (8)

Maryland: Washington, D. C. (8)

Virginia: Va. Beach VII-11 (10)

N. Carolina: So. Pines IV (10)

Georgia: Clayton 3700 ft. (4)

Alabama: Mobile V (c)

Florida: Cleveland, Jackson (4); Archer III (10); Tampa IV-24 (10).

Michigan: Marquette VII-3 (10);

Host: White pine (Pinus strobus), loblolly pine (P. teada), pitch pine (P. rigida), long leaf pine (P. palustris).

fraterna Mannerheim

See tranquebarica Gemlin.

gemmata Leconte.

1858 Leconte, p. 67

1859 Leconte, p. 337

1886 Horn p. 105, pl. 6, figs. 178-182

1887 Waterhouse, p. 36

1905 Schaeffer, p.130

1918 Van Dyke, p. 58

1918 Burke p. 211

Type locality: Mexico (Sonora).

Distribution: Arizona, New Mexico and Mexico (Sonora).

Arizona: Douglas (16); Pinal Mts. (9) Sabino Basin VI-28 (10) San Bernardino Ranch (16).

Host: Mesquite (Prosopis juliflora).

(A specimen in the National Museum bears the following label "Reared from Quercus alba")

germari Laporte-Gory

See sexsignata Say.

Note: According to Horn (1886 p. 118) gessuari L-G is a synonym of solieri and does not belong in our list.

harriaii Hentz.

1827 Hentz. p. 373 pl. XIII fig. 1

1829 Harris, p. 2

1837 chlorocephala, Dejean, p. 90

1841 chlorocephala Gory IV p. 161, pl. 27, fig. 156

1852 Harris p. 51

1857 Fitch, p. 703

1857 chlorocephala Gory = harrisii Hentz, Leconte p. 9

1859 Leconte, p. 239

1869 Glover, p. 91

1869 Harris, p. 359

1871 chlorocephala Gory, Saunders, p. 96

1873 Crotch p. 90

1878 Hubbard-Schwarz, p. 636

1878 Glover, pl. XX fig. 35

1878 Provancher p. 7

1879 Harrington, p. 119

1881 Harrington, p. 33

1883 Harrington p. 79

1884 Saunders, p. 55

1884 Harrington, p. 35

1886 Horn, p. 86, pl. 3, figs. 66-70

1887 chlorocephala, Schwarz, p. 93

1889 chlorocephala, Schwarz, p. 39

1889 Blanchard, p. 32

1890 Packard, p. 62, 69, 679

1903 Kerremans, p.187

1906 Felt, p. 467, 751

1909 Easton, p. 50

1911 Morris, p. 45

1912 Frost, p. 306

1913 Manee, p. 170

1915 Frost p. 142

1917 Nicolay p. 93

1917 Chagnon, p. 218

1917 Gibson, p. 149

Type locality: Massachusetts.

Distribution: Ottawa along the Atlantic States to Florida.

Maine: Cumberland Co. VI-28 (c); Monmouth VI-26 (c); Isle of Pines (10)

Mass: Concord (8); Brookline (4); Monterey VII-8 (14)

D.C. Washington V-15 (10);

Penn: Hummelstown VI-24 (9);

Virginia: Falls Church (9);

Georgia: Stone Mt. VII-11 (4); Clayton 3000 ft. (11)

Alabama: Auburn (4)

Host: White pine (Pinus strobus), black alder (Alnus nigra), pitch pine (P. rigida), scrub pine (P. virginiana)

horni Kerremans.

1903 Kerremans, p. 186

Type locality: Etato-Unis d'Amerigue.

Distribution: Etato-Unis d'Amerique.

Host: Unknown.

humilis Horn

1886 Horn, p. 102, pl. 6, figs. 161-172

1903 Kerremans, p. 190

Type locality: Arizona,

Distribution: Arizona.

Arizona: Holotype "Ariz" (17); Catalina Springs VI-21 (10).

Host: Unknown.

hybernata Fab.

See chrysoela Illiger

ignicollis Horn.

1885 Horn, p. 145

1886 Horn, p. 82, pl. 3 figs. 51-55

1886 Henshaw, p. 95

1899 Wickham, p. 7

1903 Kerremans, p. 186

1907 Fall-Cockerell, p. 179

1918 Burke, p. 210

Type locality: Colorado?

Distribution: California, Colorado, New Mexico, Arizona, Utah Texas and Nevada.

Utah: Beaver Cr. Can. VI-20 (1); Beaver Co. (1)

California:

Colorado: Ft. Garland (10); Solida (9)

New Mexico: Meck (10); Colombia Mts. (10); Alamogardo V-8 (17); Silver City VII-7 (11).

Nevada: Esmaraldo Co. VI-27 (c)

Texas: Montel (10)

Arizona: Pinal Mts. (4); Prescott VI-VII (13);

Host: Mountain juniper (Juniperus scopulorum), one-seed juniper (J. monosperma), alligator juniper (J. pachyphlaea), Port Orford Cedar (Chamaecyparis lawsoniana) and cypress (Cupressus sp.)

Season: July.

ignipes Laporte-Gory.

See sexsignata Say

impressa Fab.

See tranquebarica Gemlin

insculpta Herbst.

See femorata Fab.

laricis Van Dyke

1916 Van Dyke, p. 409

1917 Chamberlin, p. 138

1918 Van Dyke, p. 58

Type locality: Sumpter, Oregon.

Distribution: Eastern Oregon, California, Sierras as far south as Yosemite, and Idaho

Oregon: Sumpter, Grant Co. VI, VII (c).

California: Toulomne Meddow (15); Lake Taho (15); Arizona Lake (15).

Idaho: Cascade VI-26 (c).

Host: Larch (Larix occidentalis), lodgepole pine (Pinus contorta)

lateralis Waterhouse

1887 Waterhouse, p. 47, 185 pl. 3 fig. 20

1903 Kerremans, p. 185

Type locality: Texas.

Distribution: Texas.

Host: Unknown

libonoti Horn.

1886 Horn, p. 108, pl. 6, figs. 193-197

1903 Kerremans, p. 191

Type locality: Arizona.

Distribution: Arizona and New Mexico

Arizona: Huachuca Mts. V-5 (c) VIII (c); Palmerlee (9); Lectotype "Ariz" (17).

New Mexico: Gallinas Can. (4); Carr Canyon (17).

lineatipennis Van Dyke

Variety of mali Horn.

lixa Horn.

1886 Horn p. 101, pl. 5, figs. 159-163.

1894 Horn p. 328

1900 Griffith, p. 568

1903 Kerremans, p. 187

1907 Fall, p. 339

Type locality: Texas.

Distribution: Lower California, Nevada, Arizona and Texas.

Arizona: Phoenix (c); Catalina Springs V-2 (10); Ashfork VI-18 (10); Williams VI-1 (10). Lectotype "Tex" (17); paratype "Tex" (17).

Nevada (17). Lower California: Calamount.

Host:

lucana Horn

1894 Horn, p. 328, 367

1903 Kerremans, p. 191

1904 Schaeffer, p. 208

Type locality: Sierra El Chinche, Bajo California.

Distribution: Lower California, Arizona and California.

Arizona: Huachuca Mts. VII, VIII (1); Nogales VIII-18, IX-2 (c);
Catalina Springs V-5 (10); Cactus plain, Yuma Co. IX (13).

California: Pasadena VII-14 (7); Palm Springs; Tulare (16);

Lower California: San Jose del Cabo (17); Santa Rosa (1).

Host: Unknown.

ludificata Horn.

1886 Horn, p. 87, pl. 3, figs. 80-84

1901 Fall p. 117

1902 Skinner, p. 40

1903 Kerremans, p. 191

1907 Fall-Cockerell p. 179

1907 Fletcher, p. 100

1913 Woodworth, p. 196

1917 Burke, p. 210

Type locality: Colorado.

Distribution: California, Colorado, Arizona, South Dakota, New Mexico,
Utah and Kansas.

California: Lectotype (17); paratype (17); Weed VII, VIII (c).

Colorado: Type (17); Waldo Can. VII (10); Larkspur (10);
Manitou VIII-31 (10); Florescent (10); Buena Vista VII-4 (10).

Arizona: Flagstaff (c); Prescott VI-9 (c); Williams VI-8

(6); Grand Canyon (9); Phoenix (4); Senator (4); Huachuca Mts. VII (1). St. Catalina Mts. (10).

New Mexico: Beulah VIII-17 (8); Silver City VII-12 (11); Santa Fe (13).

South Dakota: Elmore (10).

Utah: Pangeutch (10). Kansas (10).

Host: Yellow pine (Pinus ponderosa), limber pine (P. flexilis) pinion (P. edulis), Douglas Fir (Pseudotsugae taxifolia) and Gambel oak (Quercus gamblii)

mali Horn

1886 Horn, p. 97, pl. 5, figs. 135-139

1890 Riley-Howard, p. 412

1890 Koebelle, p. 85

1891 Ricksecker, p. 412

1891 Allen p. 50

1893 Allen p. 70

1896 Cook, p. 66

1896 Cook, p. 362

1901 Fall, p. 117

1902 Chittenden, p. 726

1902 Cockerell p. 108

1902 Van Dyke, p. 173

1903 Wickham p. 68

1903 Kerremans, p. 186

1912 Gibson, p. 100

1913 Woodworth, p. 196

1916 Van Dyke, p. 411

1917 Chamberlin, p. 137

1917 Burke, p. 328

1918 Van Dyke, p. 58

1919 Burke, p. 326-330

Type locality: Owens Valley, California.

Distribution: Washington, Oregon, California, Nevada, Utah, Arizona, Colorado, New Mexico, and Manitoba, Canada.

Oregon: Dundee (c) Corvallis IV-2, VIII-15 (c); Roseburg VI-12 (c); The Dalles VII (c); Cove V-25 (c)

California: Common throughout the state, Siskiyou to Los Angeles County, Pasadena, Yosemite, Banning, Riverside, Santa Monica, Pomona, Taho, Weed and Los Gatos.

Nevada: Paratype "Nev." (17);

Utah: Paratype Utah (17);

Arizona: Williams VII-20 (10); Prescott VI-19 (10); Senator (4); Phoenix (4)

Texas: Davis Mts. (8)

Minn: Duluth (7)?

Onah, Manitoba VI-13 on P. virginicna (Wallis).

Host: Box elder (Acer negundo), silver maple (A. saccharinum), soft maple (A. rubrum), Brad-leaf maple (A. macrophylum), sycamore maple (A. pseudo-platanus), smooth leaf willow (Salix laevigata) weeping willow (S. babylonica), aroyo willow (S. lasiolepis), American elm (Ulmus americana), camperdown elm (U. scabra pendula), Huntingdon elm (U. scabra huntingdoni), mesquite (Prosopis juliflora), (Arctostaphylos tomentosa), apple(Pyrus malus), plum (Prunus domestica), peach (P. persica), wild plum (P. subcordata), cherry, (P. avium), Japanese cherry (P. pendula), hollyleaf cherry (P. ilicifolia), apricot (P. americana), coffee-berry (Rhamnus californica), evergreen buckthorn (R. crosea), California black oak (Quercus californica)

California live oak (Q.agrifolia), European sycamore (Platanus orientalis), California sycamore (P.racemosa) mountain mahogany (C.parvifolius), christmas berry (Heteromelas arbutifolia), loquat (Eriobotraya japonica), oso berry (Osmaronia cerasiformis), white alder (Alnus rhombifolia), lombardy poplar (Populus nigro-italica), madrone (Arbutus menziesii), blue gum (Eucalyptus globulus), wild lilac (Ceanothus sorediatus), European horse chestnut (Aesculus hippocastanam), pea chaparral (Pickeringia montana), cultivated rose (Rosa sp.), European mountain ash (Sorbus aucuparis), currant (Ribes rubrum), copper beech (Fagus sylvatica purpurea).

Season: April to August.

Variety lineatipennis Van Dyke.

1916 Van Dyke, p. 411

1919 Burke, p. 328

Type locality: Santa Monica Mts., California.

Distribution: California and Arizona.

California: Tulare (c)

Host: Chaparral (Baccharis pilularis) and(B.sergiloides).

Season: July.

melicula Dejean.

See chrysoela, Illiger.

merkelii Horn.

1886 Horn. p. 106 pl. 6 figs. 183-187.

1901 Fall p. 117

1902 Van Dyke, p. 173

1903 Kerremans, p. 191

1905 Schaeffer, p. 130

1913 Woodworth, p. 196

1918 Van Dyke, p. 58

1918 Burke, p. 211

Type locality: Texas.

Distribution: Arizona, Texas, and California.

Arizona: Sabino Canyon II (10); Paratype (17).

Texas: Brownsville (16), Lectotype (17) paratype (17)

California: Banning V, VI (c); San Bernardino (4)

Host: Mesquite (Prosopis juliflora), Cat's Claw (Acacia greggii)

mexicana Dejean.

See aerea Cheverlot.

micromorpha Fall.

1907 Fall, p. 237

Type locality: Hot Springs, Arizona

Distribution: Southern Arizona.

Host: Unknown.

misella Leconte,

See femorata Fabricii

monticolae Fall.

1910 Fall, p. 51

1913 Woodworth, p. 196

1917 Chamberlin, p. 136

1918 Van Dyke, p. 57

Type locality: San Bernardino Mountains, California.

Distribution: Oregon (Extreme southern portion), California.

California: Fallen Leaf Lake VIII-1 (10); Green Valley VIII-6, 8000 ft. (11); Talloc VII (13); Sierra Madra VI (13); Weed VIII-11 (c); Humbolt Co. (c).

Host: Yellow pine (Pinus ponderosa) and jeffrey pine (P. jeffreyi)

multistigmosa Mannerheim

1837 Mannerheim p. 82

1903 Kerremans p. 186

Type locality: Texas.

nigrafasciata Leconte.

See atrofasciata Leconte.

nigritule Laporte-Gory.

See femorata Fabricii.

nixa Horn.

1886 Horn, p. 98, pl. 5, figs. 145-149

1901 Fall p. 117

1903 Kerremans, p. 191

1908 Wright-Coolidge, p. 67

1917 Chamberlin, p. 138

1917 Burke, p. 328

Type locality: Western Nevada.

Distribution: Oregon, California and Nevada.

Nevada: Type (17); Lectotype Nev. (17)

California Miami (13); Azura (9); Yosemite V-22 (9) VI-18, 4000 ft. (11). Carrville VII-5 (9), Mesquite (10) Placerville (10); Calaveros (10). Weed VII (c)

Oregon: Josephine VI-11 (c).

Host: Incense cedar (Libocedrus decurrens), monterey cypress (Cypressus macrocarpa).

Season: March to August.

obscura Leconte.

See femorata Fabrecii

octocola Leconte

1858 Leconte, p. 67

1859 Leconte, p. 230

1886 Horn, p. 73, pl. 2, figs. 6-10

1887 Waterhouse, p. 46

1890 Packard, p. 669

1898 Wickham, p. 40, 305

1900 Griffeth, p. 568

1901 Fall p. 117

1903 Kerremans, p. 186

1904 octo-punctata, Kunze p. 242

1904 Wickham, p. 307

1907 Fall-Cockerell, p. 154

1909 Wickham, p. 305

1913 Woodworth p. 196

1918 Van Dyke, p. 58

1918 Burke, p. 210

Type locality: Texas.

Distribution: California, Texas, Arizona and Mexico.

California: Indio, Banning White Water and Palm Springs VI-16 (c).

Texas: Fedor, Lee Co. (3); El Paso (4) Carmal Co. (4); Macdona VII-28 (8);

Arizona: Yuma (4); Florence VI-28 (8); Bill Williams Can. (13); Tuscon VIII-16 (13); Oracle (4); Palmerlee VIII-23 (9); Redington (10); Brush Carrol (10); Sabino Can. (10); Monmoth VII-1 (10) Sta. Catalina Mts. VI-28 (10); Pima Co. VIII-12 (11); Gila; Prescott (c).

Lower California: Santa Rosa (1)

Mexico: Sonora, Alamos, San Louis Potosi and Tamalipas.

Host: Mesquite (Prosopis juliflora), Palo verde (Cercidium torreyanum).

Season: August and September.

octo-punctata (8 punctata) Kunze.

See octocola Leconte

peninsularis Schaeffer.

1904 Schaeffer, p. 207

Type locality: San Felipe, Lower California.

Distribution: Lower California.

Host: Unknown.

piuta Wickham

1903 Wickham, p. 67

1907 Fall, p. 338

Type locality: Independence, Owens Valley, California.

Distribution: California and Arizona.

Arizona: Williams VII-18 (c).

Host: Beaten from desert shrubs.

Season: July.

planata Laporte-Gory

See dentipes Germar.

postecalis Laporte-Gory

See dentipes Germar.

prasina Horn.

1886 Horn, p. 118, pl. 7, figs. 244-247.

1894 Horn, p. 368

1903 Kerremans, p. 192

1904 Schaeffer, p. 206

1913 Woodworth p. 196

1917 Chamberlin, p. 139

Type locality: Northern California.

Distribution: California.

California: Holotype "Cal" (17); Alaneha (11). Sonoma Co.(15).

Host: Unknown.

proxima Kirby.

See scabripennis Laporte-Gory.

pseudotsugae Van Dyke.

1916 Van Dyke, p. 407

1917 Chamberlin, p. 138

Type locality: Lake Tahoe, California.

Distribution: Oregon and California.

California: Fallen Leaf Lake VI-2 (10); Weed VIII-11 (c) Carrville VI-30 (10).

Hosts: Douglas fir (Pseudotsugae taxifolia), white fir (Abies concolor), grand fir (A. grandis), yellow pine (Pinus ponderosa) and jeffrey pine (P. jeffreyi)

pubescens Fall.

1907 Fall, p. 338

1913 Woodworth p. 196

1917 Chamberlin, p. 139

Type locality: Southern California.

Distribution: California and Oregon.

California: Sierra Madra (13); Lake Tahoe (15); Shasta Co.

(15); 3000 to 6000 ft. altitude.

Oregon: Mt. Jefferson VII-20, 7500 ft. (c).

Host: Scrub oak (Quercus dumosa), yellow pine (Pinus ponderosa), and jaffrey pine (P. jeffreyi)

purpurata Bland

See aeneola Ledonte

purpureoplagiata Schaeffer.

1904 Schaeffer, p. 206

1905 Schaeffer p. 129

Type locality: Florence, Arizona.

Distribution: Southern Arizona and Lower California.

Lower California: El Taste (1); San Felipe (1).

Host:

purpureovittata Horn.

1886 Horn, p. 76

1894 Horn, p. 328, pl. 2, figs. 25-29

1903 Kerremans, p. 187

1904 Schaeffer, p. 206

1909 Blatchley p. 789

Type locality: Texas.

Distribution: Indiana, Illinois, Arizona, Texas, Kansas, Oklahoma, and Lower California.

Texas: Lectotype #3430 Texas, parotype S.W.Tex. (17);

Dallas (10); Carmal Co. (4); Davis Mts. VII-11 (8); New Brunsfels (10); San Antonio VI-22 (10)

Arizona: Phoenix (4);

Oklahoma: Kingfisher VII-20 (9)

Kansas: Clark Co. VI-1 (4); Belvedue VII-1 (c); paratype Kansas (17).

Lower California: San Jose del Cabo, Santa Rosa (4); El Taste (4).

Host: Bred from Elm Twigs.

purpurifrons Motschulsky.

See contigua Leconte

pusilla Laporte-Gory

1841 Laporte-Gory II p. 53, pl. 10 fig. 72

1841 biguttata Laporte-Gory p. 50 pl. 10 fig. 12

1844 striangulata Melsheimer, p. 147

1859 Leconte, p. 236

1884 Harrington, p. 71

1886 Horn, p. 97, 120, pl. 5, figs. 140-144

1889 Blanchard, p. 31

1893 Hopkins, p. 181

1899 Hopkins p. 437

1902 Fletcher, p. 107

1903 Kerremans, p. 186

1903 biguttata L-G, Kerremans, p. 186

1903 strangulata Mann. Kerremans, p. 186

1903 Felt, p. 91

1903 Felt, p. 172

1904 Felt, p. 419

1905 Felt, p. 172

1906 Felt, p. 649, 658

1909 Blatchley, p. 791

1909 Smith, p. 293

1913 Manee, p. 170

1919 Nicolay p. 19

Type locality:

Distribution: Ontario to Carolina, west to Wisconsin and Ohio.

Ontario: Calander (8).

Mass: Dartmouth VI-7, VIII-8 (c); Lowell (13); Tyngsboro (13)

Maryland: Lloyds VII-10 (10);

N. Jersey: Jamesburg VII-24 (4); Spotwood (4); DeCosta (8); Malaga (8);

N. York: White Face Mt. (4); West Point VI-18 (c);

Penn: Pittsburg (9)

Michigan:

N. Carolina: Tyron VII (10); Retreat V-15 (10)

Alabama Mobile VII-3 (9)

W. Virginia: White Sulphur (4);

Virginia: Penington Gap VII-4 (10);

Host: White spruce (Picea canadensis), white pine (Pinus strobus), pitch pine (P. rigida), short-leaf pine (P.echinata), Fraser fir (abies fraseri)

quadri-impressa Laporte-Gory.

See femorata Fab.

quadrilineata Leconte

1859 Leconte, p. 233

1886 Horn, p. 94, pl. 4, figs.120-124.

1898 Cockerell, p. 152

1903 Kerremans, p. 192

Type locality: Santa Fe, New Mexico.

Distribution: New Mexico, Arizona, and Nevada.

New Mexico: Jamez Mts. VIII-4 (16). Gallinas Can (25); Water Can. (25);

Arizona: Carr's Peak, Huachuca Mts. VII-8 (16).

Nevada: Goldfield Esmeraldo Co. 7000 ft. VII-27 (c).

quadri-maculata (4-maculata) Mels.

See sexsignata Say.

ruficornis Strum

See dentipes Germar

rugosa Mannerheim

See tranquebarica Gmelin

rugosiceps Melsheimer

See femorata Fabricii

scabripennis Laporte-Gory.

1841 Laporte-Gory II, p. 53, pl. 9, fig. 71.

1837 proxima Kirby, p. 157

1841 scabra Gory, p. 182, pl. 31, fig. 178

1850 Leconte, p. 227

1857 Leconte p. 9

1858 Leconte, p. 68

1859 Leconte, p. 235

1871 proxima Bethume, p. 230

1872 proxima Bethume p. 33

1874 Austin, p. 2 69

1878 Hubbard-Schwarz, p. 636

1886 proxima Kirby = scabripennis L-G., Horn p. 120

1886 Horn, p. 89, pl. 3, fig. 85-89.

1886 scabra Gory = scabripennis L-G., Horn p. 120

1889 Chittenden, p. 221

1889 Blanchard, p. 31

1894 Slosson, p. 2

1895 Evans p. 146

1896 Bowditch, p. 6

1901 proxima Kby., Fall p. 117

1903 Kerremans, p. 187

1903 Felt p. 172

1903 Felt, p. 91

1903 scabra, Kerremans, p. 187

1903 proxima, Kerremans, p. 187

1904 Fletcher, p. 99

1905 Felt, p. 171, 172

1906 Felt, p. 753

1912 Frost, p. 306

1913 Woodworth p. 196

1915 Frost p. 142

1917 Nicolay, p. 93

1917 Chagnon, p. 218

1917 Gibson, p. 149

Type locality:

Distribution: Canada, New England States, west to Lake Superior.

Ontario: Calandia (8); Quebec; Alberta.

Maine: Monument (9); Paris VII-17 (c); Cumberland Co. (4).

N. Hampshire: Concord (8); White Mts. (10) Mt. Washington VII-4 (4)

Mass: Framingham (14).

N. York: White Face Mt. VII-1 (4); Big Moos VIII-12 (Felt)

Pennsylvania (17).

Minnesota: Duluth (10);

California: (proxima) Pasadena, Santa Moneca (Fall).

Host: White pine (Pinus strobus), spruce (Picea sp)

Season: June and July.

scabra Gory

See scabripennis Laporte-Gory

scitula Gory

1841 Gory IV p. 169, pl. 27, fig. 155

1837 Dejean, p. 90

1841 chlorocephala Gory

1841 ultramarina Laporte-Gory, p. 13 pl. 3 fig. 19

1857 ultramarina L-G. n.n. azurea. Leconte p. 7

1859 concinnula Lec., n.n. for azurea Leconte p. 238.

1878 Hubbard-Schwarz, p. 656

1886 ultramarina L-G., = scitula Gory, Horn p. 115

1886 Horn, p. 112 pl. 7 fig. 217, 221

1886 concinnula Lec. = scitula Gory, Horn p. 115

1891 Hamilton, p. 130

1891 chlorocephala Gory = scitula Gory, Hamilton, p. 130.

1903 Kerremans, p. 185

1903 ultramarina L-G, Kerremans, p. 185

1903 concinnula Lec., Kerremans, p. 185

1906 Felt, p. 701

1908 Heyne-Taschenberg, p. 139

1909 Smith, p. 293

Type locality: Pennsylvania?

Distribution: Connecticut to Virginia west to Michigan

Connecticut: Stamford VI-21 (c).

Pennsylvania: Philadelphia (c) Easton (9)

N. Jersey: Jamesburg VII-4 (c); DeCosta VII (8).

Virginia: Ft. Monroe (10).

Michigan: Detroit VII (10);

Host: Pin oak (Quercus minor)

semisculpta Leconte.

See contigua Leconte.

serripennis Laporte-Gory

See tranquebarica Gmelin

serripes Schaeffer.

1905 Schaeffer, p. 130

1909 Schaeffer, p. 76

Type locality: Beaver Canyon, Utah.

Distribution: Arizona Utah.

Arizona: Williams VII-1, VII-29 (10); Oak Creek VIII (16); Cheyenne Can. VIII (10).

Host : Gambel oak (Quercus gambellii)

Season: July

sexfasciata Schaeffer.

1918 Schaeffer, p. 212

Type locality: Key West, Florida,

Distribution: Florida Keys.

Host: Unknown.

sexguttata Say.

See sexsignata Say.

sexsignata Say.

182 B. sexguttata (preoccupied) Say, p. 161

1836 Buprestis Say, p. 158

1841 germari Laporte-Gory II p. 50 pl. 9 fig. 67

1841 ignipes Laporte-Gory II p. 50 pl. 9 fig. 68

1853 4-maculata Melsheimer, p.

1857 Leconte p. 8

1859 Leconte, p. 237

1873 analis Lec. = sexsignata Say Crotch, p. 90

1873 ignipes Gory = sexsignata Say, Leconte p. 332

1878 Glover, pl. XI fig. 1

1878 Hubbard-Schwarz, p. 656

1880 Zesch-Reinecke p. VII

1884 Harrington p. 71

1886 Horn, p. 112, pl. 7 figs. 212-216.

1889 Chittenden, p. 220

1889 Blanchard, p. 31

1890 Packard, p. 485, 520

1895 Hamilton, p. 364

1897 Chittenden, p. 71

1897 Harrington, p. 70

1899 6-guttata Say = sexsignata Say, Harris, p. 411

1902 Fiske, p. 68

1903 Kerremans, p. 185

1903 sexguttata Say Kerremans, p. 185

1903 germari L. et G. Kerremans, p. 185

1903 ignipes L et G. Kerremans p. 185

1905 Schaeffer, p. 148

1906 Felt, p. 409

1909 Blatchley, p. 791

1909 Smith, p. 293

1909 Wickham, p. 23

1912 Frost, p. 306

1915 Frost, p. 269

1917 Chagnon, p. 218

1918 Blackburn, p. 20, 23, 36, 82 pl. 8 fig. 26

1919 Nicolay p.19

Type locality:

Distribution: Maine to Georgia, west to Michigan and Nebraska.

Mass: Melrose (c); Sherborn VI-27 (c).

N. York: Acqueduct V-20 (19); Huntington, L.I. VII-17 (19); Flatbush, L.I. VII-21 (19);

Connecticut: New Haven V-12 (14); Lynne (10)

Pennsylvania: Philadelphia VII-6 (8); Charerot (9); Shiremanstown (10); Hecton Mills VI (10);

Delaware Co. VII-8 (8) Washington, D.C. VI-27 (10).

N. Carolina: Black Mts. VI-12 (9); Tyron (10); Broadman XI-5 (10);

W. Virginia: Kanawah (10)

Virginia: Fall's Church (10) Pennington Gap VII-4 (10); Nelson Co. VI-22 (c).

Ohio: Cincinnati VI-3 (11).

Iowa: Ames (W); Iowa City (W).

Michigan: Pt. Heron VI-5 (10).

Host: Bred from hickory, (Hickoria sp.) beech (Fegas sp). bald cypress (Taxoduim disticum), white oak (Quercus alba), yellow birch (Betula lutea), American larch (Larix americana), maple (Acer sp.) Butternut (Juglans cinerea), and chestnut (Castanea dentata).

Reported from pitch pine (Pinus rigida)

smaragdula Fall

1907 Fall, p. 239

Type locality: Oak Creek Canyon, Arizona.

Distribution: Reported only from the type locality.

Host: Unknown.

soror Leconte

See femorata Fab.

socialis Waterhouse

1887 Waterhouse p. 39, pl. 3, fig. 10

1903 Kerremans p. 192

Type locality: Mexico

Distribution: Mexico and Arizona.

Arizona: Ft. Yuma (8); Nogalis IX-18 (16); Ft. Grant (17).

Host: Unknown.

speculifer Horn

1886 Horn, p. 83

1903 Kerremans, p. 192

Type locality: Colorado?

Distribution: Utah, California, Arizona, New Mexico, Colorado and Texas.

California: Lectotype and paratype (17); Pasadena V (13); Los Angeles (10);

Arizona: Ash Fork VI-18 (10); Williams VI-16 (10); Grand Canyon VII-10 (10);

Texas (17). Colorado (4)

Utah: Smooth Cr., Beaver Co. VI-20 (16); Box Canyon VI-12 (16).

Host: Unknown.

streingulata Melsheimer.

See pusilla Laporte-Gory.

subopaca Schaeffer.

1904 Schaeffer, p. 208

Type locality: Tulare County, California.

Distribution: Reported only from type locality.

Host: Unknown.

subsylindrica Mots.

See delata Leconte.

sylvania Fall.

1910 Fall, p. 50

1913 Woodworth p. 196

1916 Van Dyke, p. 410

1917 Chamberlin, p. 139

Type locality: Sylvania, California.

Distribution: Oregon and California.

Oregon: Corvallis IV-20 (c); Mt. Jefferson (c); Douglas Co. IX-1 (c).

California: Sonoma Co. (15); Del Monte Co. (15)

Host: Douglas fir (Pseudotsugae taxifolio), apple (Pyrus malis)

texana Leconte.

1859 Leconte, p. 234

1873 Crotch, p. 90

1886 Horn, p. 96

1894 Horn, p. 366

1898 Cockerell, p. 152

1904 Schaeffer, p. 27

1907 Fall-Cockerell, p. 180

1913 Woodworth, p. 196

1918 Burke, p. 211

Type locality: Texas.

Distribution: California, Colorado, Arizona, New Mexico and Texas.

Texas: El Paso (c)

Utah: Beaver Canyon VIII (16).

Arizona: Senator (4)

New Mexico: Coolidge 7000 ft. (25).

Host: Rocky Mountain juniper (Juniperus scopulorum)

thoracicus Schaeffer.

1905 Schaeffer, p. 128

Type locality: El Taste, Lower California.

Distribution: Lower California (El Taste and Santa Rosa)

Host: Unknown.

tranquebarica Melin

1787 B. impressa Fabrecii, p. 182 #61 (Name preoccupied)

1788 B. tranquebarica Linne, p. 1932 No. 74 (Gmelin)

1790 B. excavata Oliver, p. 232 #95

1792 B. excavata Fabrecii, p. 206 #84

1801 B. excavata Fabrecii, p. 205 #105

1805 Illiger p. 90 #70

1829 impressa Eschscholtz p. 8

1837 fraterna Mannerheim, p. 75

1837 rugosa Mannerheim, p. 74

1841 denticollis Laporte-Gory IV, p. 178, pl. 30, fig. 173

1841 denticulata Laporte-Gory, p. 46, pl.8, fig. 62

1841 serripennis Laporte-Gory, p. 46, pl. 8, fig. 63

1867 tumida Cheverlot, p. 585

1867 impressa Cheverlot, p. 586

1869 Colobogaster impressa Fab., Gemminger-Harold p. 1422

1871 Saunders, p. 96

1886 impressa Horn, p. 109, 110, 121, pl. 4 figs. 198-202

1887 impressa Schwarz, p. 93

1888 impressa Schwarz, p. 93

1889 impressa Schwarz, p. 39

1889 Fleutiaux, p. 404

1889 impressa Fab. Fleutiaux, p. 404

1889 excavata Oliver, Fleutiaux, p. 404

1889 denticulata Laporte-Gory, Fleutiaux, p. 404

1889 denticollis Gory, Fleutiaux, p. 404

1889 rugosa Mann. Fleutiaux, p. 404

1889 traterma Mann. Fleutiaux, p. 404

1893 Gundlach, p..169

1903 impressa Kerremans, p. 186

1908 Heyne-Taschenburg, p. 139

1914 Leng-Mutchler, p. 430

1916 impressa Fab., Howard, p. 452

1917 Snyder, p. 136

1918 impressa Fab. = tranquebarica Gmel. Fisher, p. 173, 177

1919 Snyder, p. 155, 163, pl. 18, 21, figs. 1, 2.

Type locality: West Indies?

Distribution: Florida, Antilles, Santa Domingo, Puerto Rico, Guadalupe, Cuba, Dutch Guiana and St. Thomas.

Florida: Miami VI (10); Hebe Sound V-17 (10); Key West (10); Biscayne Bay (10); Elliott Key (1).

Host: Red mangrove (Rhizophora mangle), Australian pine (Casuarina equisetifolia), Butterwood (Conocarpus eracta).

trinervia Kirby.

1837 Buprestis (Odonotomus) trivervia Kirby, p. 157

1848 White p. 34

1852 cicatricosa Motschulsky, p. 77

1859 Motschulsky, p. 184

1859 Leconte, p. 235

1871 Bethume, p. 230

1872 trimervia Bethume, p. 31

1873 Crotch, p. 90

1874 Couper, p. 137

1874 Austin, p. 269

1877 Packard, p. 589, 810

1878 Glover, pl. 36 fig. 22

1878 Hubbard-Schwarz, p. 636

1882 Leconte, List I and V.

1886 Horn p. 90 pl. 4 figs. 90-94

1886 cicatricosa Mots = triervia Kyb. Horn p. 120

1889 Blanchard, p. 31

1890 Packard, p. 680

1890 Harrington, p. 159

1893 Cockerell p. 311

1894 Slosson p. 3

1894 Hamilton p. 29

1895 Hamilton p. 364

1895 Evans, p. 146

1896 Bowditch, p. 6

1898 Cockerell p. 151

1899 Wickham, p. 7

1901 Fall p. 117

1903 Kerremans, p. 187

1903 cicatricosa, Kerremans, p. 187

1906 Felt, p. 751

1907 Fall-Cockerell p. 179

1909 Blatchley p. 791

1912 Frost p. 306

1916 Frost, p. 386

1917 Chagnon p. 218

1917a Burke plate II, fig. 4

1918 Burke p. 211

Type locality: Latitude, 54° Rocky Mountains.

Distribution: Alaska and Hudson Bay, south through New England States and Rocky Mountains to Carolina, New Mexico, Oregon and California.

Canada: Yukon, H.B.T, (10).

Maine: Paris VII-7 (c)

N. Hampshire: Mt. Washington VII-4 (c)

Michigan: Isl. Royal (8); White Fish Point (10)

Kansas (17) Colorado (4); So. Dakota (10)

New Mexico: Vermego V (10); Clouderaft VI (17) Beulah 7800 ft. VII (c) Gallinos Can. (24); Santa Fe Canyon (24).

California: Truckee 5800 ft. (4); VIII

Oregon: Portland (4)

Montana: Glacier Park VIII-22 (8)

Alaska: Ft. Yukon, Salmon River.

Host: Western yellow pine (Pinus ponderosa), limber pine (P. flexilis), white pine (P. strobus), pinion (P. edulis)

tumida Cheverlot

See tranquebarica Gmelin

ultramarina Laporte-Gory.

See azurea Leconte.

ulkei Leconte

1859 Leconte, p. 240

1871 Saunders, p. 96

1886 Horn, p. 117, pl. 7 figs. 243.

1894 Horn, p. 368

1903 Kerremans, p. 192

Type locality: Texas.

Distribution: Texas.

Texas: Marathon, Brewster Co. VIII, 4000 ft. (8).

Host: Unknown.

verdigripinnis Frost.

1910 Frost, p. 43

1910 Fall p. 49

1913 Gibson, p. 126

Type locality: Maine.

Distribution: Nova Scotia, Maine, Vermont, Manitoba and Michigan.

Host: Unknown.

Season: July-August.

violaseo-signata Schaeffer.

1918 Schaeffer

Type locality:

viridepunctata Laporte-Gory

See chrysoela Illiger.

viridiceps Mels.

See femorata Fab.

viridicyanea Horn.

1886 Horn, p. 84

1901 Fall p. 117.

1913 Woodworth p. 196

1917 Chamberlin p. 138

Type locality:

Distribution: Oregon, Montana, California, and Nevada.

Oregon: Ashland VII-3 (10); Ochoco National Forest VI-30

(c), Burns VI-5

California: Miami VI (13); Mowhawk VI (13); Shasta (8), Cisco 6000 ft. (4), Fresno VIII (8) Los Angeles (10); Tulare Co. (16); Yosemite VI-18 (c); Trinity, Shasta, Siskiyou and Placer Co. (15).

Nevada: Lectotype and paratype "Nev" (17).

Host: Incense cedar (Libocedrus decurrens), Douglas Fir (Pseudotsugae taxifolia) and western juniper (Juniperous occidentalis)

vulcancia Leconte

See californicia Leconte.

Genus Chrysophana Lec.

1859 Leconte p. 217-219

Type of genus Ancylochcira placida Lec.

placida Lec.

1854 Ancylochcira placida Leconte p. 17

1859 Leconte p. 219

1888 Holland p. 91

1893 Fall p. 235

1894 Fall p. 98

1898 Cockerell p. 152

1901 Fall p. 117

1902 Kerremans p. 21

1906 Kerremans p. 404

1907 Fall p. 180

1913 Gibson p. 126

1913 Woodworth p. 196

1917 Chamberlin p. 166

1917 Burke p. 88

1917a Burke p. 3, pl. VIII fig. 5.

1918 Burke p. 330

Type locality: Oregon

Distribution: British Columbia south through the Rocky Mountain and Pacific Coast States.

British Columbia: Peach land (Gibson); Vancouver.

Washington: Seattle (3)

Oregon: Talent (10); Ashland VI-9 (C); Dilly (16); Gold Hill (10) Lake Permelia 3000 ft. VII-23(C); Corvallis IV-26, V-2 (C); Wren VIII-11

(0) Pratum VII-20 (0); Junction City VI-23 (0); Elkton III-19 (0)

California: Vade VIII-5 (10); Yreka V-25, VIII-2 (10); Pyrmid R. S. VIII-2 (10); Doble (10); Ventura Co. (10); Placerville (10); Summerdale (13); Lake Co. VI, VII (13); Glen Alpine (13); McCloud (13); Placer Co. (13); Tellac (13); Miami (13); Mellwood, Fresno Co. (16) Mendicino Co. (18); San Louis Obispo (10); Kern River Can. 7000 ft. (7); Summit Meddow, Fresno Co. 7000 ft. VII-4 (8);

Arizona: Senator IV-7 (4); Williams VI-21 (10); Bright Angle G. C. VII-11 (10).

Nevada: Armsby Co. (10); Lake Tahoe (10).

Nebraska: War Bonnette Canyon (10).

Colorado: Boulder (10).

Utah: Beaver (17).

New Mexico

Hosts: Larva live in the cones of Knobcone pine (Pinus attenuata), and yellow pine (P. ponderosa), in the wood of W. White pine (Pinus monticolae), sugar pine (P. lambertiana), lodgepole pine (P. contorta), Yellow pine (P. ponderosa), single-leaf pinion (P. monophylla), Knobcone pine (P. attenuata), Yellow pine var. (P. scopulorum), Jeffery pine (P. jeffreyi), digger pine (P. sabiniana), Mt. Hemlock (Tsuga mertensiana), Alpine Fir (Abies lasiocarpa), White fir (A. concolor), Lovely fir (A. magnifica) and W. red cedar, (Thuja plicata).

Altitude up to 6500 feet in California.

Season: March-September.

Cinyra Lap. et. Gory.

1837 Laporte et Gory I, p. 157, pl. 39

Type of the genus Buprestis elongata Fab.

abbreviata Casey

See gracilipes Melsheimer

gracilipes Mels.

1844 Dicerca gracilipes Melsheimer p. 145

1857 Dicerca Lacordaire p. 36

1859 Leconte p. 211

1870 Pettet p. 102

1871 Saunders p. 47

1889 Blanchard p. 30

1894 Stormberg p. 37

1903 Halecia Kerremans p. 70

1904 Schaeffer p. 205

1905 Schaeffer p. 128

1906 Felt p. 701

1909 Blachley p. 785

1909 Smith p. 292

1909 Casey p. 175

1909 Wickham p. 23

1914 Casey p. 363

1914 abbreviata Casey p. 362

1915 Frost p. 296

1919 Nicolay p.

1920 Knull p. 6

Type locality: Massachusetts

Distribution: Ontario to South Carolina, west to Iowa and Missouri

Massachusetts: Sherborn (14)

New York: Rosedale, L. 2. VII-15 (19).

New Jersey: Spotswood (4); Molaga V-31 (8); Brook Hill VII(?) (8)

Pennsylvania: Pittsburg IV (3); Hummelstown V-29 (c); Delaware Co. VII-28 (8); Philadelphia VII-8 (8); Harrisburg (20).

Virginia: Falls Church (10); Ft. Monroe (10)

Iowa: Iowa City (W)

Ohio: Cincinnati (10).

Host: Burr oak (Quercus macrocarpa), white oak (Q. alba) Swamp, White oak (Q. bicolar) and Ironwood (Ostrya virginiana).

var. macilenta Casey

1909 Casey p. 175

1914 Casey p. 362

Type locality: Texas.

var. ocularis Casey

1914 Casey p. 362

Type locality: Texas.

prosternalis Schaef.

1904 Schaeffer, p. 205

1915 Schaeffer, p. 128

Type locality: Brownsville, Texas.

Distribution: Texas.

Texas: Brownsville VII (c) (16); San Diego V-14 (10).

Host: Iron wood.

purpurascens Schaeff.

1905 Schaeffer p. 127

Type locality: El Taste, Lower California.

robusta Chamberlin

1920* (Fully described elsewhere).

Type locality: Texas.

Host: Unknown.

---

* The largest of our species easily distinguished by its large size, robust form, dark dull color. Front, with scattered coarse punctures, dull blackish violate with faint greenish tinge. A depression at the vertex and an irregular callosity extending across the middle. Clypens broadly feebly emarginate, corners sharply angulate. L. 14 m.m. W. 5 m.m.

Genus Dicerca Eschscholtz.

1829 Eschscholtz. p 9.

Type of the genus Bupsestis aenea Linn.

abrupta Casey

See

acerba Casey

See tenebrosa Kirby

aestiva Casey

See divaricata Say

americana Herbst

1801 Buprestis Herbst, p. 107 pl. 148 fig. 3.

1817 Buprestis Schonherr, p. 217 # 27.

1837 impressifrons Dejean, p. 87

1837 coryphaea Dejean, p. 87

1841 asperata Laporte-Gory, p. 105 pl. 27 Fig. 142

1844 impressifrons Melsheimer, p. 144

1844 B. aenea Mels. = impressifrons Melsheimer, p. 144

1857 Chrysea Mels. = asperata L-G. Leconte p. 7

1857 molitor Mels = chrysea Mels. Leconte p. 7.

1857 Poecilinota americana Lacordaire, p. 36.

1857 B. impressifrons Mels., Lacordaire, p. 36.

1859 asperata Leconte, p. 199

1870 asperata Pettit, p. 102

1873 asperata Crotch, p. 85

1878 asperata Hubbard-Schwarz, p. 655

1882 asperata Bowditch, p. 27

1888 asperata Hamilton, p. 65

1889 asperata Chittenden, p. 219

1889 asperata Blanchard, p. 30

1890 asperata Packard, p. 221, 238

1906 asperata Felt, p. 701

1909 asperata Wickham, p. 23

1909 asperata Lec., = americana Herbst, Smith, p. 292

1909 Casey p. 163

1909 impressifrons Mels., = asperata Lec., = americana Herb., Casey p. 163

1909

1909

1909

1913 Manee, p. 167 168?

1915 Kiviat, p. 237

1917 asperata, Gibson, p. 149

Type locality: Pennsylvania.

Distribution: Ontario to North Carolina west to Illinois and Iowa.

New York: Buffalo (4); Peckskill (7);

Mass: Hubbardstown (14); Stoneham (14);

N. J.: Fort Lee (9); Madison (16)

Penn.: Pittsburgh (9) Lingbston ?(10)

Maryland, (17) Washington D. C. (10)

N. C.: Tyron Apr. (10); Broodman Nov. (10); Highlands (10)

Mich.: Ann Arbor (10)

Ga.: Decatur Co. June (4); Iowa City (W) Iowa.

Hosts: Bred from white oak (Quercus alba), and hickory (Hickoria sp.), Reported from oak, lobolley, longleaf pine, Poison oak (Tocidendron disticum) and Pinus virginasea

ampliata Casey

See horni Crotch

asperata L. et G.

See americana Herbst.

augusticauda Casey

See

aurichalcea Melsheimer.

See divaricata Say

austera Casey

See lugubris Leconte.

Baltimorensis Herbst.

See obscura Fabricii (140)(N.H.)

viangulata Casey

See

befoveata Lec.

See tenebrosa Kirby

Californica Crotch

See tenebrosa Kirby

callosa Casey (150 N.Y.)

See

caudata Lec.

1859 Leconte p. 195

1873 Crotch p. 85 s (var. of divaricata)

1889 Blanchard p. 29

1909 Casey p. 142

1912 Frost p. 305

1915 Kiviat p. 237

1917 var caudata Nicoloy

1918 Gibson p. 112

1919 Nicoloy p. 18

Type locality: Pennsylvania

Distribution: New York (N.Y.City (4) White Plains (4) Oct.,

Baysboro L. I. 7/2

Maine Norway VIII-30 (14) Illinois

Mass:

Colo: Larkspur VII-28 (10)

Canada: Victoria,Beach. Manitoba,Jun. (Wallis)

Host: Black birch (Betula nigra) Western birch (B. occedentalis)

Black alder (alnus incana) Yellow Pine (Pinus scopulorum(10))

chrysea Melsheimer

1844 Bupristis Melsheimer p 143.

1857 Lacordaire p. 36.

1859 Leconte P. 200

1870 Pettit p. 102

1873 chrysea Mels. = tenebrosa Kby. Crotch p. 86

1889 Blanchard p. 30

1893 Hamilton p. 274

1895 Evans p. 146

1912 Frost p. 305

1915 T'vost p. 142

1917 Gibson p. 149

Type locality : Pennsylvania

Distribution: Maine Monmouth VI-27 (c)

New York, Syracuse (10), Lewis Co. (10)

Michigan; Marquette VI-27(10)

Canada; Edmonton, Alba. June, Ontario.

Mass. Fvanningham VI-20, VI-25 (c)

Host: Balsam Fis. (Abies balsamea)

consimilis L.-G.

See lurida Fab.

consobrina Mels.

See tuberculata Chev.

corrosa Dej.

See lurida Fab.

coryphaea Dejean.

See americana Herbst.

crossicollis Lec.

See tenebrosa Kby.

cupreola Casey

See filiola Casey

distinguenada Laporte - Gory

See tenebrosa Kirby

divaricata Say.

1823 Buprestes Say, p. 155

1837 Stenuris tenebrica Kirby, p. 156

1837 S. divaricata Kirby, p. 154

1837 Kirby, p. 154

1837 Dejean, p. 87

1839 Buprestes Say, p. 158

1844 dubia Melsheimer, p. 142

1844 purumpunctato Melsheimer, p. 143

1844 aurichalcea Melsheimer, p. 142

1848 White, p. 20

1848 tenebrica White, p. 20

1850 Leconte, p. 227

1850 dubia Mels., Leconte, p. 227

1850 aurictiolcea Mels., Leconte, p. 142

1850 parumpumctata Mels., Leconte, p. 142

1852 Harris, p. 42

1857 B. tenebrica Lacordaire, p. 36

1859 Leconte, p. 195

1862 Harris, p. 48

1869 Harris, p. 357

1869 Glover, p. 91

1870 Jones, p. 8

1870 Weilandy, p. 148

1870 Riley, p. 103

1870 Pettit, p. 102

1870 LeBaron, p. 103

1870 Thomas, p. 148

1871 Glover, p. 65

1872 B. (Sternuris) divaricata Bethune, p. 31

1872 Sternuris tenebrica Bethune, p. 32.

1873 Crotch, p. 85

1874

1876

1877 Provancher, p. 348

1878 Glover, pl. X fig. 5

1878 Hubbard-Schwarz, p. 636, 655

1879

1880 Zesch-Reinecke, p. VII

1882 Bowditch, p. 27

1883 Riley, p. 25

1884 Harrington, p. 46

1886 Caufield, p. 196

1887 Harrington, p. 30

1888 Cockerell, p. 58

1888 Harrington p. 64

1888 dubia Mels., Hamilton p. 64

1889 Chittenden, p. 219

1889 Blanchard, p. 29

1890 Harrington, p. 51

1890 Packard, p. 328, 386, 424, 519, 530.

1890 Smith, p. 422

1890 Marten, p. 7

1891 Smith, p. 422

1892 B. devaricatus Washburn, p. 10

1893 Hopkins, p. 181

1894 Harrington, p. 15

1895 Evans, p. 146

1895 Slosson, p. 6

1895 Hamilton, p. 364

1895 Daggett, p. 313

1896 Bowditch, p. 6

1897 Harrington, p. 70

1899 Lugger, p. 52

1901 Scott, p. 196

1901 Felt, p. 834

1902 Kerremans, p. 131

1902 divaricata Say, Kerremans, p. 131

1902 tenebrica Kirby, Kerremans, p. 131

1902 dubia Mels., Kerremans, p. 131

1902 aurichalcea Mels., Kerremans, p. 131

1902 parumpunctata Mels., Kerremans, p. 131

1902 caudata Lec., Kerremans, p. 131

1902 prolongata Lec., Kerremans, p. 131

1902 McGillivray-Houghton, p. 251

1904 Pettit, p.

1905 Schaeffer, p. 147

1906 Felt. p. 428, 457

1907 Gibon, p. 80

1908 Morris, p. 443 pl. 58 fig.11

1908 Houghton, p. 57

1909 Morris, p. 57, pl. 58 fig. 11

1909 Wickham, p. 23

1909 Easton, p. 50

1909 Smith, p. 292

1909 aestiva Casey, p. 145

1909 Casey, p. 144

1909 tenebrica Kirby, p. 149

1909 limula Casey, p. 144

1909 incisa Casey, p. 144

1909 nigra Casey, p. 142

1909 parumpunctata Mels., Casey, p. 145

1909 aurichalcea Mels., Casey p. 145

1912 caudata Frost p. 305

1912 Frost, p. 305

1914 Comstock, p. 549

1915 Johnson, p. 312

1915 Somes, p. 13

1915 Frost, p. 142

1917 Nicolay, p. 92

1917 var caudata Nicolay p. 92

1917 Chagnon, p. 217

Type locality:

Distribution: Maine to Oregon, North Carolina to California.

Southeastern Canada.

Cumberland Co., Me. (4); Bennington Co., Vt., (4);

Washington, D. C. VI-10 (10);

New Hampshire; Canadian Rockies (Kirby)

New York: Buffalo (4); Ithaca (4); Golden VI-30 (10);

Andover VII-28 (10); Wading River L.I. V-30 (19)

New Jersey: Ft. Lee (4); Greenwood Lake (16); Dunellen (16)

Iowa: Iowa City (w); Ames (c)

Illinois: Willow Springs VI-20 (c)

Penn: Pittsburgh (3); Castle Rock VI-8 (8); Rickete V-22 (8);
Jannette (3).

Virginia: Charter Oak July (10);

N. Carolina: Tyren (10); Melrose V (10)

Michigan: Marquette (10); Eagle Harbon VII-4 (10);
Detroit (10) Newberry (10).
Mass: Fitchburg (10) Framingham (c)
Calif. Lake Tahoe Region (c), Idaho: Cascade VI-16 (c)
Oregon: Ochoco Nat. Forest. June (c); Corvallis June (c).
South Dakota, Montana, Utah, and Colorado. Montreal, Canada.
Host: Red maple (Acer rubrum), aspen (Populus tremuloides), birch (Betula americana), oak (Querqus sp.), beech (Fagus atropunicea), apple (Pyrus malus), Black Cherry (Prunus serotina), Black alder (Alnus incana), Black cottonwood (Populus trichocarpa), Willow (Salix sp.), pear, peach, and prune (P. communus).

comolini Lap. et Gory.

See tuberculata Chev.

dubia Mels.

See divarcata Say.

erosa Cas.

See

filiola Casey

See cuprola Casey

floridae Casey

See

gaudens Cas.

See lovettei Casey

gracilis Casey

See

hesperica Casey

See tenebrora Kirby

hilaris Lec.

See tuberculata Chev.

horni Crotch.

1873 Crotch, p. 86

1894 Fall, p. 98

1902 VanDyke, p. 172

1903 Kerremans, p. 131

1908 Wright-Coolidge, p. 67

1909 Casey, p. 153

1909 ampliata Casey, p. 153

1909

1909

1909

1913 Woodworth, p. 196

1917 Chamberlin, p. 130

1917 Burke, p. 326

Type locality: Tulare County, California.

Distribution: Montana, Idaho, Washington, Oregon, California, Nevada, and Lower California.

Montana: Colorado: Moffit Cr. (10)

Idaho: Cascade VI-16 (c); Riggius (10);

Washington: Pullman (10), Almota (10);

Oregon: Grants Pass IX-5 (10)

Nevada: Sierra Madra (13)

California: Trinity County (4); Tulare County Dec. (4), Kings River. Con. July (7); Santa Monica (5); Mt. Wilson V-2, VI-4(7); San Bernardino Mts. VI-2 (7); Kawenah V-15 (8); Piedmont VIII-15;

Los Angeles County (10); Ft. Jones (10); Los Gatos (10); Placerville (c); Shasta (10); Santa Clara (10), Eureka VI-19 (10); Azusa July (13)Sierra Madra (13) Ahwahnee, May (13)

Lower California: Euesuada (1); El Tasle (9).

Host: Snow berry (Symphoricarpos racemosus), buck brush (Ceanothus cuneatus), blue brush (C, thyrsiflorus), deer brush (C. integerrimus), coffee berry (Rhamnus californica), California bucheye (Aesculus californica), poison oak (Toxicodendron diversiloba), white alder (alnus rhombifolia), mountain alder (A. tenuifolia), mountain mahogany (Cercocarpus parvifolius), plum (Prunus domestica), sweet cherry (P. avium), sumach (Rhus glabra occidentalis).

impresaifrons Mels.

See americana Herbst.

inaequalis Dejean.

(Dej. 1837 p. 87. Laid to be a synonym of tuberculata Cher).

indistincta Mels.

See lurida Fabricii

indurata Casey

See abscura Fabricii ?

inflatula Casey

See abrupta Casey

incisa Casey

See divanicata Say.

innocura Casey

See lurida Fab.

lacustsis Leconte

See lagubris Lec.

lepida Leconte

*1841 B. pugionata Lap. et Gory, II, p. 99, pl. 26 fig 136.

1857 Leconte p. 7 (B. pugionata L-G=D. lepida)

1859 Leconte p. 198

1873 Crotch p. 85.

1873 maculosa Gory = lepida Lec. Leconte p. 331

1894 Stormberg p. 37

1895 Hamilton p. 364

1903 B. pugronota L&G = D. lepida Lec. Kerremans p. 132.

1919 Casey p. 138

Type locality: Pennsylvania ?

Distribution: Massachussets to Florida, west to Illinois.

Mass: Stonehour (14)

Pa: Hummelstown VIII-1, VIII-15 (c)

Ala.: Mobile

N. Y.

Florida (16)

Host: Hawthorn (Crataegos sp.)

levettei Cas. 135 Ind. Ill
Gandeus 136

See limula Cas.

limula Cas.

See divaricata Say.

longicauda Casey

See piscifórmis Casey

longipennis Casey

See prolongata Lec.

*B. pugionata of L. et. G. is not the true D. pugionata of G but a species later described by Leconte as D. lepida.

lugubris Leconte (Vorgtembrosa)

1859 Leconte p. 200

1859 lacustris Leconte p. 202

1873 Crotch p. 86

1873 lacustris Lec = lugubris (female) Lec. Crotch p. 86

1878 Hubbard-Schwarz p. 636

1887 Harrington p. 30

1895 Evans p. 146

1902 lugubris Lec = [illegible]brosa Kby. Kerremans p. 132

1909 Casey p. 156

1909 lacustris Casey p. 156

1909 austera Casey p. 157

Type locality: Marquette Michigan.

Distribution: Ontario to Michigan, Louisiana.

New Jersey: Atlantic City

Michigan: Marquette 7/8 (4) White Fish Point (10)

Minnesota: Lake Itasca (c), Duluth (c)

Louisiana: Vowells Mill Aug. (4)

Host: Maple (Acer sp.)

lurida Fabricius.

1775 Buprestis Fabricius, p. 217 #7

1781 Fabricius, p. 274 #8

1787 Fabricius, p. 176 # 10

1788 Linne, p. 1927

1790 Oliver, p. 20 pl. 8 fig 83

1792 Fabricius, p. 190 # 18

1801 Fabricius, p. 190 #24

1801 Herbst, p. 75 pl. 143 fig. 4

1806 Cuprea Melsheimer p. 45 # 999

1817 Schonherr, p. 219 # 136, 127.

1806 maculata Melsheimer p. 45 # 1004

1823 Say, p. 164

1832 Say, p. 60 # 3

1836 Say, p. 158

1837 Dejean p. 87 Corrosa

1837 consimilis Laporte-Gory, I, p. 104

1841 B. lurida Laporte-Gory, II, p. 105 pl. 27 fig. 144

1844 indistincta Melsheimer, p. 143

1846 Strum p. 59

1848 White, p. 20

1848 corrosa Dej., White, p. 20

1848 cuprea Mels., White,p. 20

1848 maculata Mels., White, p. 20

1857 Thompson, p. 377

1857 B.indestincta Lacordaire, p. 36

1857 Leconte, p. 7

1859 Leconte, p. 197

1862 Harris, p. 48

1869Glover, p. 91

1870 Pettit, p. 102

1872 Clementi, p. 37

1873 lurida Fab = obscura Fab. Crotch p. 85

1873 D. obscura Fab., = lurida Fab., = consimilis, L-G Leconte p. 331

1873 pruinosa L-G vesembler lurida Fab. Leconte p. 331

1874 Austin, p. 269

1874 LeBaron, p. 95

1876 Thompson, p. 113

1879

1880 Osborn, p. 226

1882 Osborn, p.

1882 Bowditch, p. 27

1884 Harrington, p. 44

1888 Hamilton, p. 65

1889 Blanchard, p. 30

1889 Chittenden, p. 22

1890 Packard, p. 290

1893 Hopkins, p. 181

1895 Hamilton, p. 364

1896 Wolcott, p. 236

1896 Bowditch, p.6

1906 Felt, p. 427, 442, 504

1909 Smith, p. 292

1909 Blatchley, p. 782

1909 Wickham, p. 23

1909 innocua Casey, p. 133

1909 truncata Casey p. 133

1909 seriata Casey, p. 136

1909 indistincta Mels., Caseym p. 136

1909 Casey, p. 136

1912 obscura variety lurida Engelhardt, p. 221

1915 Robertson, p. 151

1915 Johnson, p. 312

Note - corrosa Dej., probably is synonymous with lurida Lec.

Type locality:

Distribution: Ontario to Florida west to Indiana, Iowa, Texas and Colorado.

New York: West Point VI-12 (c); abundant on Long Island (Nicolay); Buffalo VII-20 (10):

Penn: Rochville VII-14 (10) Castle Rock (8) Lehighton VI-28 (c)

New Jersey: Hoboken (4); Westville (8); Maloga (8)

Vermont, Wisconsin, Massachusetts.

W. Va.: White Sulphur VI-27 (c); Cairo (10); Kanawha (10)

Va.: Pennington Gov. IV-7 (10)Arlington July (10);

Gt. Falls July (10)

Washington D. C. VIII-10 (10). Plummers Island, Md. VIII 28 (10)

N. C. : South Pines (8); Tyvon Aug. (10); Blantzse (10);

Florida: Havlane III-10 (10); Enterprise (10); Montecello XII-4 (10)

Texas: New Bumsfels (16) Montecello XII-4 (10)

Mich.: Pt. Huron June (10). Iowa: Iowa City (w); Ames (w)

maculosa Gory

See lepida Leconte

mauca Leconte

See tuberculata Chevrolat

montana Casey

See tenebrosa Kby.

molitor Mels.

See spreta Gory

mario Cas.

See

mutica Lec.

1859 Leconte p 196

1873 Crotch p. 85

1902 Kerremans p. 132

1909 Smith p. 292

1909 Casey p. 165

1919 Nicolay p. 18

Note: Species known only by the type, said to have been taken in a lumber yard in Brooklyn N. Y.

mystica Casey

See tenebrosa Kirby

nigra Casey

See divaricata Say

obscura Fabricius.

1781 Buprestis Fabricius, p. 274 #9

1787 Buprestis Fabricius, p. 176 #10

1788 Linne, p. 1927 #40

1792 Buprestis, Fabricius, p. 190 # 19

1801 Buprestis, Herbst, p. 96 # 52 pl. 143 fig. 5

1801 Buprestis Fabricius, p. 190 # 25

1801 Buprestis baltimorensis Herbst, p. 99 pl. 148 fig. 7

1801 Herbst, p. 96

1905 Illiger, p. 86 #25

1817 Buprestis Schonherr, p. 219, 127

1817 baltimorensis, Schonherr, p. 219

1832 Say, p. 61 #4

1835 Say, p. 159

1837 Schonherr, p. 219 #37

1841 Laporte - Gory, p. 105 pl. 26 fig 141, II

1841 Buprestis consimilis Gory, IV, p. 109

1841 B.prunosa Gory, IV, p. 109 pl 19 fig 106

1841 B. consimilis Laporte-Gory, II p. 104 pl. 27 fig. 142

1846 Strum p. 59

1848 White, p. 20

1857 B. baltimorensis Herbst Leconte p 7,=B. obscura (Fab.)L-G

1957 Poecilionata baltimorensis, Lacordaire, p. 36

1857 B. pruinosa Gory, Leconte p. 8

1859 Leconte, p. 196

1859 soror Leconte, p. 197

1873 soror Leconte = abscura Fab. Crotch p. 85

1873 lurida Fab = obscura Fab. Crotch, p. 85

1873 consimilis L-G = obscura Lec. Leconte, p. 331

1873 Crotch, p. 85

1873 baltimorensis Herbst, obscura Fab. Crotch H., 85

1873 D. obscura Gory = baltimorensis Hbst., Leconte, p. 331

1877 Provancher, p. 349

1878 Glover, pl. XI fig 11

1878 obscura Fab., Glover, pl. Xi fig. 11

1878 baltimorensis Herbst, Glover, pl. Xi fig. 11

1878 Schwarz, p. 451

1878 Hubbard-Schwarz, p. 655

1880 Zesch-Reinecke, pl. VII

1884 Townsend, p. 221

1886 Hansen, p. 78

1888 Hamilton p. 65

1890 Packard, p. 442

1892 Townsend, p. 69

1893 Hopkins, p. 181

1901 Scott, p. 31

1903 Kerremans, p. 131

1903 consimilis L-G., Kerremans, p. 131

1903 lurida Fab., Kerremans, p. 131

1903 baltimorensis Herbst, Kerremans, p. 131

1903 indestincta Mels., Kerremans, p. 131

1903 prinosa Gory, Kerremans, p. 131

1903 soror Lec., Kerremans, p. 131

1904 Hopkins, p. 38

1906 Felt, p. 427, 442, 499, 500

1909 Smith, p. 292

1909 Blatchley, p. 782

1909 Wickham, p. 23

1909 soror Lec., Casey, p. 134

1909 ruglaris Casey, p. 134

1909 Casey, p. 131

1909 indurata, Casey, p. 131

1909 porcatula Casey, p. 133

1911 Watson, p. 99

1913 Manee, p. 167

1915 Keviat, p. 237

1915 Robinson, p. 151

1917 Chagnon, p. 217

1917 Burke, p. 325

Type locality:

Distribution: Montreal to Florida west to the Pacific Coast States.

Illinois, Edgebrook, VIII-7 (9);

North Carolina: Blue Ridge (1); Black Mts. (9); Tyvon Apr. (10)

Virginia: Nelson County VI-22 (c), Falls Ch. Aug. (10) Shipman (10)

Va. Beach (10)

Oregon: Corvallis (c)

New Mexico: near Albuquerque.

Iowa: Ames (w), Iowa City (w)

California: Chico (Burke)

Texas: Carmal County (1)

Alabama: Mobile VI-16 (10)

Washington, D. C. (10)

Ontario: Redvers Lake VII-10 (9)

New York: N. Y. City, July (4) Buffalo (1);

Montreal X - Nov.

Georgia: Clayton (4) 2000-3000 ft.

New Jersey: June Ft. Lee VII-10 (4)

Newfoundland VII (4); Westville (8)

Florida: Lakeland V-7 (4); Crescent City (10), Capron IV-8 (10);

Louisiana: Vowell's Mills (4)

Covington IV-6 (10)

Host: Persimmon (Diaspyros viriginiana), Oregon ash (Fraxinus Oregonia), hickory (Hickoria sp.) maple (Acer sp.), white oak, (Quercus alba),

Season: April - September.

pecterosa Leconte

1857 Leconte p. 45

1859 Leconte, p. 203

1873 Crotch, p. 86

1901 Fall, p. 116

1902 Kerremans, p. 132

1908 Gibson, p. 126

1909 Casey, p. 165

1913 Woodworth, p. 196

1917 Chamberlin, p. 130

Type locality: Oregon

Distribution: Rocky Mountains and Pacific Coast States.

California: Los Angeles County (5), Acton (5), Los Gatos (10), Shasta (10), Mt. Wilson (13), Miami (13), Cole (13), Lake Tahoe (15).

Idaho: Atlanta (4), Cascade (c)

Utah: Wasatch 6-27 (10)

Nevada: Esmaralde County (9)

Oregon: Corvallis,(c), Roseburg (c), The Dalles (c), Rogue River (e), Sumpter (e)

pertinax Casey

See subcuprea Casey

pinorum Casey

See punctulata Schronhen.

pisciformis Casey

See

porcatula Casey

See obscura Fabricii

prolongata Leconte.

1859 Leconte, p. 194

1873 Crotch, p. 84

1877 Packard, p. 589, 810

1878 Glover, pl. XLII fig. 11

1878 Hubbard-Schwarz, p. 636

1878 Leconte, p. 472

1882 Leconte,

1888 Cockerell, p. 58

1888 Hamilton, p. 64

1888 Cockerell, p. 232

1889 Hamilton, p. 105

1889 Blanchard, p. 29

1890 Harrington, p. 159

1893 Cockerell, p. 328

1895 Evans, p. 146

1898 Cockerell, p. 328

1900 Holland, p. 422

1903 Evans, p. 291

1906 Felt, p. 746

1907 Fall-Cockerell, p. 179

1909 Wickham p. 23

1909 Casey, p. 149

1909 longipennis Casey, p. 150

1909

1909

1911 Watson, p. 108

1913 Woodworth, p. 196

1917 Burke, pl. IV fig. 1

1917 Burke, p. 326

1917 Nicolay, p. 92

1917 Chagnon, p. 217

1917 Chamberlin, p.129

Type locality: Lake Superior region.

Distribution: Alaska to California and New Mexico, New England States to Carolina.

Canada: St.Slave Lake VI-3 (Anderson); Smith's Landing B.C. VI-5 (Anderson); Seedbury Ont. (4); Telegraph Creek B.C. (c); Folden, B.C. (4); Redvers, Sask, (c).

Alaska: Ft. Yukon (10)

Montana: Bitter Root Mts. (1);

Utah: Park City VII-8 (10); Kamas Aug. (10);

Michigan: Marquette VII-8 (10);

Wisconsin (16) (4);

Minnesota: Duluth (4);

Illinois: Willow Springs VI-30 (c);

Iowa: Iowa City (w); Ames VII-11 (c)

Arizona: Williams (10)

South Dakota: Englewood Aug. (10)

New Mexico: Near Albuquerque (Watson).

Colorado: Manitau (10)

Idaho: Cascade VI-16 (c)

Oregon: Corvallis 7-1 (c); Ochoco Nat. Forest VI-26 (c)

California: Placerville July (c); Strawberry July (c); Phillips Station July 1-4 (c).

Host: Black cottonwood (Populus trichocarpa), Aspen (P. tremulvides), Willows (Salix sp.)

prunosa Gory

See obscura Fab.

pugionata Germ.

1824 Buprestis Germar p. 37, No. 61.

1859 Leconte, p. 196

1868 Horn, p. 124

1873 Crotch p. 85

1884 Lugger p. 203

1889 Chittenden, p. 219

1889 Blanchard, p. 30

1890 Harrington, p. 159

1895 Harrington, p. 364

1903 Kerremans p. 131

1906 Felt, p. 750

1909 Blatchley, p. 781

1909 Smith, p. 292

1909 Casey, p. 138

1913 Manee, p. 167

Type locality:

Distribution: Southeastern Canada and Northeastern United States.

Massachusetts: Shelborn 5/16 9/27 (14)

New York: Ithaca (16); West Point 5/24 (c).

New Jersey: Hemlock Falls 10/11 (9); Hewitt (c).

Maryland:

D. of C. Washington 6/6 (10)

Pennsylvania: Water Gap (9); Darby (8); Alleghany (10); Philadelphia 6/10 8/27 (9)

Canada: Ontario

Hosts: White oak (Quercus alba.) Black alder (Alnus incanus), Spirea (Spiraea apulsfolia).

punctulata Schonherr.

1817 Buprestis Schonherr, p. 252 #203 Appen. p. 123 # 170

1826 Sturm, p. 15

1836 B. transversa Say, p. 249

1837 sylvatica Dejean, p. 87

1841 spreta Gorn, IV, p. 108 pl. 19 fig. 105 IV

1841 Laporte - Gory, II p. 99 pl. 25 fig. 134

1844 Melsheimer, p. 145

1844 B. transversa Say, Melcheimer, p. 145

1846 molitor Melcheimer, p. 144

1857 B. transversa Say = B.punctulata Scho., L-G, Leconte, p. 7.

1858 Fitch, p. 206

1859 Leconte, p. 201

1869 Glover, p. 91

1870 Pettit, p. 102

1873 Crotch, p. 86

1878 Glover, pl. XI fig. 12

1880 Zesch-Reinecke, p. VII

1882 Bowditch, p. 27

1889 Blanchard, p. 30

1889 Chittenden, p. 217, 219

1890 Packard, p. 684

1903 Kerremans, p. 131

1903 transversa Say, Kerremans, p. 131

1906 Felt, p. 648, 656

1909 Smith, p. 292

1909 Casey, p. 154

1909 pinorum Casey, p. 154

1909

1909

1912 Grossbeck, p. 135

1913 pinorum Casey, Manee, p. 168

1915 Frost, p. 142

1917 Nicolay, p. 92

Type locality: Georgia

Distribution: From Massachusetts to Georgia, west to Indiana and Michigan.

New York: Astoria L.I. (4); Ithaca (4); Kamas Aug (4); Peekskill (7); West Point N.Y. VI-7 (c); Common on Long Island May - September.

Massachusetts: Brookline (4);

New Hampshire: Webster May (10)

New Jersey: Lakehurst V-29 (4); Westville May (8); Anglesea V (8) Molaga, V (8);

North Carolina: Tyvon Aps. (10); South Pines De. 30 (c);

Washington, D. C. (10)

Virginia: Newport News (lo)

Indiana: Millers VIII-1 (c).

Host: White pine (Pinus strobus), pitch pine (P.rigida), loblolly pine (P.tedea), short-leaf pine (P.echinata).

purumpunctata Mels.

See divaricata Say

rigida Casey

See

ruglaris Casey

See obscura Fabricii

rustica Casey

See

sagax Casey

See

salebrosa Dejean

(Dejean 1873 p 87. Said to equal tuberculata Chem.)

scobina Chev.

See spreta Gory

seriata Casey

See lurida Fabricii

severa Casey

See

sexualis Crotch

1873 Crotch, p. 87

1878 Leconte, p. 472

1898 Cockerell, p.

1903 Kerremans, p. 131

1906 Fletcher, p. 100

1907 Fall-Cockerell, p. 179

1909 Casey, p. 162

1909

1909

1913 Gibson, p. 126

1913 Woodworth, p. 196

1914 Gibson, p. 116

1917 Chamberlin, p. 130

Type locality: Oregon.

Distribution: Alaska to California and New Mexico.

British Columbia: Quamechan Lake, Spril.

Washington: Seattle (3); Tacoma (13);

Oregon: Dilly (4) Rainier IV-24 (c); Astoria VI(c); Detroit VI, VIII (e); Corvallis VIII-11 (c); Linn County June (c)

California: Fresno County (16); McCloud June (16); Weed Aug (c); Castle Rock VII-VIII (c).

Idaho: Moscow

Port Yukon: Salmon River, Alaska (c)

Host: Douglas fir (Pseudotsugae taxifolia), yellow pine Pinus ponderosa), knobcone pine (P.attenuata).

soror Leconte

See obscura Fab.

spreta Leconte

See asperata Laporte-Gory

spreta Gory

1840 Gory, IV, p. 108 pl. 19, fig. 105

1844 impressifrons Melsheimer, p. 144

1844 molitor Melsheimer, p. 144

1857 impressifrons Mels. = spreta Gory-Leconte p. 7

1857 molitor, Lacordaire, p. 36

1859 asperata Leconte, p. 198

1859 spreta Leconta, - asperata Gory, p.

1870 Pettit, p. 102

1873 coryphaea Dej. = spreta Gory, Leconte, p. 331

1873 spreta of Lec = asperata of Gory, Crotch, p. 85

1873 asperata of Lec. is spreta of Gory, Crotch p. 85

1873 Crotch, p. 85

1873 molitor Mels = spreta Gory., Leconte p. 331

1873 impressifrons Mels = spreta Gory, Leconte, p. 331

1873 scobina Chev. = molitor Mels., Leconte p. 331

1878 spreta, (molitor female), Glover, pl. XI fig. 8

1878 molitor female, (spreta male), pl. XI fig. 13

1880 Zesch-Reinecke, p. VII

1888 Hamilton, p. 65

1895 Hamilton, p. 364

1903 spreta, Kerremans, p. 132

1903 impressifrons Melsheimer, Kerremans, p. 132

1909 Blatchley, p. 782

1909 Smith, p. 292

1909 scobina Chev., Casey, p. 164

1909

1909

Type locality: Boreal America

Distribution: Ontario to North Carolina west to Indiana and Iowa. Alabama: Mobile (1); Spring Hill X-29 (c); Kentucky, Illinois, Georgia: Agusta June (3). Maryland, Texas (17); Florida (17); North Carolina (17); New Orleans, La. (10); Buffalo, N. Y. (c); Ames, Ia. (c); Philadelphia Pa. (8); Delaware (8)

stolida Casey

See tenebrosa Kby.

subalqualis Cas.

See

subargentea Cas.

See

subcuprea Cas.

See

sulcatula Cas.

See

tenebrica Kirby

See divaricata Say

tenebrosa Kirby

1837 Buprestis (Stenuris) Kirby, p. 155

1841 distinguenada Laporte Gory. p

1848 White, p. 19

1850 Leconte, p. 227

1850 Leconte, p. 227

1850 lacustris Leconte, p. 227

1850 lugubris Leconte, p. 227

1850 bifoveata Leconte, p. 227

1857 Lacordaire, p. 36

1857 crossecollis Leconte, p. 145

1859 Leconte, p. 199

1859 lugubris Leconte, p. 200

1859 lacustris Leconte, p. 202

1859 bifoveata Leconte, p. 202

1859 crossicollis Leconte, p. 202

1870 Pettit, p. 102

1871 Saunders, p. 36

1871 tenebrosa Kby = distinguenda L-G Saunders p. 36

1871 Bethune, p. 230

1872 Bethune, p. 31

1873 distinguenda L-G (Saund) = tenebrosa Kby., Crotch, p. 86

1873 Crotch, p. 86

1873 californica Crotch p. 87

1873 bifoveata Lec., = female tenebrosa Kby., Crotch, p. 86

1873 crossicollis ♀Lec., = tenebrosa Kby., Crotch, p. 86

1873 distinguenada L-G., = male tenebrosa Kby., Lec., p. 331

1877 Probancher, p. 348

1878 Hubbard-Schwarz. p. 636

1881 Harrington, p. 30

1882 Leconte, list II and VI

1884 Saunders, p. 54

1885 Harrington, p. 30

1888 Holland, p. 91

1889 Blanchard, p. 30

1890 Harrington, p. 159

1890 Packard, p. 684

1895 Evans, p. 146

1895 Daggett, p. 314

1896 Bowditch, p. 6

1900 Holland, p. 422

1901 californica Cr. Fall, p. 115

1902 McGillivary-Houghton, p. 251

1902 californica Cr. VanDyke, p. 172

1903 Kerremans, p. 132

1903 distinguenada Kirby, Kerremans, p. 132

1903 chrysea Mels., Kerremans, p. 132

1903 crossicollis Lec., Kerremans, p. 132

1903 lugubris Lec., Kerremans, p. 132

1903 bifoveata Lec., Kerremans, p. 132

1903 lacustris Lec., Kerremans, p. 132

1903 californica Cr. Kerremans, p. 132

1906 Felt. p. 648, 657

1909 Casey, p. 155

1909 californica Cr. Casey , p. 162

1909 bifoveata Lec., Casey, p.

1909 stelida Casey 161

1909 mystica Casey, p. 159

1909 montana, Casey, p. 160

1909 hesperica Casey, p. 155

1909 crossicollis Lec., Casey, p. 166

1909 acerba Casey, p. 158

1909 chrysea Mels., Casey, p.

1909 wickhami Casey, p. 60

1909 distinguenada ., Casey, p.

1912 Frost p. 305

1912 Gibson, p. 100

1913 californica Cr. Woodworth p. 196

1914 Casey, p. 155

1914 hesperica Casey, = crossicollis Lec., Casey, p. 155

1915 Gibson, p. 137

1917 variety chrysea Nicolay, p. 92

1917 Chagnon, p. 217

1917 Chamberlin, p. 130

Type locality: Latitude 54 Rocky Mountains.

Distribution: Alaska to California east to the New England States.

Canada: Telegraph Cr., B.C., (4); Ft. Williams, Ont (4); Colander, Ont. (8); Owerne Aug (Criddle), Dawson, Gainsville Ferry, Field, B. C. VII-6 (17);

Wisconsin: Bayfield (4)

Michigan: White Fish Pt. (10); Isl.Royal L.S. (10); Marquette VI-27, VIII-7 (17);

Maine: Cumberland County (4)

Minnesota: Duluth (10); Waldo Aug. (17);

Alaska: Fort Yukon, Salmon River (c)

Dalifornia: Placerville VIII-14 (10); Yosemite (10); San Bernardino Mts. (10); Echo, Mt.. (5); Mt. Wilson (5); Los Algeles (10); Sonoma County (16)

Washington: Tacoma (10)

Oregon: Haines (10); Hideway VII-24 (10); Dilly (8); Klamath Falls VI-10 (c); Sumpter July (c): Sparta, Aug (c); Detroit V and VIII (c); Corvallis VIII (c) Gold Center June-July (c)

Colorado: Waterloo County (10)

Idaho: Centerville VI-2 (10); Grimes Pass (10); Moscow (10); Cascade VI-16 (c);

Montana: Pine Grove (10);

Whoming: Cheyenne County CII 18 (10);

Host: Northern white cedar (Thuja occidentalis), white pine (Pinus strobis), yellow pine (P.ponderosa), lodgepole pine (P.contorta,) white fir (Abies concolor), spruce (Picea sp.) lovely fir (Abies magnifica), Douglas fir, (Pseudotsuga taxifolia).

tetrica Casey

See

transversa Say

See punctulata Schronherr.

truncata Casey

See lurida Fabricii.

tuberculata Chevrolat

1838 Buprestes Chevrolat V pl.65

1838 B. scobina Chevrolat p. 66 (Boston)

1837 Laporte-Gory,Ip. 99, pl. 25, fig 135.

1837 Laporte-Gory,Ip. 99

1827 B.domolini Laporte-Gory I p. 98, pl. 25, fig. 133

1837 asperata Laporte-Gory I, p. 105, pl. 27, fig. 143.

1844 consobrina Melsheimer p. 145

1846 molitor Melsheimer p. 144

1848 White, p. 19

1857 Fitch, p. 706

1857 B. scobina Chev. = tuberculata L-G Leconte, p. 7

1859 Leconte, p. 201

1859 hilaris Leconte, p. 200

1859 manca Leconte, p. 201

1867 Chevrolat, p. 577

1870 manca Pettit, p. 102

1873 manca Lec. Crotch, p. 86

1873 Crotch, p. 86

1873 hilaris Lec. = ♀ manca Lec. Crotch, p. 86

1873 hilaris Lec. = tuberculata ♀ Chev. Leconte, p. 331

1873 manca Lec. = tuberculata ♂ Chev. Leconte, p. 331

1873 domoulinii Gory = tuberculata Chev. Leconte, p. 331

1877 Provancher, p. 349

1878 manca Hubbard-Schwarz, p. 636

1878 Glover, plate 38, fig. 28.

1880 manca Zesch-Reinicke, p. VII

1889 manca Linter, p. 286

1889 Blanchard, p. 30

1890 Packard, p. 684

1893 Gundlach, p. 159

1893 Hamilton, p. 274

1895 Evans, p. 146

1895 Hamilton, p. 364

1903 Kerremans, p. 132

1903 domolini C-G, Kerremans, p. 132

1903 tuberculata, Chev = domolini C-G, Kerremans, p. 132

1903 consobrina Mels = domolini C-G, Kerremans, P. 132

1903 asperata C-G., scobina Chev., molitor Mels., hilaris, Lec., and manca Lec. = tuberculata C-G. Kerremans, p. 132

1909 distinguenda L-G Casey, p. 157

1909 Casey, p. 157

1909 domolini L-G., Casey 157

1909 hilaris Lec., Casey p. 157

1912 Frost, p. 305

1914 Leny-Matchler, p. 430 (Cuba)

1919 Nicolay, p. 17

Type locality:

Distribution: Ontario to Florida, and Cuba.

Canada: Ontario (Sparrow Lake)

Vermont: N.Y. (Bell port 6/5 Huntington 9/5

Jamica, L.I.

New Hampshire:

Maine: (Wales, July (14)

Massachusetts: Framingham, June (14)

Connecticut:

Florida; Louisiana, Virginia, Georgia,

Cuba.

Hosts: (Abies balsamea)and(Tsuga canadensis)

vancouveri Casey

See tenebrosa Kirby

Wickhami Casey

See tenebrosa Kirby

Genus Engyalus Water

1889 Waterhouse p. 50

Type of the Genus Agrilus pulchellus Bland.

pulchellus Bland

1865 Agrilus pulchellus Bland p. 382

1866 Agrilus Leconte p. 82

1873 Agrilus Crotch p. 93

1873 Agrilus Leconte p. 333

1874 Agrilus LeBaron p. 96

1889 Waterhouse p. 50 pl. 4 fig. 9 a.b.

1891 Agrilus Horn p. 312

1894 Agrilus Horn p. 378

1896 Agrilus Walcott p. 236

1903 Kerremans p. 263

1905 Schaeffer p. 150

1907 Fall-Cockerell p. 180

Type locality: Colorado.

Distribution: Colorado, New Mexico, Arizona, Texas and Mexico.

Colorado: Lectotype "Colo" (17); Ft. Collins VII-16 (1).

Texas: Brownsville VIII-4 (1).

Mexico: Sonora.

Arizona: Huachuca Mts. VII-5 (1); Nogalis IX-13 (16); Reef, Cochise Co. IV (17).

Host: Breeds in the roots of Erigeron sp.

Genus Eupristocerus Deyr.

1864 Deyrolle p. 113

Type of the Genus Buprestis cogitans Web.

cogitans Web.

1801 Buprestis cogitans Weber p. 75

1801 Buprestis ignara Fabricii p. 211

1802 Buprestis Illiger p. 248

1801 B. ruficollis Herbst p. 249, pl. 155, fig. 9a-b.

1817 Agrilus Schonherr p. 255

1835 Agrilus Say p. 163

1840 Buprestis Erichson p. 240

1841 Eumerus ignarus Laporte-Gory II, p. 4 pl. I, fig. 5.

1857 Buprestis Lacordaire p. 81

1857 E. ignarus L-G = B. cogitans Web., Leconte p. 7

1859 Caraebus Leconte p. 241

1877 Provancher p. 13 (Separate p. 13)

1878 Glover plate 33 fig. 34

1883 Rhaebascelis Leconte p. 598

1889 Blanchard p. 32

1889 Chittenden p. 221

1895 Hamilton p. 364

1903 Kerremans p. 246

1903 B. ruficollis Hbst., = E. cogitans Web., Kerremans p. 246.

1906 Felt p. 750

1909 Smith p. 294

1909 Easton p. 50

1912 Frost p. 306

1913 Gibson p. 126

1913 Manee p. 169

1917a Burke plate VI fig. I

1917 Chagnon p. 219

1919 Nicolay p. 19

Type Locality: "Boreal America"

Distribution: Nova Scotia to North Carolina, west to Pennsylvania.

Maine: Monmouth VI-22-VII-14 (14);

Mass. Shesborn VII-2, (14)

N.J. Spotswood VI-22 (4); Lakehurst VI-22 (4); Orange VI-1; Darby (8);

N.Y. Keene Valley, Esseux Co., VII-19 (1); Stanton Island VII-4 (c)

Penn. Pittsburg VII-7 (3);

Va. Charter Oak (10); Falls Church VI-26 (10).

Md. Blandsburg VII-12 (10).

Ky. Livingston VII-16 (10)

Del. Claymont VI-27 (8)

Host: Black Alder (alnus incannus).

Genus Glyptoscelimorpha Horn

1893 Horn p. 137

Type of the genus Glyptoscelimorpha marmorata Horn

marmorata Horn

1893 Horn p. 137

1901 Fall p. 118

1903 Kerremans p. 42

1905 Fall p. 72.

1907 Kerremans p. 585

1913 Woodworth p. 196

Type locality: Los Angeles County, California (17)

Distribution: Southern California:

So. California: Lancaster, Mojave Desert VII. (Lectotype and Paratype, Los Angeles Co., Cal. (17).

Host: Unknown.

Genus Gyascutus Leconte

1858 Leconte p. 67

Type of the genus Chalcophora planicosta Leconte

acutangulus Casey

See planicosta Leconte

aeneoviridis Casey

See carolinensis Horn

aereata Casey

See planicosta Leconte

amplus Casey

See planicosta Leconte

carolinensis Horn

1876 Horn p. 288

1892 Kerremans p. 55

1895 Townsend p. 43

1902 Kerremans p. 65

1908 Hippomelas Kerremans p. 317

1909 Casey p. 66

1909 obesus Casey p.

1909 aeneoviridis Casey p. 66

Type locality: Wilmington, North Carolina (17)

Distribution: North Carolina.

Hosts: Unknown.

compactus Casey

See obliteratus Leconte

cribriceps Casey

See planicosta Leconte

cuneatus Horn

1868 Horn p. 133

1883 Horn p. 287

1892 Kerremans p. 55

1901 Fall p. 115

1903 Hippomelas Kerremans p. 65

1905 Wickham p. 168

1908 Hippomelas Kerremans p. 318

1909 Prasinalia Casey p. 59

1909

1909

Type locality: California, Owens Valley.

Distribution: California, Arizona and Texas.

Florence Ariz. Apr. (8), VII-28 (C)

cylindrinus Casey

See

debilis Casey

See

egregins Casey

See planicosta Leconte

fidelis Casey

See obliteratus Leconte

juniperinus Wickham

1905 Wickham p. 167

1908 Hippomelas Kerremans p. 315

1909 Casey p. 68

1909

Type locality: Chadburns Ranch (4500 ft.) Pine Valley Mountains (22 miles from St. George) Utah.

Distribution: Utah

Host: Beaten from juniper

Season: July

obesus Casey

See carolinensis Horn

obliteratus Leconte

1858 Chalcophora obliteratas Leconte p. 66

1859 Leconte p. 89

1866 Horn p. 290

1868 Horn p. 133

1883 Horn p. 288

1892 Kerremans p. 55

1894 Horn p. 327

1901 Fall p. 115

1902 Hippomelas Kerremans p. 65

1902 Van Dyke p. 173

1904 Kunze p. 242

1904 Wickham p. 307

1905 Wickham p. 167

1908 Hippomelas Kerremans p. 316

1909 Casey p. 65

1909 compactus Casey p. 66

Type locality: "San Diego Region", California

Distribution: Southwestern States and Bajo California.

California: Banning VII-3 (15); San Bernardino June (13); Owens Valley (15); Tulare (13); Azura (13); Palm Springs Apr. (13); Keeler VII-4 (13).

Arizona: Winslow (9); San Lemon VI-27 (10); Hot Springs VI-25 (10); Tinajas 1900 ft. (10); Phoenix (C)

New Mexico:

Utah: St. George (9)

Nevada:

Texas: (c)

Lower California:

Host: Mesquite (Prosopis juliflora). Reported from Willow (Salix sp.)

pimalicus Casey

See planicosta Leconte

pistorius Casey

See planicosta Leconte

planicosta Leconte

1858 Chalcophora planicosta Leconte p. 66

1859 Leconte p. 189 pl. 12 fig. 1

1868 Horn p. 133

1889 Waterhouse p. 171

1891 Duges p. 2

1892 Kerremans p. 55

1892 Townsend p. 38

1895 Townsend p. 42

1898 Cockerell p.

1898 Wickham p. 236-?

1901 Fall p. 115

1902 Hippomelas Kerremans p. 65

1905 Wickham p. 167

1907 Fall-Cockerell p. 179

1908 Hippomelas Kerremans p. 314

1909 Casey p. 61

1909 snowi Casey p. 62

1909

1909

1913 Woodworth p. 196

Type locality: "San Diego Region", California.

Distribution: California, Arizona (4000 ft.) New Mexico and Mexico (Durango and Sonora)

Los Angeles (10); Neeldes (10); Delta V-20 (C); Demming N.M. (10)

Hosts: Mesquite (Prosopis juliflora), and creosote bush (Larrea mexicana)

snowi Casey

See planicosta Leconte

tenuis Casey

See

Genus Halecia Laporte et Gory.

1837 Laporte et Gory I.p.108

Type of the genus Buprestis blanda Fab.

texana Kerremans

1909 Kerremans III. p. 348, pl.20, fig.6.

Type locality: Texas.

Distribution: Texas.

Note: Known only by the type which is in the Kerremans collection. From the figure and description it may be a large specimen of Agaeocera scintillans. Kerremans may have been influenced by the fact that A. scintillans had not been taken in the United States at time he wrote, it has since been taken in Sabine Canyon, Arizona by Dr. Lutz.

Genus Hippomelas Laporte & Gory.

1837 Laporte et Gory I, p. 92

Type of the Genus Buprestis saginata Mannerheim

angustus Casey

See caelatus Leconte

1858 Chalcophora caelatus Leconte p. 67

1859 Gyascutus Leconte p. 190

1868 Gyascutus Horn p. 133

1882 Gyascutus Waterhouse p. 7

1883 Horn p. 288

1889 Gyascutus Waterhouse p. 171

1891 Gyascutus Duges p. 2

1892 Gyascutus Kerremans p. 54

1898 Wickham p. 305

1903 coelata Kerremans p. 65

1908 Heyne-Taschenberg p. 131

1908 Kerremans p. 312

1909 Stictocera Casey p. 69

1909 S. pollens Casey p. 70

1909 S. laticornis Casey p. 70

1909

1913 Woodworth p. 196

Type locality: Ures, Sonora, Mexico.

Distribution: Southwestern States, Mexico and Lower California.

Arizona: Cochise Co. 3750 ft. (c); Bill Williams Fork VIII (c); Phoenix V-9 (c); Ft. Huachuca IX-7 (7); Tuscon Mts.

VIII-29 (10); Bisbee (17); Santa Rita Mts. (W); Congress Jc. V-15, July (C); Prescott (C); (S. laticornis Cas. Sabino Can. VI-12 on Palo verde) (10).

Texas: California:

Mexico: Ures, Sonora, Chihuahua.

Lower California:

Host: Palo verde (Cercidium floridum).

californica Horn

1875 Gyascutus californica Horn p. 147

1883 Horn p. 288

1892 Gyascutus Kerremans p. 54

1901 Fall p. 115

1902 Van Dyke p. 173

1903 Kerremans p. 65

1908 Kerremans p. 314

1904 Nanularia Casey p. 174

1909 N. cupreofusca Casey p. 174

1913 Woodworth p. 196

Type locality: San Joaquin Valley, California.

Distribution: Southern California: Eldorado Co. (15); Banning, VII (15); Poway, San Diego Co. (C); San Barnardino Co. (10).

cylindricus Casey

See sphenicus Leconte

grossus Casey

See caelatus Leconte

laticornis Casey

See caelatus Leconte

metallicus Casey

See

planicuda Casey

See sphenicus Leconte

robustus Casey

See sphenicus Leconte

serrulatus Casey

See sphenicus Leconte.

sphenicus Leconte

1854 Buprestis sphenicus Leconte p. 83

1859 Gyascutus Leconte p. 190.

1866 Gyascutus Leconte p. 348.

1868 Gyascutus Horn p. 133.

1871 Gyascutus Saunders p. 22

1882 Gyascutus Leconte p. 36.

1883 Horn p. 288

1889 Waterhouse p. 172

1892 Kerremans p. 56

1898 Wickham p. 304

1900 Griffith p. 568

1903 var. sphenica Lec., Kerremans p. 65

1908 Kerremans p. 310

1909 Casey p. 57

1909 cylindricus Casey p. 58

1909 grossus Casey p. 57

1909 planicauda Casey p. 58

1909 serrulatus Casey 57

1909 robustus Casey p. 57

1918 Garnette p. 142

Type locality: Between Laredo and Ringold Barracks, Texas,

Distribution: Texas, California, Arizona, Lower California and Mexico, (Coahuila, Alamar, and Durango).

Arizona: Phoenix VII (C); Ft. Huachuca VII-12 (7); Hot Springs VII-9 (9); Sabino Can. IX (10); Tuscon (10); St. Rita Mts. VIII-22 (10); Florence VII-26 (16);

Texas: San Diego X-27 (10); Del Rio Valverdo VIII-22 1000 ft. (17)

California: Near Banning (Garnette).

Lower California: San Rosa (1).

Mexico: Coahuila, Alamar and Durango (Waterhouse)

Host: Mesquite (Prosopis juliflora).

Season: July to October.

Genus Mastogenius Solier

1851 Solier p. 507

Type of the Genus Mastogenius paralellus Sol

impressipennis Fall

1906 Fall p. 167

1918 Schaeffer p. 214, 239.

Type locality: El Taste, Lower California.

Distribution: Reported only from Type locality.

Hosts: Unknown.

puncticollis Schaeffer

1918 Schaeffer p. 213

Type locality: Huachuca Mountains, Arizona.

Distribution: Reported only from the type locality.

Host; Unknown.

robustus Schaeffer

1904 Schaeffer

1905 Schaeffer p. 148

1906 Fall p. 167

1918 Schaeffer p. 214

Type locality: Palmerlee, Cochire Co., Arizona.

Distribution: Arizona; Huachuca Mts. (8); Palmerlee (16)

Host: Beaten from oak.

subcyaneus Leconte

1859 Haphostethus Leconte p. 254

1884 Lugger p. 203

1903 Kerremans p. 332

1904 Schaeffer p. 210

1905 Schaeffer p. 149

1906 Fall p. 167

1909 Smith p. 249

1918 Schaeffer p. 214

1919 Nicolay p. 20

Type locality:

Distribution: New York to Florida west to Illinois and Texas.

New York: Acqueduct L.I. VII-14 (19); Jamasa L.I. (19);
New York City VII-(4)

Rhode Island: Cranston VII-22 (14); Washington D.C.VI-24 (10)

New Jersey: Anglesea (8)

Pennsylvania: Pittsburg VI (c)

Virginia: Va. Beach (10); Ft. Monroe V-26

W. Virginia: Berkeley VI-24 (10); Harpers Ferry V-19 (10)

N. Carolina: Red Knob VI-21 (10)

Louisiana: Apolousas IV-29 (8)

Florida: Archer (10)

Texas: Victoria III-21, IV-10 (10)

Georgia: St. Catalina Island IV-19 (10); St. Simon
Island V (4)

Illinois (4) Indiana.

Host: Bred from Hornbeam (Ostrya virginiana) Lugger and
Spanish oak (Quercus digitata)(10), beaten from oak and
willow.

Genus Melanophila Esch.

1829 Eschscholtz p. 9

Type of the genus

acuminata DeGeer.

1774 De Geer, p. 133

1788 Linne p. 1932

1788 acuta, Linne, p. 1939 (Gemlin)

1790 Oliver, p. 66 pl. 5 fig. 46

1792 appendiculata, Fabricius, p. 210

1799 moria Paykull, p. 230

1799 B. appendiculata Fab. Panzer Heft 68 p. 20

1801 Fabricius p. 205

1801 appendiculata, Herbst, p. 234 pl. 147 fig.2

1805 Illiger, p. 92 No. 104

1808 B. appendiculata, Gyllenhal, p. 451

1817 appendiculata, Schonherr, p. 238 No. 126

1823 B. longipes, Say p. 164

1826 appendiculata, Sturm, p. 20

1829 appendiculata Fab. Eschscholtz p. 8

1832 B. appendiculata Fab. Gray p. 358

1836 immeculata, Mannerheim, p. 8 pl. 2 fig. 14

1837 Apatura appendiculata, Laport-Gory I, p. 8 pl. 2 fig. 14

1837 A. decolorata Laporte-Gory I, p. 5, pl. 1 fig. 7

1837 Phaenops immaculata, Dejene, p. 89

1837 immeculata, Mannerheim, p. 70

1837 immeculata, Man.-Gory p. 75 pl. 13, fig. 72

1837 Oxypteris appendiculata, Kirby, p. 160

1837 Phaenops longipes, Dejene, p. 89

1837 B. gebleri, Dejene, p. 89

1837 P. immeculata, Dejene, p. 89

1839 pecchiolii, Laport-Gory, p. 33 pl. 18 fig. 46

1841 Gory, p. 74 pl. 13 fig. 72

1841 Gory, p. 75 pl. 13 fig. 74

1848 dicolorata, White, p. 13

1848 appendiculata, White, p. 13

1850 P. longipes, Leconte, p. 227

1850 P. appendiculata, Leconte, p. 227

1850 P. assimilis, Leconte, p. 227

1857 longipes, Lacordaire, p. 48

1857 immaculata, Lacordaire, p. 48

1857 appendiculata, Lacordaire, p. 48

1857 Leconte, p. 44

1857 A. appendiculata, L. & G. = Buprestis longipes, Say.Leconte p. 7

1857 A. decolorata L-G = A. croceosignata L-G. I, p. 5 pl. 1 fig. 9
rugata, Leconte, p.

1859 Leconte, p. 212

1860 appendiculata, Motschulsky, p. 108

1860 gebleri, Motschulsky, p. 108

1863 appendiculata Fab. Thompson p. 26

1867 longipes, Cheverlot, p. 581

1867 Cheverlot, p. 581

1870 longipes, Pettit, p. 102

1871 appendiculata, Behtune, p. 230

1872 B. Oxypteris appendiculata, Bethune, p. 34

1874 Austin p. 269

1877 longipes Provancher, p. 354

1878 longipes, Hubbard-Schwarz, p. 636, 656

1878 longipes, Glover, pl. XI fig. 8, pl. XLII fig. 8

1880 longipes, Bethune p.

1880 longipes, Zesch-Reinecke, p. VII

1882 Leconte, List 1, 8 & 9

1882 appendiculata, Leconte, List 10

1882 longipes, Horn, p. 103

1883 longipes, Harrington p. 60

1883 longipes, Harrington p. 37

1884 appendiculata, Bland, p. 212

1885 longipes, Ricksecker, p. 97

1885 Saunders, p. 37

1888 Holland, p. 92

1889 longipes, Blanchard, p. 30

1889 longipes, Hamilton, p. 138

1889 immaculata, Hamilton, p. 138

1889 appendiculata, Hamilton p. 138

1890 Packard, p. 827

1890 Harrington, p. 159

1890 longipes, Harrington, p. 159

1890 appendiculata, Harrington, p. 159

1892 Kerremans p. 110

1893 longipes, Cockerell, p. 329

1894 longipes, Chittenden, p. 227

1894 longipes, Slosson, p. 2

1894 appendiculata, Hamilton, p. 29

1894 longipes, Harrington, p. 15

1895 Hamilton, p. 364

1895 longipes, Evans, p. 146

1896 longipes, Bowditch, p. 6

1896 Walcott, p. 236

1898 longipes, Wickham p. 305

1898 appendiculata, Cockerell, p. 151

1899 longipes, Wickham, p. 7

1900 longipes, Holland, p. 422

1900 Fall, p. 461

1901 Fall p. 116

1902 longipes Young p. 157

1903 Kerremans p. 165

1903 acuta Linn, Kerremans p. 165

1903 appendiculata Fab. Kerremans p. 165

1903 longipes Say, Kerremans p. 165

1903 immaculata Say, Kerr. p. 165

1903 longipes, Evans, p. 219

1906 Felt, p. 753

1907 Fall-Cockerell, p. 179

1909 longipes, Easton, p. 50

1909 Wickham, p. 23

1909 longipes, Wickham, p. 305

1909 Smith, p. 292

1909 appendiculata, Blachley, p. 786

1910 Poppius, p. 411

1910 appendiculata Fab. Poppius p. 411

1912 Frost, p. 305

1914 Leng-Mutchler, p. 430

1914 longipes, Leng-Mutchler, p. 430

1917 Chagnon p. 218

1917 Chamberlin, p. 134

1917 longipes, Chamberlin, p. 134

1917 autropurpurea, Say, Chamberlin, p. 134

1918 autropurpurea, Say = acuminata, DeG., Burke, p. 107

1918 Burke, p. 106, 107

1918 longipes, Say = acuminata DeG. Burke, p. 107

1919 Swain p. 12

Type locality: Europe.

Distribution: Atlantic to the Pacific, Alaska to Mexico, Cuba, Asia and Europe.

Alaska: Cape Nome IX; Eagle (17)

Canada: British Columbia: Glacier (17); Nipigon, Ont. VII-21 (9)

Manitoba (7) Saskatchawan VII-20 (17); Bauff Alb. VIII-16 (10); Ungava Bay, H.B.Terr.(10) Yukon Ter. Sixty mile river (Swaine); Stewart River (Swaine).

Washington: Pullman (3); Hoaquim (10); Tacoma (4);

Oregon:

California: Sylvania (4); Santa Monica (15), Weed (C); Los Angeles (10); Los Gatos (10).

Colorado: Denver (4); Silverton (4); Boulder (10); Leadville 11,000 ft. VII-10 (9); Greeley (4).

Montana: Brandon VI-13 (10); Helena VIII-19 (10); Glacier Park VIII-22 (9).

Wyoming: Big Horn Mts. IX-5 (10);

Arizona: Yuma V (4); Oricle VII-7 (4); Tuscon VII-27 (10).

Idaho: Coeur d'Alene, VI-15 (c); Moscow VI-2 (c).

New Mexico: Los Vegos VII-18 (10); Gallup (4).

So. Dakota: Lead (10); Custer (10);

Iowa: Independence (W); Elmo (W); Forest City (W).

Michigan: Pt. Heron VI (10); Marquette VII-7 (10);

Wisconsin: Tomahawk Lake (10).

Minnesota: Duluth (7).

New York: Long Island (19);

Pennsylvania: Jannette (3); Pittsburgh IX-22 (9);

Florida: Kissimmee (9); Pt. Orange (4);

Host: Yellow pine (Pinus ponderosa), lodgepole pine (P. murryana), jack pine (P. resinosa), engelmann spruce (P. engelmanni), sitka spruce (P. sitchensis), western red cedar (Thuja plicata), grand fir (Abies Granis) monterey cypress (Cupressus macrocarpa)

Season: May to October

acuta Linne

See acuminata DeGeer.

aeneola Mels.

1846 Melsheimer, p. 146

1846 metallica Melsheimer, p. 146

1857 Lacordaire p. 49

1859 Leconte, p. 214

1878 Hubbard-Schwarz, p. 636

1882 Horn, p. 106

1889 Blanchard, p. 31

1903 metallica, aeneola, Kerremans p. 165

1906 Felt, p. 751

1909 Smith p. 292

1909 Blatchley p. 786

1917 Gibson p. 149

1918 Burke, p. 106, 108

Type locality: Pennsylvania.

Distribution: New England States to Florida west to Indiana.

(Reported from Peachland, British Columbia by Gibson (1912 p. 149), evidently an error in determination).

New Hampshire: White Face Mt. VI- (4)

New York: Oakdale, L.I.VIII-8 (19); Bayshore, L.I. VII-3 (19); West Point VI-11 (c);

Pennsylvania (17);

New Jersey: DeCosta VII-4 (8); Malaga VIII-4 (17); Jamesburg VII (4) Lakehurst VII (4)

Michigan: Marquette (10)

N. Carolina: Tyron (10); So. Pines VII (Manee)

Virginia: Falls Church (10); Daneville VI-25 (10)

Maryland: Piney Point (10); Pennington Gap VII-11 (10).

W. Va: Berkeley (10)

Washington, D. C. VIII-8 (10)

Georgia: Stone Mt. (4); Cornelia VI.

Host: Sand pine (Pinus Verginiana)

Season: April to August.

appendiculata Fab.

See acuminata DeGeer.

appendiculata Laporte-Gory

See longipes Say

atropurpurea Say

1823 Buprestis atropurpurea Say p. 160

1859 Leconte, p. 213

1866 Leconte, p. 348

1882 Horn, p. 104

1892 Kerremans p. 111

1894 Hamilton, p. 29

1903 Kerremans p. 165

1907 Fall-Cockerell, p. 179

1912 Gibson, p. 100

1917 Chamberlin, p. 134

1919 Burke, p. 107

Type locality: Texas.

Distribution: This species is reported from Alaska to Mexico, east to Kansas. The exact range is doubtful since atropurpurea is often confused with acuminata. The same species is said to occur in Asia (Siberia and China) and Europe.

Host:

bistriguttata Dejean

See notata Laporte et Gory

californica Van Dyke

1917 Burke, p. 327, under Melanophila sp.

1918 Van Dyke, p. 54

1919 Burke, p. 105

Type locality: Carrville, Trinity Co., California.

Distribution: California, Oregon and Idaho.

California: Shasta, Trinity, Tuolumne, El Dorado, Ventura and Los Angeles Counties. Yosemite Valley (10) Weed VII-VIII (c).

Oregon: Dilly (4) Ashland VII (c)

Idaho: Centerville V-VII (10).

Host: Yellow pine (Pinus ponderosae), jack pine (P. jeffreyi), digger pine (P. sabiniana), coulter pine (P. coulteri), monterey pine (P. radiata), knobcone pine (P. attenuata), big-cone spruce (Pseudotsuga macrocarpa).

Seasons: May to August.

carolina Manee.

1913 Manee, p. 164

Type locality: Southern Pines, North Carolina.

Distribution: Not reported elsewhere.

This species is hardly to be separated from aeneola Mels.

Host: Long leaf pine, (Pinus palrestris)

consputa Lec.

1857 Leconte, p. 44

1859 Leconte, p. 212

1882 Horn, p. 103, pl. 4 fig. 2,4

1885 Ricksecker, p. 97

1892 Kerremans p. 111

1901 Howard, p. 97

1903 Kerremans p. 165

1913 Woodworth, p. 196

1917 Chamberlin, p. 133

1917 Burke p. 3

1919 Burke, p. 106, 107

Type locality: Northern California.

Distribution: Oregon, California, Colorado, Arizona and Nevada.

Oregon: Jackson Co. (c)

California: Shasta (4) Weed VIII (c); Calavoras Grove (10); Kennett VIII (10); San Francisco VII-10 (10); McCloud (13); Pasadena IX, VI (5).

Colorado: South Park (4); Salida (13);

Arizona: Tuscon (4)

Nevada (17). One doubtful record (Duluth, Minn." (3)

Host: Yellow pine (Pinus ponderosa), lodgepole pine (P. murryana), monterey pine (P. radiata), knobcone pine (P. attenuata), douglas fir (Pseudotsuga taxifolia).

croceosignata Laporte-Gory

See fulvoguttata Harris

decolorata Lap. et. Gory

See acuminata DeGeer.

discopunctata Faldermann

See fulvoguttata Harris

drummondi Kirby

1837 Trachypteris drummondi, Kirby, p. 159 pl. II fig. 8

1837 T. umbellatarum Kirby p. 159

1837 Phaenops gebleri, Dejean p. 89

1848 White, p. 13

1853 guttulata Mannerheim p. 221

1857 Lacordaire, p. 48

1857 Leconte, p. 7

1859 Leconte, p. 213

1871 Bethume, p. 230

1872 Buprestis drummondi, Bethume, p. 33

1872 B. (T.) umbellatarum Kirby, Bethume p. 34

1873 Crotch, p. 89

1874 Henshaw, p. 17

1877 Packard, p. 589, 810

1877 Provancher, p. 312, (Supplement p. 12)

1878 Glover, pl. XL, fig. 30

1882 Horn, p. 104

1888 Holland p. 91

1889 Hamilton p. 138

1889 gebleri Dej., Hamilton, p. 138

1890 Harrington, p. 159

1892 Kerremans p. 111

1894 guttalata Gebel. = drummondi Kirby, Harrington p. 29

1894 discopunctata Fald.= drummondi Kirby, Harrington, p. 29

1894 Slosson, p. 2

1896 Bowditch, p. 6

1898 guttalata var. drummondi, Cockerell, Bul. 28 p. 152

1899 Wickham, p. 7

Hopkins Bul. 21

1902 Hopkins, Bul. 37, p. 22

1901 Fall p. 116

1903 Van Dyke, p. 172
1904 Hopkins Bul. 48, p. 22, 38
1906 Felt, p. 753.

1838 Apatura, Laporte-Gory, p. 3, pl. 1, fig. 3

1843 Apatura, Mannerheim, p. 236, #130

1907 Fall-Cockerell, p. 179

1908 Morris, p. 444

1908 Wright-Coolidge, p. 67

1909 Morris, p. 59

1909 Burke, p. 404

1913 Gibson, p. 126

1917 Chamberlin, p. 134

1917 Gibson, p. 149

1917a Burke, pl. II, fig. 2, pl. VIII, fig. 1

1917 Burke, p. 327

1918 Van Dyke, p. 55

1919 Burke, p. 105, 106, 107

1919 Swaine p. 13 E.

Type locality: Canadian Rockies, Lat. 54°and 65°.

Distribution: Alaska and Hudson Bay region to New Mexico, east to Michigan. Reported from Europe.

Alaska:

Canada: Donald, B.C. VI-9 (10); Glacer, B.C. (10) Unguva Bay H.B.T. (10); Golden, B.C. (4); Yukon Ter. 62°32' N. 139°30' W.; Lesser Slove Lake Alberta (Swaine)

Washington: Buckeye (10); Key Port VII (10); Hoaquin (10); Seattle (10); Pullman (3) Port Townsend (4);

Oregon: Ashland VII-16 (c); Dilly (4); Cascade (4) Corvallis IV-VIII (c); Wendling IV (c) Detroit V-VIII (C); Grant Co. VII-VIII (c); Klamath Falls VII (c) Astoria VI (c); Portland VII (c).

California: Summerdale (10); Yosemite (10); St. Cruz Mts. (10) Los Gatos (Burke); McCloud (10); Mendicino (4) Dunsmuir (4); Placer Co. (4); Weed VIII (c).

Wyoming: Nat. Park 8/17 (8);

Montana: Helena IV-30 (10); Darby VII-8 (10)

Idaho: Moscow (10)

Colorado: Georgetown 9,500 ft. VII (10); Glenwood Springs VII (13); Bailey (3); Ft. Collins VII-2 (3);

New Mexico: Meek (10); Luna (4) Beula (1)

Arizona: Williams VII-27 (10)

Utah: (Burke); Nevada (15)

Minn: Duluth (10)

Mich: White Fish Pt. L.S. (10)

Host: Western Larch (Larix occidentalis), noble fir (Abies noilis), grand fir (A. grandis), white fir (A. concolor), black fir (A. nigra), lovely fir (A. magnificia), alpine fir (A. lasiocarpa), amabilis fir (A. amabilis), douglas fir (Pseudotsugae taxifolio), englemann spruce (Picea engelmanni), sitka spruce (P. sitchensis), western hemlock (Tsugae heterophilla), mountain hemlock (T. martensiana), and yellow pine (Pinus ponderosa).

Season: April to October.

drummondi Mannerheim = guttulata Gebler

fulvoguttata Harris

1829 Harris, p. 2

1830 guttulata, Gebler, p. 75, 80

1833 discopunctata, Faldermann, p. 47 pl. 1 fig. 5

1837 Apatura octospilota Laporte-Gory I, p. 4 pl. 1 fig. 4

1837 A. croceosignata, Laporte-Gory I, p. 5 pl. 1 fig.

1837 A. decolorata, Laporte-Gory I, p. 5 pl. 1 fig. 7

1837 A. discompunctata Fald. Laporte-Gory p. 3, pl. 1 fig. 2.

1837 subguttata, Dejean, p. 89

1837 decolorata L-G., Randell p. 22

1842 Harris, p. 45

1852 Harris, p. 50 fig. 26

1853 guttalata Geb. Mannerheim, p. 221

1857 A. octospilota, L. et. G. = A. croceosignata, L. et G. Leconte p. 7

1857 A. decolorata, L. et. G. = A. crocosignata, L-G. Leconte p. 7

1857 Trachypteris fulvoguttata, Fitch, p. 706

1857 discompunctata Fald. Lacordaire p. 48

1859 Leconte, p. 213

1869 Harris, p. 358

1869 Glover, p. 91

1870 Pettit, p. 67

1873 Crotch, p. 99

1874 Austin, p. 269

1877 Provancher, p. 315

1878 Hubbard-Schwarz p. 636, 656

1878 Glover pl. XI, fig. 9

1880 Zesch-Reinecke, p. VII,

1881 Harrington, p. 30

1882 Horn p. 104, pl. IV, fig. 5.

1882 Leconte, p.

1885 Ricksecker, p. 97

1889 guttalata Geb., Hamilton p. 138

1889 Blanchard, p. 31

1890 Packard, p. 683

1892 Hopkins, p. 256

1892 Kerremans p. 111

1893 Hopkins, p. 181

1894 Slosson, p. 2

1895 Hamilton, p. 364

1895 Evans, p. 146

1896 Bowditch, p. 6

1898 Hopkins, p. 103

1899 Hopkins, p. 254

1902 Hopkins, p. 22

1902 Young p. 157

1902 Kerremans, p. 165

1902 guttalata, Kerremans, p. 165

1902 discopunctata, Kerremans, p. 165

1902 octospilota, Kerremans, p. 165

1902 croceosignata, Kerremans, p. 165

1902 decolorata, Kerremans, p. 165

1902 drummondi, Kerremans, p. 165

1903 Felt, p. 172

1904 Hopkins, Bul. 48

1905 guttalata Geb., Poppins p. 175

1905 Felt, p. 171

1906 Felt, p. 339, 390

1909 Smith, p. 292

1909 Burke, p. 405

1912 Frost, p. 305

1913 Woodworth, p. 196

1914 Felt, p. 373

1916 Blackburn-Ellis, p. 49

1916 Morris, p. 19

1917 Nicolay, p. 93

1917 Chagnon p. 218

1918 Blackburn, p. 20, 31, 34, 36, 41, 80.

1918 Van Dyke, p. 55

1919 Burke p. 105, 106, 108

1920 Knull p. 6

Type locality: Massachusetts.

Distribution: Eastern and Middle States, Canada. (Reported from California and Nevada; these specimens are probably drummondi)

Canada: Ontario

Maine: Monmouth

New Hampshire: White Mountain (10);

New York: West Point (9); Ramapa (4); Buffalo (4)
Big Moose VIII-12 (Felt)

New Jersey: Orange Mts. (8);

Pennsylvania: Pittsburg (9)

Michigan: Port Heron (10); Grand Island V (10); Marquette VII-2 (10)

North Carolina: Tyron (10); Durham (10);

W. Virginia (10)

Host: Eastern hemlock (Tsuga canadensis), red spruce (Picea rubens), white pine (Pinus strobus).

Season: May to August

gebleri Dejean

See drummondi Kirby

gentilis Leconte.

1859 prasina II, Leconte, p. 254

1863 Leconte, p. 42

1869 Gemminger-Harold, p. 1385

1873 prasina, Lec. = gentilis, Lec., Crotch, p. 89

1882 Horn, p. 105

1885 Ricksecker, p. 97

1894 Fall, p. 98

1901 Fall, p. 116

1903 Kerremans p. 164

1912 Gibson, p. 126

1913 Woodworth, p. 196

1914 Gebson, p. 116

1916 Larsen p. 6

1917 Chamberlin p. 134

1917 Burke p. 327

1919 Burke p. 105, 106, 107

Type locality:

Distribution: Pacific Coast and Rocky Mountain States, east to Dakota.

Washington: Spokane (4)

Montana: Columbia Falls (10);

Idaho: Centerville VII (10)

Colorado: Waldo Canyon (10); Denver (3); Boulder VIII (c); Vaily VIII (3);

California: Tallac VII (4); Madera Co. III-23 (8); Miami (9); Taho 6,200 ft. VI-10 (9); Summerdale (10) Meyers (c) Fallen Leaf Lake (15); Fresno (4) Weed VIII (c); McCloud (13); S.B.Mts. (5); Los Angeles (10) Tulare Co. (16);

Arizona: Flagstaff VI-29 (9) VII-7 (C); Williams VII (10);

Nevada: Tahoe (9)

New Mexico: Buela (4); Parvenis (16)

Nebraska: War Bonnette Canyon (10)

Host: Yellow pine (Pinus ponderosa), variety (P. scopulorum) sugar pine (P. lambertiana), jeffery pine (P. jeffreyi)

Season: March to August.

guttulata Gebler

See fulvoguttata Harris

guttulata Mannerheim

See drummondi Kirby

immaculata Dejean

See acuminata DeGeer.

immaculata Mannerheim

See longipes Say

intrusa Horn

1882 Horn, p. 105

1892 Kerremans p. 112

1894 Fall, p. 98

1901 Fall, p. 116

1901 Howard, p. 97

1903 Kerremans p. 165

1913 Woodworth, p. 196

1917a Burke, pl. II fig. 3

1917 Burke, p. 328

1918 Van Dyke, p. 55

1919 Burke, p. 106, 108.

Type locality: California.

Distribution: California, Colorado, Nevada, Arizona and Texas, Oregon?

California: Holotype No. 3426 Cal. (17); Paratype Cal. (17); Plumas Co. VIII-17 (8), VI-2 (c); Julian (10); Placerville (10); Tallac (10); McCloud (13); San Bernardino Mts. (5);

Colorado: Cheyenne Canyon (10);

Arizona: Pinal Mts. (9); Williams (10); Santa Cruz Mts. (13);

Nevada: Paratype Nev. (17)

Texas: Flotonia VII-30 (8).

Host: Yellow pine (Pinus scopulorum), sugar pine (P. lambertiana), knobcone pine (P. attenuata), Western Yellow Pine (P. ponderosa).

Season: June to July.

longipes Say.

See acuminata Dejean.

luteosignata Mann.

See notata Laporte-Gory

metalica Mels.

See aenola Melsheimer.

miranda Lec.

1854 Phaenops mirandus Leconte, p. 83

1859 Leconte, p. 212

1859 Leconte, p. 11, pl. 2, fig. 7

1882 Horn, p. 102, pl. IV fig. 1

1892 Kerremans p. 113

1893 Cockerell p. 313

1895 Townsend, p. 43

1907 Fall-Cockerell, p. 179

1919 Burke, p. 106

Type locality: Fort Union, New Mexico.

Distribution: Oregon through the Rocky Mountain States to Texas.

Oregon: Eastern Oregon (Leconte)

Colorado: Denver VII (c); Globe VIII-4 (3)

Arizona: Pinedale (10); Grand Canyon.

Utah: Gt. George (9); San Juan Co.

New Mexico: Ft. Wingate VII-1 (9); Ft. Union (Lec.)

Texas (Lec).

Host: Unknown

Season: July-August.

moria Paykull

See acuminata DeGeer.

notata Laporte-Gory

1837 Apatura notata, Laporte-Gory, p. 4 pl. 1 fig. 5

1837 var. bistriguttata, Dejean, p. 89

1837 luteosignata Dejean p. 89

1837 luteosignata Dej. Mannerheim, p. 70

1848 luteosignata Dej. Ziegler, p. 267

1848 White, p. 23

1857 Lacordaire, p. 48

1857 Leconte, p. 7

1859 Leconte, p. 212

1867 Cheverlot, p. 580

1873 Crotch, p. 89

1873 luteosignata Dej. = notata L-G. Leconte p. 331

1882 Horn. p. 103 pl. IV, fig. 3,6

1888 Waterhouse, p. 17

1892 Kerremans p. 113

1893 Gundlach, p. 163

1901 Scott, p. 31

1903 Kerremans, p. 165

1903 luteosignata Dej. Kerremans, p. 165

1909 Smith, p. 292

1913 Manee, p. 169

1914 Leng-Mutchler, p. 43

1914 Blatchley, p. 89

1917 Blatchley, p. 239

1917 Leng-Mutchler, p. 205

1918 Dozier p. 331

1919 Burke, p. 107

Type locality: North America (Exact locality not recorded)

Distribution: New Jersey to Florida, Cuba and the Behamas west to Arizona.

New Jersey: (Smith)

N. Carolina: Willmington (8)

Georgia: Savannah (10); Offerman IV-12 (4); St. Simon Island (4) Okefenokee Swamp (4)

Florida: Enterprise (14); Key Largo (c); Tampa (17) Lake Poinsetta (10); Miami (10); Biscayne VI-27; Gainsville III-31 (Dozier)

Louisiana: Vernon Parish (4)

Arizona: Tuscon (4)

Cuba (4).

Host: Pine

Season: June and July.

variety opaca Leconte.

1859 Leconte, p. 213

1873 Crotch, p. 89

1892 Kerremans p. 113

1903 Kerremans, p. 165

Type locality: Georgia.

Distribution: North Carolina, Georgia and Florida.

Georgia: Okejenokee Swamp IV-12 (4)

Florida: Key Largo (9); Ragged Key III-28 (10);

N. Carolina: Southern Pines VI-12 (c).

Host: Pine.

obtusa Horn

1882 Horn, p. 106

1892 Kerremans p. 113

1903 Kerremans p. 165

1919 Burke, p. 108

Type locality: Georgia.

Distribution: Georgia.

Georgia: Holotype Georgia #3427 (17).

Host: Unknown

octospilata Laporte-Gory

See fulvoguttata Harris.

opaca Leconte.

Variety of notata Laporte-Gory

pecchiolii Laporte-Gory

See acuminata DeGeer

pini-edulis Burke.

1908 Burke, p. 117-118 fig. 6

1918 Burke, p. 210

1918 Van Dyke, p. 55

1919 Burke, p. 106, 108

Type locality: Arizona (Grand Canyon, P.O.) and Utah (Panguitch).

Distribution: California, Colorado, New Mexico, Utah and New Mexico.

California: Havilah V-25, Kern Co. (c); Auberry, Fresno Co. VI-2 (c)

Colorado: Garden of the Gods (10)

Arizona: Grand Canyon, (Burke)

Utah: Panguitch (Burke)

Host: Pinyon (Pinus edulis), Digger Pine (P. sabiniana)

Season: June to September.

prasina Leconte

See gentilis Leconte.

rugata Leconte

See acuminata DeGeer

subguttata Dejean

See fulvoguttata Harris.

transversa Say

See

umbellatarum Kirby

See drummondi Kirby

Genus Paratyndaris Fisher

1919 Fisher p. 92

Type of the genus: Tyndaris olneyae Skinner

barberi Skinner

1903 Tyndaris barberi Skinner p. 236, pl. 10 fig. 3

1907 Tyndaris Kerremans p. 568

1919 Fisher p. 92

Type locality: Florence, Arizona.

Distribution: Arizona.

Arizona: Type Florence VI-28 (17); Hotsprings VI-26 (17)

Host: Taken on cat's-claw (Acacia greggii), Mexican Ironwood (Olneya tesota).

Season:

chamaeleonis Skinner

1903 Tyndaris chamaeleonis Skinner p. 237 pl. 10 fig. 1

1907 Tyndaris Kerremans p. 566

1919 Fisher p. 92

Type locality: Carmal Co., Texas.

Distribution: Extreme Southern Texas.

Texas: New Brunsfels, Carmal Co. (17); Los Barregos (10); Brownsville VI-6, VI-23 (c).

Host: Taken on flowers of Mesquite (Prosopis juliflora)

Season:

cincta Horn

1885 Tyndaris cincta Horn p. 147 pl. 4 fig. 13

1902 Tyndaris Kerremans p. 40

1903 Skinner p. 236

1907 Tyndaris Kerremans p. 562

1919 Fisher p. 92

Type locality: Texas.

Distribution: Texas.

Texas: Holotype (Unique) "Tex" (17).

Host: Unknown.

coursetia Fisher

1919 Fisher p. 93

Type locality: Tucker Canyon, Santa Catalina Mts. Arizona

Distribution: Taken only in the type locality.

Host: Bred from (Coursetia microphylla)

Season: July-17.

olneyae Skinner

1903 Tyndaris olneyae Skinner p. 236 pl. 10 fig. 4

1907 Tyndaris Kerremans p. 567

1917a Tyndaris Burke pl. V, fig. 4

1918 Tyndaris Burke p. 211

1919 Fisher p. 92

Type locality: Florence; Arizona.

Distribution: Arizona and Texas.

Arizona: Yavapi Hot Springs VI-26 (17); Florence VI-26 (17);

Cotype Florence (13); Cotype Hot Springs VI-28 (10); Bush Corral, St. Catalina Mts. (10); Santa Rita Mts. VII-12 (11); Rinion Mts. 5000 ft. VI (c).

Texas: Davis Mts. VI-6 (9); Chisos Mts. VI-7 (9).

Hosts: Mexican Ironwood (Olneya tesota), cat's claw (Acacia greggii), Mesquite (Prosopis juliflora), and Palo Verde (Cercidium torreyanum)

prosopis Skinner

1903 Tyndaris prosopis Skinner p. 237 pl. 10 fig. 6

1906 Tyndaris Kèrremans p. 567

1919 Fisher p. 92

Type locality: Austin, Texas.

Distribution: Texas.

Texas: Austin VI-28 (17); Brewster Co. VI-10 (10).

Host: Mesquite (Prosopis juliflora).

Season: June

Genus Poecilonata Esch.

1829 Eschscholtz p. 9.

Type of the Genus Buprestis variolosa Paykull

bridwelli VanDyke

1918 Van Dyke p. 53

Type locality: Imperial Co., California.

Distribution: California and Arizona.

Arizona: Tuscon VI-30, VII-10 (10).

Host: Type specimens taken on flowers, also taken on cottonwood in Arizona.

Season: June-July.

costicollis Gory

See thureura Say

cupripes Casey

1909 Casey p. 169

1912 Gibson p. 126

Type locality: Bayfield, Wisconsin.

Distribution: Wisconsin, Montana and Manitoba (Canada)

Montana: Missoula (10).

Host: Aspen (P. trichocarpa).

cyanipes Say

1823 Buprestis cyanipes Say p. 164

1873 Crotch p. 88

1873 esecta = cyanipes Say, Crotch p. 88

1878 Hubbard-Schwarz p. 655

1879

1880 Zesch-Reinicke p. VII.

1884

1886 Fletcher p. 10.

1889 Blanchard p. 30

1889 Harrington p. 51

1891 Davis p. 66

1891 debilis Lec. = cyanipes Say., Horn p. 45

1892 Davis p. 80

1894 Harrington p. 47

1895 cyanipennis Hamilton p. 364

1898 Cockerell p. 151

1902 Kerremans p. 132

1906 Felt p. 746

1908 Gibson p. 126

1909 Smith p. 292

1909 Blatchley p. 783

1909 Wickham p. 23

1909 Casey p. 167

1911 Gibson p. 114

1912 Frost p. 305

1913 Gibson p. 126

1917 Chagnon p. 218

1917 Burke p. 327

1920 Knull p. 5

Type locality:

Distribution: Yukon Territory south through the Pacific Coast and Rocky Mountain states to New Mexico.

Canada: Saskatchewan VII-3 (16); Telegraph Creek B.C. (4); Radisson (16);

Idaho: Beaver Canyon VII-23 (10); Cascade VI-22 (c).

Colorado: El Paso Co. (10); Cripple Creek (10); Colorado Springs.

California: Lake Tahoe (10) Tuolumne Co. (10);

New Mexico: Gallinas Canyon (24).

Wyoming: Yellow Stone Park (10).

Utah: Virginia River (4)

Michigan: Detroit (10).

Minnesota: Duluth (10).

New York: Buffalo (10)

Penn. Jonnette (3); Hummelstown VI-6 (Knull); Melford (Knull)

Wisconsin: Bayfield (4)

Virginia (16).

Indiana: Millers VIII-11 (c)

Host: Bred from Aspen (Populus tremuloides), cottonwood (P. deltoides) and large-toothed Aspen (P. grandidentata) Beaten from oak, sycamore, pine and willow.

Season: June to September.

debilis Leconte

1859 Leconte p. 204

1891 debilis Lec. = cyanipes Say. Horn p. 45

1902 Kerremans p. 132

Type locality: Baltimore, Maryland.

Distribution:

Host:

Season:

erecta Gory

1841 Dicerca Gory (Suppl) p. 110, pl. 19, fig. 108

1857 Leconte p. 8

1859 Leconte p. 204

1873 D. erecta Gory = P. cyanipes Say, Leconte p. 331

1902 Kerremans p. 132

1909 Casey p. 167

1912 Frost p. 305

1917 Gibson p. 149

1919 cyanipes var. erecta Gory, Nicolay p. 277

Type locality:

Distribution: Canada to Texas, west to Wisconsin and California.

Canada: Edmunton, Alberta VII (Gibson).

New York: Buffalo (4), New Jersey (19).

Illinois: Cicero VIII-5 (c)

Michigan (18).

Wisconsin (18).

Texas (18).

California (10).

Host:

ferrea Mels.

1844 Melsheimer p. 144

1857 Buprestis, Lacordaire p. 36

1859 Leconte p. 204

1902 Kerremans p. 132

1902 VanDyke p. 172

1917 Burke p. 327

1917 Chamberlin p. 131

Type locality: Virginia

Distribution: Minnesota to Virginia and Oregon to Arizona.

Minnesota: Duluth (10).

Virginia (18); Illinois (18)

Oregon: Grant Co. VI-22 (c)

California: Humbolt Co. (15) Placerville VI-30 (c)

Phillips Station VII-1 (c).

Arizona: Williams VI-19 (10).

Hosts: Aspen (Populus tremuloides), Nuttalls Willow. (Salix nuttalli), Black cottonwood (Populus trichocarpa).

Season: July to September.

parviceps Casey.

1909 Casey p. 169

Type locality: New Mexico

Distribution: New Mexico and California

California: Bonito (10); Tulare Co. (16).

Hosts: Aspen (P. tremuloides)

Season:

thureura Say

1832 Buprestis Say p. 3

1840 Buprestis costicollis Gory IV, p. 109, pl. 19 fig. 107

1857 Lacordaire p. 36

1857 B. costicollis Gory thureura Say, Leconte p. 8

1859 Leconte p.

1880 Zesch-Reinecke p. VII.

1894 Stromberg p. 37

1902 Kerremans p. 132

1902 costicollis Gory, Kerremans p. 132

1909 Smith p. 292

1909 Casey p. 170

1915 Kiviat p. 237

1917 Burke p. 327

1917a Burke pl. III fig. 4.

Type locality: Louisiana

Distribution: Louisiana (Say, New Jersey (Smith), Illinois (Kiviat), Kansas (3), Penn.(3), Texas (18), Montana (Burke), Idaho (c), Utah, California (15), Arizona (4), Oregon (c).

Hosts: Aspen (Popalus tremuloides), black cottonwood (Populus tremuloides), black willow (Salix nigsa), and Willow (Salix sp.)

Season: July-August (Ill.), June to Aug. (Calif.)

Genus Pachyscelus Solier

1833 Solier p. 313

Type of the genus Pachyscelus scutellatus Mihi

americanus Gory

See purpurens Say

caeruleus Schwarz.

See swartzi Kerremans

carbonatus Leconte

1859 Leconte p. 252

1903 Brachys Kerremans p. 326

Type locality; Lousiana

Distribution: Louisiana

Host: Unknown.

laevigatus Say

1825 Trachys laevigatus Say p. 252

VI-15 (17) Lehigh Gap. VII-3 (17), Glenside VII-5 (17)

Maryland: Plummers Isl. V-28 (c)

Virginia: Falls Ch. VII-11 (9);

Georgia: Clayton VI (4)

N. Carolina: Black Mountains VI-21 (9); Tyron (10);

W. Virginia: White Sulphur (13);

Michigan: Detroit VI-23 (10)

Florida (4), Washington D.C. (17).

Hosts: Larva mine the leaves of black gum (Nyssa sylvatica), black haw (Crataegus douglasii), milk weed, bush clover (Lespideza virginica), Tick tree foil (Meibormia obtura) and M. viridiflora.

oculatus Schaeffer

1909 Schaeffer p. 377

Type locality: Nogales, Arizona.

Distribution: Southern Arizona.

Host: Unknown.

politus Kerremans

See laevigatus Say.

punctata Gory

See laevigatus Say

purpureus Say

1836 Metonius purpureus Say p. 164

1837 Dejean p. 94

1841 Brachys americanus Gory p. 346 pl. 58

1857 Metonius Lacordaire p. 87

1859 Leconte p. 253

1874 LeBaron p. 96

1878 Hubbard-Schwarz p. 656

1878 Schwarz p. 364

1889 Blanchard p. 32

1898 Cockerell p. 152

1903 Kerremans p. 319

1903 americana Kerremans p. 319

1906 Felt p. 715

1907 Fall-Cockerell p. 181

1909 Smith p. 296

1909 Wickham p. 23

1915 Johnson p. 312

1919 Nicolay p. 20

Type locality: Posey County, Indiana.

Distribution: New England to Iowa, New Mexico and Texas.

Mass: Framingham VI (14);

New Jersey: Greenwood Lake V (4); Orange Mts. V-30 (8).

Penn: Glenolden V-25 (8);

Tenn: Elmwood (9); Nashville VIII (9)

Ohio: Cincinnati VII-9 IX-5 (11)

Illinois: Palas Park V-26 (9); Riverside VI-29 (c)
Glenweir V-26 (c).

Iowa: Iowa City (W); Waterloo (W).

Michigan: Detroit (10). Texas (17), New Mexico: (24)

Host: Feeds on the leaves of Geranium (Geranium maculatum)

Taken on Rhas tox (14).

schwarzii Kerremans

1844 Buprestis caerulea Melsheimer (calalogue) p. 148

1878 caeruleus Schwarz p. 364, 452

1896 caeruleus Castle-Laurent p. 303

1903 schwarzii n.n. for caeruleus (name preoccupied) Swz. Kerremans p. 321

1917 Burke pl. VI fig. 4.

Type locality:

Distribution: Georgia and Florida, west to Texas and Arizona.

Georgia: Okefenokee Sw. (4);

Florida: Tampa IV-3 (4); Orange Co. (17); Lake Mary (8); Enterprise IV-17 (e); Kissimmee VI-20 (10); Copson III-4 (10).

Texas: Harrisburg VII-31 (8);

Arkansas (8);

Arizona: (17).

Host: Unrecorded.

Genus Polycesta Sol.

1833 Solier p. 281 pl. 11 fig. 11

Type of the Genus

angulosa Duval

See excavata Blanchard

arizonica Sch.

1906 Schaeffer p. 21

1906 Fall p. 166

Type locality: Palmerlee, Cochire Co., Arizona.

Arizona: Palmerlee; Huachuca Mts. VII -7 (8).

Distribution: Arizona.

Host: Taken on live oak.

californica Lec.

1857 Leconte p. 45

1858 Leconte p. 68

1859 Leconte p. 220

1859 Motschulsky p. 180

1859 cribrana Motschulsky p. 182

1873 Crotch p. 89

1901 Fall p. 118

1902 Keremans p. 26

1905 Fall p.73, 105

1906 obtusa = californica Lec. Keremans p. 508

1906 Fall p. 166

1906 Schaeffer p. 22

1907 Keremans p. 612

1913 Woodworth p. 196

1917 Chamberlin p. 166

1917 Burke p. 329

Type locality: Sacramento, California.

Distribution: Oregon, California, Texas and Lower California.

Oregon: Ashland (Miller)

California: Los Angeles Co. VI - VII (10); Kaweah Jan. 15 (9); Walker (10); Placerville (10); Pasadena V, VI (5); Yosemite (15); Mariposa Co. (15); Trinity Co. (15); Los Gatos (Burke).

Texas VI - 13 (16); (Kerremans), (18)

Range Southern Oregon and California.

(Keremans gives Texas)

Hosts: Kellog oak (Quercus kellogii), canyon live oak (Q. chrysolepis), Douglas Oak. (Q. douglasii), Garry oak. (Q. garryan), California black oak (Q. californica), interior live oak (Q. weslizeni) Fremont poplar (Populus fremonti), white alder (Alnus rhombifolia), mountain mahogany (Cercocapus parvifolius), domestic apple (Pyrus malus), domestic pear (P. communis), almond (Prunus amygdalus), broad leaf maple (Acer macrophyllum), christmas berry (Heteromeles arbutefolia), redbud (Cercis occidentalis) manzanita (Arctostaphylos viscida) and cats claw (Acacia greggii)

cavata Leconte

See elata Leconte

3.

cribrana Motschulsky

See californica Leconte

elata Leconte.

1858 Leconte p. 68

1858 cavata Leconte p. 69

1859 Leconte p. 220

1873 cavata Lec. = elata Lec. Crotch p. 89

1878 Glover plate 41 fig. 29

1891 Angell p. 106

1905 Fall p. 73

1906 elata and cavata = californica Lec. Kerremans p. 508

1906 Schaeffer p. 22

1906 Fall p. 166

1907 Kerremans p. 612

1917 Burke p. 329

Type locality: Texas.

Distribution: Arizona and Texas. (Alabama?).

Arizona: Kitt's Peak 3600 ft. VIII - 7

Texas: Cypress Mills Dec., Jan. (4) ; El Paso (9); Belthage V - II (9);

Hosts: Larva work in post oak (Quercus obtusifolia),
Arizona oak (Q. arizonica), Emory oak (Q. emoryi),
white leaf oak (Q. hypoleuca), Wright sycamore (Plantanus wrightii), hackberry (Celtis reticulata) and mesquite (Prosopis juliflora)

excavata Blanch.

1837-45 Blanchard p. 149

1857 angulosa Duval p. 62

1867 angulosa Cheverlot p. 582

1893 angulosa Gundlach p. 166

1906 angulosa Schaeffer p. 22

1906 angulosa Duv. = excavata Blan. Kerremans p. 513 pl. 10, fig. 5.

1910 obtusa Lec.= angulosa Duv. Fall p. 138

1914 angulosa Leng - Matchler p. 429

1917 Leng - Matchler p. 205

Type locality P. excavata Mercado, Santa Cruz, Argentina?

Type locality of P. angulosa. Cuba

Distribution: Florida, Cuba, and South America.

Florida: Elliott Key (1); Key Largo (1); Melscomba Key (4); Buck Key (10); Miami V (10).

obtusa Leconte

See velosco Laporte- Gory

velasco Lap. et. Gory.

1841 Laporte et Gory p. 5 pl. I. fig. 6.

1857 Leconte p. 8.

1858 obtusa Leconte p. 69.

1859 obtusa Leconte p. 220, 221.

1873 Crotch p. 89.

1873 obtusa Crotch p. 89.

1873 obtusa Lec. = velasco L - g. Leconte p. 332.

1888 Waterhouse p. 18.

1894 Horn p. 328.

1898 Wickham p. 235.

1898 Wickham p. 305.

1901 Fall p. 118.

1902 Van Dyke p. 200

1905 Fall p. 73

1905 obtusa Lec. Fall p. 74

1906 Schaeffer p. 22

1906 Fall p. 166

1907 Kerremans p. 612

1907 Fall-Cockerell p. 154

1909 Wickham p. 305

1910 Fall p. 138

1913 Woodworth p. 196

1917 Burke p. 329

1917 a Burke pl. IV fig. 4

Type locality: Mexico

Distribution: Arizona, California, Texas, Mexico and Lower California.

Arizona: Tuscon VIII - 25 (4); Yuma V (4); Ft. Huachuca (7); Florence VII-12 (8); Sabino Can. VII 3600 ft.

California: Indio (5)

Texas: Carmel Co. (1); Laredo (10); Hermit Co. (13);

Lower California: Santa Rosa 2000 ft. (1).

Hosts: Catsclaw (Acacia greggii), mosquite (Prosopis juliflora), and paloverde (Cercidium torreyanum).

Genus Psiloptera Solier.

1833 Solier, p. 283 pl. 1 fig. 13

Type of the genus Buprestis attenuata Fabricii

arizonica Casey

1909 Spinthoptera Casey, p. 74

1910 Psiloptera, arizonica, Kerremans, p. 133

Type locality: Arizona.

Distribution: Arizona.

caseyi Kerremans.

See convexa Casey

convexa Casey.

1909 Spinthoptera Casey, p. 73

1910 caseyi Kerremans, p. 126

Type locality: El Paso, Texas.

Distribution: Known only by the type

cupreopunctata Schaeffer.

1905 Schaeffer, p. 147

1909 Spinthoptera Casey, p. 75

1910 Kerremans, p. 141

Type locality: Brownsville, Texas

Distribution: Known only from the type locality.

Host: Mesquite (Prosopis juliflora).

drummondi Laporte-Gory

1837 Laporte-Gory, I, p. 37 pl. 9 fig. 44

1848 White, p. 16

1857 Leconte, p. 7

1859 Leconte, p. 93

1873 Crotch, p. 84

1882 Waterhouse, p. 10

1891 Marlott, p. 43

1898 Cockerell p.152

1903 Kerremans, p. 94

1904 Kunze, p. 242

1904 Wickham, p. 307

1907 Fall-Cockerell, p. 179

1910 Kerremans, p. 130

Type locality: Mexico.

Distribution: Kansas, New Mexico, Arizona, California. Texas and Mexico.

Host: Common Petalstesnon multiflorus

Kansas: Riley Co. (1).

Arizona: Ft. Huachuca IX-12 (7); Oricle VI-29 (10); Nogales VIII-18 (c).

Texas: Carpas Christi? (9); San Antonio (10); Witcheta Falls (10); Uvalde VI (13).

ocularis Casey.

1909 Spinthoptera Casey, p. 73

1910 Kerremans, p. 125

Type locality: Western Texas.

Distribution: Western Texas.

parva Casey

See webbi Leconte

valens Leconte.

See webbi Leconte.

webbi Leconte

1852 Dicerca woodhousii Leconte, p. 68

1857 Leconte, p. 7

1857 woodhousii Leconte, p. 7

1857 D. woodhousii Lacordaire, p. 36

1858 Dicerca Leconte, p. 68

1858 D. woodhousii Leconte, p. 66

1858 D. valens Leconte, p. 66

1859 Leconte, p. 193

1859 woodhousii Leconte, p. 193

1866 Chalcolepidius webbi Leconte, p. 348

1873 Crotch, p. 84

1882 Waterhouse, p. 10

1895 Townsend, p. 43

1898 Wickham p. 305

1898 Cockerell, p. 151

1903 Kerremans, p. 94

1903 woodhousii Kerremans, p. 94

1903 valens, Kerremans, p. 94

1905 Schaeffer, p. 147

1909 Wickham, p. 305

1909 Spinthoptera valens Casey, p. 73

1909 S. parva Casey, p. 73

1909 S. woodhousii Casey, p. 74

1909 S. webbi Lec., Casey, p. 75

1910 webbi Lec., Kerremans, p. 132

1910 parva Cas., woodhousii Lec., Kerremans, p. 129

1910 valens Lec., Kerremans, p. 128 pl. 27 fig. 4

1910 woodhousii Lec., Kerremans, p. 129

1918 Burke, p. 210

Type locality: Ures, Sonora, Mexico.

Distribution: Kansas to Texas.

Kansas

Nevada: Alameda

Arizona: Sabino Canyon (23); Santa Rita Mts. (22);

N ew Mexico: Los Crucis VIII-19 (9)

Texas: Green Valley VIII (7); El Paso (1)

Host: Palo verde (Cerdidium torreyanum), mesquite (Prosopis juliflora). Taken on Salix longifolia, eating leaves.

Season: July-August.

woodhousii Leconte

See webbi Leconte.

Genus Ptosima Sol.

1833 Solier p. 277, pl. X fig. 8

Type of the genus Buprestis 9-maculata Fabricii

gibbicollis Say

1823 Buprestis gibbicollis Say p. 161

1836 Buprestis Say p. 159

1840 Acmaeodera Erichson p. 241

1841 luctuosa Gory IV p. 71 pl. 13 fig. 69

1859 Leconte p. 221

1873 Luctuosa Gory = gibbicollis Say, Crotch p. 89

1884 Lugger p. 203

1892 Kerremans p. 163

1895 Hamilton p. 364

1899 Harris p. 411

1902 luctuosa Gory = gibbicollis Say, Kerremans p. 39

1903 Wickham p. 70

1907 Kerremans p. 543

1908 Heyne-Taschenberg p. 128

1909 Blatchley p. 794

1909 Smith J.B. p. 294

1917a Burke plate V fig. 3

1920 Knull p. 7

Type locality:

Distribution: Eastern and Middle western States, Maryland, Washington, D.C. VI-2 (10), Alabama, Iowa, Kansas (17), Ohio, Indiana, Kentucky (1), Illinois,, St. Louis, Missouri

(10), Murphreesboro, Arkansas (9), Opelousus, Louisiana IV-24 (8),

Pennsylvania: Pittsburgh V-29 (9); Hummelstown (3); Jannette VI (3).

Texas: Brewster Co. (10); Chisos Mts. VI-10 (10); Dallas (10).

Hosts: Redbud (Cercis canadensis) Sassafras (Sassafras sassafras) Black Locust (Gleditsia triacanthos)

variety schaefferi* new variety

Type locality: Cypress Mills, Texas VI-1

Distribution: Southern Texas.

Host: Unknown.

walshei Lec.

1863 Leconte p. 81

1892 Kerremans p. 164

1901 Fall p. 121

1907 Kerremans p. 544

Type locality: Rock Island, Illinois.

Distribution: Illinois, California and Texas.

Illinois: Rock Island (Leconte).

California: Los Angeles Co. (5); Texas (4).

---

*Ptosima gibbicollis var. schaefferi new variety.

Form of gibbicollis, larger and with distinct orange markings in place of yellow; clypens more deeply sinus; head and thorax more densely punctured, under parts decidedly more pubescent, hairs long, white and silky. Length 9.5 mm.

Type locality: Cypress Mills, Texas. July 1.

A form not uncommon in collections and which has been placed with P. gibbicollis. Easily separated from the latter by its larger size and orange markings. Named in honor of Mr. Chas. Schaeffer who has made known to science so many rare forms from southwestern Texas.

Genus Rhaeboscelis Chev.

1833 Chevrolat p.

Type of the Genus

tenuis Lec.

1863 Leconte p. 82

1878 Schwarz p. 452

1903 Keremans p. 293

1904 Schaeffer p. 211

1909 Smith p. 295

1919 Nicolay p. 20

Type locality: Maryland.

Distribution: New York to Florida west to Illinois.

New York: Dyker Medow L. I. (19); Bellport VI-27 (19);

New Jersey: 5-mile Beach VII-4 (8); Anglesea VII (4);
Rutherford VII (4); Smoke Hill VI-13 (16).

Florida: Orlando (16).

Illinois: (Leconte).

texana Schaeffer

1904 Schaeffer p. 211

Type locality: Brownsville, Texas.

Distribution: Extreme Southern part of Texas.

Texas: Hidalgo Co. (8); Combes V-20 (10); Victoria
VIII-7 (10); Brownsville VIII-4 (c).

Host: Unknown

Genus Schizopus Leconte

1858 Leconte p. 70

Type of the Genus Schizopus leatus Leconte.

leatus Lec.

1858 Leconte p. 71

1859 Leconte p.

1891 Horn p. 46

1901 Fall p. 118

1902 Kerremans p. 44

1907 Kerremans p. 593

1913 Woodworth p. 196

Type locality: Florence, Arizona.

Distribution: Desert Regions of Arizona, California and Lower California.

Arizona: Florence (Lec.)

California: Palm Springs V-30 (c); Holotype No. 3498 "Calif." (17); Banning (15); San Diego, Inyo, Imperial Co. VI.

Lower California (9)

Host: Probably the larva mine the stems of some desert flower.

Sallei Horn

1885 Horn p. 145, pl. 4 fig. 14

1886 Henshaw p. 95

1891 Horn p. 46

1901 Fall p. 118

1902 Kerremans p. 44

1907 Kerremans p. 592

1913 Woodworth p. 196

Type locality: Mariposa Co., California.

Distribution: Southern California.

Genus Taphrocerus Solier.

1833 Solier p. 314

Type of the Genus; Brachys alboguttatus L-G (T. gracilis Say.)

agriloides Cr.

1873 Crotch p. 96

1878 Schwarz p. 363,452

1880 Zesch-Reinecke p. V11

1892 Kerremans p. 292

1896 texanus Kerremans p. 312

I896 texanus Kerr.- agriloides Cr., Horn p. 247

1903 Kerremans p. 328

1918 Dozier p. 331

1919 Blatchley p. 30

1920 Nicolay-Weiss p. 145

Type Locality; Belfrage, Texas(?)

Distribution: Along the Gulf Coast from Florida to Texas, north to Maryland and Arizona.

Florida; Jacksonville (4); Gainsville IV-3(Dozier);

Alabama: Delchamps VIII-30 (15); Caden VIII-2 (9); Mobile IV-11.

Texas: Seabrook VII-2 (8); Columbus, Brownsville VIII-4 (I);

Carmel Co. (I).

Louiiana: Covington VI-6 (9).

Georgia; Okfenokee Swamp VI-15 (4).

Marylamd: Plummers Island VIII-2 (C).

Arizona: Huachuca Mts. VII-5 (I).

Host: Taken on Juncus maritimus.

alboguttatus Mann.

See gracilis Say.

albonotatus Blat.

1919 Blatchley p. 29

1920 Nicolay-Weiss p. 148

Type Locality: Southern Florida.

Distribution: Georgia and Florida.

Georgia: Billy's Island,Okefenokee Swamp VI (4).

Florida: Jacksonville (4); Lakeland,Ft.Myers,La Belle and Dunedin, Oct.20 to Apr.10 (Blatchley).

Host: Taken on Huckleberry.

cylindricollis Kerr.

See laevicollis Leconte

gracilis Say

1825 Trachys Say p. 253

1836 Aphanisticus Say p. 165

1836 Laporte-Gory p. 2

1837 alboguttatus Mannerheim p. 120

1837 Dejean p. 94

1841 alboguttatus Mann.,Laporte-Gory II, p. 2, pl. 1, fig. 1.

1844 alboguttatus Mann., Melsheimer p. 148

1857 B.alboguttatus Mann.-T.gracilis Say. Leconte p. 9

1859 Leconte p. 251

1870 Pettit p. 102

1874 Henshaw p. 17

1878 Schwarz p. 363, 452

1878 Hubbard-Schwarz p. 656

1883 Leconte p. 389, 599

1889 Blanchard p. 32

1892 Kerremans p. 292

1895 Hamilton p. 364

1901 Fall p. 121

1903 Kerremans p. 327

1907 Fall-Cockerell p. 181

1909 Easton p. 50

1909 Wickham p. 23

1909 Blatchley p. 805

1909 Smith p. 295

1912 Gibson p. 100

1913 Manee p. 169

1913 Woodworth p. 196

1915 Johnson p. 312

1917 Chagnon p. ### 219

1919 Blatchley p. 30

1919 Nicolay p. 20

1920 Nicolay-Weiss p. 146

Type Locality: Senipuxten Island, Indiana.

Distribution: Ontario, Canada to Florida, west to Manitoba, and New Mexico. and California.

Canada: Assinbue, Man. VIII-29 (9); Ontario.

Maine: Paris VII-15 (C).

Massachusetts: Southboro VI-29 (C).

New York: Stanton Island VI (4); Peekskill (4); Long Island VII, VIII (19).

New Jersey: Lakehurst (4); Red Bank V-21 (8).

North Carolina: Black Mountains V (9).

Georgia: Clayton VIII (4).

Pensylvania: Angora Vi-15 (17).

Minnesota: Meridian Vi-18 (9).

Illinois (17). Washington, D.C. (17).

Iowa: Ames (W); Iowa City (W); Burlington (W).

Missouri: St. Louis (4).

New Mexico: (Cockerell)

1907 Kerremans p. 602

California: Los Angeles (17); Los Angeles Co.(Van Duzee)

Texas: Brownsville VIII-4 (16).

Hosts: Adults taken on leaves and flowers of button bush (Cephalanthus occidentalis), oak brush and myrtle bush.

laevicollis Lec.

1878a Leconte p. 403

1878 Schwarz p. 336

1892 Kerremans p. 292

1896 cylindricollis Kerremans p. 312

1896 cylindricollis Kerr.-Laevicollis Lec.,Horn p. 247

1920 Nicolay-Weiss p. 145

Type Locality: Florida.

Distribution: Georgia,Alabama and Florida. Pensylvania?

Georgia: Tifton VIII-24 (10); Okefenokee Swamp VI-15 (4).

Alabama; Coden VI-9

Florida: Haw Creek VI-10 (10); Green Cove Springs (4).

Hosts: Unknown,adults taken sweeping.

puncticollis Sz.

1878 Schwarz p. 363, 452.

1892 Kerremans p. 292

1903 Kerremans p. 328

1909 Blatchley p. 30

1920 Nicolay-Weiss p. 143

Type Locality: Enterprise,Florida.

Distribution: Alabama and Florida.

Alabama: Coden Vi-1 (1); Delchamps Vi-10 (C).

Florida: Paradise Key Feb., Cedar Key VI (10); Enterprise (10); Biscayne IV-29, V-28, IX-28 (8).

Hosts: Unknown.

schaefferi N-W

1920 Nicolay-Weiss p. 144

Type Locality: Brownsville, Texas.

Distribution: Taken only by Mr.Chas.Schaeffer in the vicinity of Brownsville.

Host: Unknown.

Season: August.

Genus Thrincopyge Lec.

1858 Leconte p. 17

Type of the genus Buprestis ambiens Leconte

alacris Leconte

1858 Leconte p. 17

1859 Leconte p. 219 pl. 12 fig. 2

1878 Glover, plate 45, fig. 39

1885 Horn p. 147

1888 Waterhouse p. 19

1891 Duges p. 15

1893 Townsend p. 38

1895 Townsend p. 43

1898 Cockerell p. 151

1900 Derremans p. 308

1902 Kerremans p. 45

1907 Fall-Cockerell p. 180

1907 Derremans p. 598

Type locality: New Mexico

Distribution: New Mexico, Arizona, Texas and Mexico.

New Mexico: Los Crucis (4); San Andres Mts.

Arizona: Tuscon (9); Phoenix (4)

Tesas: Alamogordo IV, El Paso 3700 ft. VI (9).

Mexico: Guanajuato and Guadalajara.

Host: Bred from the stalks of Spanish bayonett (Dasylirion wheleri)

Season: June, July.

ambiens Lec.

1854 Buprestis ambiens p. 83

1859 Leconte p. 219

1885 Horn p. 147

1895 Townsend p. 43

1898 Cockerell p. 151

1898 Wickham p. 305

1900 Kerremans p. 308

1902 Kerremans p. 45

1907 Fall-Cockerell p. 180

1907 Kerremans p. 599

1909 Wickham p. 305

1917 Burke p. 329

1917a Burke pl. IV fig. 3

Type locality: Frontera, (Rio Grande) Texas.

Distribution: Arizona, New Mexico and Texas.

Arizona: Prescott (c); Tuscon (4); Nogalis VIII-10 (9); Oracle VI-3, VII-1 (10); St. Catalina Mts. (10); Benson (13); Santa Rita Mts. (W).

Host: Spanish bayonett (Dasylerion wheeleri), Yucca (Lilioceae sp.)

laetifica Horn

1885 Horn p. 146

1886 Henshaw p. 95

1898 Cockerell p. 151

1900 Kerremans p. 309

1902 Kerremans p. 45

1907 Kerremans p. 602

Type locality:

Distribution: California, New Mexico, Arizona and Texas.

Arizona: Prescott (c)

Texas: Lectotype (male) (17); Paratype (male) (17).

Host: Unknown.

Genus Trachykele Mars.

1865 Marseul p. 149

Type of the genus Trachykele blondeli Mars.

blondeli Mars.

1865 Marseul p. 150

1869 Gemminger & Harold p.

1871 Saunders p. 21

1873 Crotch p. 87

1903 blondeli Mars = lecontei Gory - Kerremans p. 130

1906 Fall p. 160-165

1907 Fall-Cockerell p. 179

1909 Burke p. 409 fig. 32

1909 Casey p. 178

1914 Gibson p. 116

1917 Burke p. 326

Type locality (Exact type locality is not known, Marseul gives no locality. (See Ent. News Vol. 17 p. 161)

Distribution: British Columbia, Washington, Oregon, California and New Mexico.

Washington: Hoaquin VI-2, Seattle (15)

Oregon: Dilly (4)

California: Palo Alta (10); Pyramid Ranger Station (10); Placerville (10); Strawberry (15); Camino (15);

New Mexico: Santa Fe' (13).

Hosts: Western red cedar (Thaja plicata), Monterey cypress (Cupressus macrocarpa), McNab Cypress (C. macnabiana), Western juniper (Juniperous occidentalis)

Apr.-Aug.

lecontei Gory

1841 Buprestis lecontei Gory p. 107 fig. 104

1837 Dejean p. 87

1859 Leconte p. 203

1871 Saunders p. 21

1873 Crotch p. 87

1906 Fall p. 160-165

1909 Burke p. 408 fig. 30

1917 Burke p. 327

1917a Burke pl. IV fig. 2

Type locality: Louisiana.

Distribution: Virginia, North Carolina, South Carolina, Georgia and Louisiana.

Virginia: Cape Henry (10); Louisiana: La Fourche XII (10).

South Carolina: Ferguson (10)

Host: Bald cypress (Taxodium distichum).

Season: May-July

nimbosa Fall.

1906 Fall p. 164

1917 Chamberlin p. 131

1917 Burke p. 326

1917a Burke pl. VIII fig. 2.

Type locality: Marble Bridge, Tulare Co., Calif.

Distribution: British Columbia, Washington, Oregon, California and Texas.

Oregon: Corvallis (C), Yamhill VII-14 (C).

California: Marble Bridge 5200 ft. (5); Carrville VII-4 (15); Vade (10); Glen Alpine 7000 ft. VII (13); Talloc (13); Phillips Station, El Dorado Co. (15); Round Meddow, Giant Forest (Hopping).

Hosts: Grand fir (Abies grandis), white fir (A. concolor), magnificent fir (A. magnifica), Alpine hemlock (Tsugae mertensiana).

June-July.

opulenta Fall

1906 Fall p. 162

1908 Wright-Coolridge p. 67

1909 Burke p. 408, fig. 31

1909 Casey p. 178

1917 Chamberlin p. 130

1917 Chrystal p. 946-949

1917 Burke p. 326

Type locality: Tulare Co., California.

Distribution: British Columbia to California.

Washington: Near Seattle.

Oregon: Corvallis V-4 (c); Detroit IX (c).

California: Shasta Co. (15); Tuolumne Co. (15); Three Rivers (5); Lake Tahoe (15); Marin Co. (15); Towels, Placer Co., Sequoia Nat. Park (10); Pyramid R.S. (10); Mariposa Big Tree Grove VII-7 (10); Fresno (16).

British Columbia: Vancouver Island (16); (Stave Lake, North Vancouver, How Sound, Sechelt Inlet, Nelson Island, Powell Lake, Malaspina Inlet, Lund Lake, Harrison Lake (Chrystal) Lillouet V-22 (Anderson).

Hosts: Incense cedar (Libocedrus decurrens), Red wood (Sequoia sempervirons) Big tree (S. Washingtoniana), Western juniper (Juniperus occidentalis), Western red cedar (Thuja plicata), Seargents cypress (Capressus sargentii)

Season: April, May & June.

Genus Trigonogya Schaeffer.

1918 Schaeffer p. 213.

Type of the genus Mastogenius reticulaticellis Sch.

reticulaticellis Schaef.

1904 Mastogenius reticulaticellis Schaeffer p. 210.

1905 Mastogenius Schaeffer p. 149

1906 Mastogenius Fall p. 167.

1918 Mastogenius Schaeffer p. 239/

1918 Schaeffer p. 213.

Type locality: Brownsville, Texas.

Distribution: Taken only in the vicinity of Brownsville.

Texas. Probably extends into Mexico.

Host: not known.

Genus Xenorhipis Leconte

1866 Leconte p. 384

Type of the genus Xenorhipis brendeli Leconte

brendeli Lec.

1866 Leconte p. 386

1871 Saunders p. 56

1873 Crotch p. 88

1882 Horn p. 111

1884 Horn p. 174

1889 Blanchard p. 31

1896 Reinick p. 284

1903 Kerremans p. 162, pl. II, fig. 4

1906 Wenzel p. 38

1909 Smith p. 293

1909 Blatchley p. 787

1916 Morris p. 19

Type locality: Peoria, Illinois.

Distribution: New York to Texas.

New York: Brooklyn. Pennsylvania: Pittsburg VII-2 (3). Crafton Alleggenia Co. (3). Illinois: Peoria (Lec.) Georgia: Tybee Island VI-27 (c). Iowa: Iowa City (W). Massachusetts. Texas: Victoria V-11 (10).

Hosts: Bred from hickory (Hickoria sp.) and beaten from live oak in Georgia.

List of Authors and Titles

Agassiz, Louis
1850 Lake Superior, its Physical Characters, vegetation and animals. (See Leconte, for Coleoptera).

Allen, E. W.
1891 First Biennial Report, Oregon State Board Hort. (Bul. No. 4) Notes on Apple Tree Borer p. 48-51.
1893 Second Biennial Rept. Oregon State Board Hort. Notes p. 67-79.

Alcide, D'Orbigny - See Blanchard.

Angel, G. W. J.
1891 Ent. News II, Larva of Polycesta elata Lec. p. 106-107.

Anon,
1900 Calif. State Bd. of Hort. Bul. No. 71 p.

Atwood, W. B.
1893 Virginia Exp. Sta. Bul. #24 Injurious Insects - Remedial Measures for the same p. 1-20 (C. femorata p. 9)

Austin, E. P. - See Sprague.
1874 Proc. Bost. Soc. Nat. Hist. XVI, Catalogue of the Coleoptera of Mt. Washington N.H. p. 265-277. Bups. p. 269

Austin, E. P.
1882 Journ. Bost. Zoological Soc. I, Notes on Collecting certain Buprestidae p. 45 (no species mentioned).

- B -

Back, E. A.
1912 9th Ann. Rept. Virginia Entomologist. Flat-headed Apple Tree Borer p. 40.

Bartlett, J. N.
1875 New England Farmer Vol. 54 (new series Vol. 30) #244, Tree Borers.

Bethune, Rev. C. J. S.
1871 Can. Ent. III, Insects of the Northern Part of British America. (Fam. Bupr. p. 230-233).
1870 Insects of Northern part of British America from Kirby (Buprestidae p. 65-71)
1871 First Rept. Ent. Soc. Ont. Insects affecting the Apple. p. 6.
1872 Can. Ent. IV, Insects of the Northern Part of British America. (Fam. Bupr. p. 31-36)
1873 Can. Ent. V, Noxious Insects, p. 140

1875 5th Rept. of the Ent. Soc. Ont. The Flatheaded Apple tree Borer p. 13-14.
1877 Can. Ent. IX, A few Common Wood-boring Beetles p. 221-226
1877 7th Rept. Ent. Soc. Ont. A few common Wood-boring Beetles p. 22-30
1887 17th Rept. Ent. Soc. Ont. Remedies for Noxious Insects, p. 55-64. (Bupr. p. 57)
1908 38th Rept. Ent. Soc. Ont. Injurious Insects in Ontario 1907 p. 95-99

Blackman, M. W.
1915 N. Y. State Coll. Forestry Technical Publication No. 2. Observations on the life history and habits of Pityogenes hopkensi Sw. (C. femorata p. 54)
1918 N. Y. State Coll. of Forestry. Tech. Bup. #10, Vol. 18 #4. Pt. 1. Notes on Insects bred from bark and wood of Amer. Larch. (Bupr. p. 16-36, 80-85 (With Stag, H.H.)
1919 Psyche XXVI Notes on Forest Insects p. 85-96.

Blackman, M. W. and Ellis, W. O.
1916 N.Y. School of Forestry Bul. #26 Insect Enemies of Shade Trees and Ornamental Shrubs. (Buprestidae pp. 46-52).

Blackman, M. W. and Stage, Harry H.
1918 (See Blackman),

Blaisdell, F. E.
1892 Insect Life V, Notes on the Habits of some species of Coleoptera observed in San Diego County, California. p. 33-3

Blanchard,
1837-1843 Voyage dans L'Amerique Meridionale Vol. VI Insects Coleopteras. Bupr. p. 147-154.

Blanchard, Frederick
1889 Entomologia Americana V. A List of the Buprestidae of New England, p. 29-33.

Bland, James H. B.
1864 Proc. Ent. Soc. Phila. III, Descriptions of several new species of North American Coleoptera p. 381-384.
Agrilus pulchellus n. sp. p. 382
1865 Proc. Ent. Soc. Phila. IV, Descriptions of several new species of North American Coleoptera p. 65-72.
C. purpurata n. sp. p. 66.

Blatchley, W. S.
1909 The Coleoptera of Indiana, (Bupr. p. 776-807).
1913 Can. Ent. XLV, On some apparently new Coleoptera from Indiana and Florida. p. 21-24.
1914 Can. Ent. XLVI, Notes on the Winter and Early Spring Coleoptera of Florida, with descriptions of new species. p. 88-92.
1917 Can. Ent. XLIX, On some new or noteworthy Coleoptera from the West Coast of Florida. p. 236-240.

1919 Can. Ent. Ll, Some new or scarce Coleoptera from Western and Southern Florida p. 28-32

Boque, E. E.
1897 Oklahoma Exp. Sta. Bul. #26. Some Injurious Orchard Insects C. femorata p. 10-12.

Bowditch, Fred C.
1882 Journ. Boston Zool. Soc. I, Notes on Certain Coleoptera p. 27-28.
1896 Psyche VII, Chrysobothris femorata and Clerus 4-guttatus p. 387-388.
1896 Psyche VII, Supplement, II. List of Mt. Washington Coleoptera p. 1-11.

Britton, Dr. W. E.
1912 Conn. Exp. Sta. Report. A Gall-making Beetle of the Hop Horn-beam p. 291.

Broadhead,
1896 American Entomologist I, Injured Apple Trees . p. 120.

Brooks, Fred E.
1914 Journ. Agri. Research. III, Apple Root Borer, p. 179-184
1919 Farmers Bull. 1065. The Flat-headed apple tree borer, p. 11-12, figs. 1-13.

Brunner,
1893 Ann. Rept. Mich. Hort. Soc. C. femorata p. 166
1898 Ann. Rept. Mich. Hort. Soc. C. femorata p. 121
1901 Ann. Rept. Mich. Hort. Soc. C. femorata p. 51

Burke, H. E.
1907 Proc. Ent. Soc. Wash. IX, A New Buprestid Enemy of Pinus edulis p. 117-118 fig.
1910 U.S.D. Agri. Year Book. Injuries to Forest Trees by Flatheaded Borers p. 399-415 fig. 25-36.
1917a U.S.D. Agri. Div. Ent. Bul. #437. Flatheaded Borers affecting Forest trees in the United States p. 1-8 pl. I-IX
1917 Proc. Ent. Soc. Wash. XIX, Oryssus is Parasitic, p. 87-89
1917b Journ. Econ. Ent. X, Notes on some Western Buprestids, p. 325-332. A Buprestid Household Insect, Chrysophana placida p. 406
1918 Journ. Econ. Ent. XI, Notes on some Southwestern Buprestidae p. 209-211.
Biological Notes on some Flatheaded wood Borers of the Genus Buprestis p. 334-338.
1919 Journ. Econ. Ent. XII, Biological Notes on some Flatheaded Barkborers of the Genus Melanophila p. 105-108

1919 Journ. Econ. Ent. XII, Biological Notes on the Flatheaded Apple tree borer (Chrysobothris femorata Fab.) and the Pacific Flatheaded Apple tree borer (Chrysobothris mali, Horn). p. 326-330

Burrill, T. J.
1883 12th Rept. Illinois Entomologist. The Lombardy Poplar borer, Agrilus granulatus Say. p. 121-122

Butterick, Philip L.
1913 Journ. Econ. Ent. V. Notes on Insect destruction of firekilled timber in the Black hills of South Dakota p. 456-464.
1913 Reprinted in Forest Quarterly Vol. XI. p. 363

Butz, Geo. C.
1898 Penn. Exp. Sta. Bul. #43. Apples in Pennsylvania - Insect Enemies p. 13-17.

Card, Fred W.
1895 Neb. Exp. Sta. Bul. #39. Some Obstacles to Successful Fruit Growing. Flatheaded Borers p. 127-130.

Carpenter, Chas.
1870 Amer. Ento. & Botanist I, Raspberry Gouty Gall. p.129

Carpenter, W. L.
1879 North Amer. Ento. I

Casey, Thomas L.
1884 Contributions to Coleoptera II, Anthaxia p. 172-175
1909 Proc. Wash. Acad. Sci. XI, No. 2, Studies in American Buprestidae, p. 47-178
1910 Can. Ent. XLII, A Correction (B.ornata, B.decora) p.110
1914 Memoirs on the Coleoptera V, Buprestidae p. 360-363

Castle D.M.
1897 Ent. News VIII April Collecting in Georgia and Florida p. 7-9.

Castle, D. M. and Laurent, Philip.
1896 Ent. News VII, April Collecting in Georgia and Florida p. 300-305

Castleman, Castlenau see Laporte.

Caulfield, F. B.
1886 Can. Ent. XVIII, A Note on Dicerca divaricata. p. 196
1889 20th Rept. Ent. Soc. Ont. Insects Injurious to Oak, p. 55-56

Ceasar, L.
1912 42nd Rept. Ent. Soc. Ont. Insects of the Season in Ont. p. 28-36. A. ruficollis p. 31
1915 45th Rept. Ent. Soc. Ont. Forest and Shade tree Insects, p. 46 A. anxius
1917 47th Rept. Ent. Soc. Ont. Notes on some insects of the Season p. 106-110 (A. ruficollis p. 109)

Chagnon, C.
1917 A Supplement to the 9th Rept. of the Quebec Soc. for the Protection of Plants. A Preliminary List of the Insects of the Province of Quebec. Part III, Coleoptera p. 161-277. Fam. Bupr. p. 217-219.

Chamberlin, W. J.
1917 Ent. News XXVIII, Notes on some Buprestidae of Northern California. p. 129-139 & p. 166-169.
A correction p. 234 (On Trachykele).

Chamberlin, R. V.
1900 See America, Jan. 20, 1900 Agrilus anxius p. 42

Chambers, V. T.
1872 Can. Ent. IV, On Some Leaf-mining Coleopters, p. 123-125

Chambliss, C. E.
1893 Tenn. Bul. Vol. 6, #1. Some Injurious insects of the Apple C. femorata p. 8-9

Chapman, R. M.
1915 Journ. Agri. Research III, #4 Some observations on the Life History of Agrilus bilineatus p. 283

Chevrolat, Aguste
1833 Silbermann's Revue Entomologique
1834 Gray in Griffith's, In the Animal Kingdom. 3rd. Fasc. Spec. 2 Vol. 14, pl. 31, fig. 2
1834 Coleopteres du Mexique. Buprestidae (Sternoxe) p. 99, 103-104, 135-145, 189-193.
1837-8 Silb. Rev. Ento. V, - Centurie de Buprestides p. 41-110
1853 Revue et Magas Zool. V, Description d'une nouvelle espece de Buprestide p. 308-309
1854 Revue and Magazine Zoology VI, A Note on Synonomy p. 701
1867 Ann. Ent. Soc. France. VII, Coleoptera de L'lle Cuba. Bupr. p. 573-588, Notes, Synonymies et descritions d. especies nouvelles.

Childs, LeRoy
1914 Monthly Bul. Calif. Hort. Soc. III, The Oak twig Girdeler (Agrilus politus) p. 150-155

Chittenden, Frank H.
1889 Entomologia Americana V. Notes on the Habits of Buprestidae p. 217-221
1894 Ins. Life, VII, Insects noticed in the Forestry Building. (Chicago) p. 226-227.
1895 Ins. Life, VII, Some Coleopterous Enemies of the Grape Vine, p. 384-387
1897 Bu. Ent. Cir. #24, 2nd. series p. 1-8 The two lived Chestnut Borer. Agrilus bilineatus p. 1-8
1897 Bu. Ent. Bul. #7 Some Injury to Chestnut and Pine in Virginia and Neighboring States. Agrilus bilineatus p. 67-71
1898 Bu. Ent. Bul. #18 n.s. A destructive Borer Enemy of Birch trees p. 44-51.
1900 U.S.D.Agri. Div. Ent. Bul. #22 n.s. Food Plants and Injury of North American species of Agrilus p. 64-68.

1902 U.S.D.Agri. Year Book, Principal Injurious Insects in 1902. p. 726-733.
1904 Bu. Forestry Bul. #26. p. 67.
1907 Bu. Ent. Cir. 32 n.s. The Larger Apple Tree Borers p. 1-11 (Bupr. p. 9-11)

Chrystal, R. N.
1917 Agri. Gaz. of Canada IV, No. 11. The Western Cedar Borer Trachykele Sp. p. 946-49.

Clementi, V.
1872 Can. Ent. IV, Captures at North Duro, County of Peterboro, Ontario p. 37.

Clark, T. C.
1890 Ins. Life III, Maple Tree Borers. p. 161

Clemons,
1869 American Ent. I, An Orchard giving out p. 168

Close, C. P.
1900 Utah Bul. #65. The Flat-headed Apple-tree Borer p. 84.

Cockerell, T.D.A.
1888 Ins. Life I, Dicerca a Poplar Feeder. p. 58
1888 Can. Ent. V. Dicerca a Poplar Feeder p. 178
1893 Trans. Amer. Ent. Soc. XX, The Entomology of the Mid-Alpine Zone of Custer County Colorado. p. 305-370
1897 Journ. N.Y. Ent. Soc. V, Biological Notes on some Coleoptera from New Mexico p. 149-150
1898 New Mex. Exp. Sta. Bul. #28, pt. 2, The Zonal Distribution of Coleoptera. p. 136-178. (Bups. p. 151-153).
1902 Psyche IX, Records of the Habits of New Mexico Coleoptera p. 378-380
1902 Bu. Ent. Bul. #37 n.s. Notes from New Mexico and Arizona. p. 107-109.

Comstock, J. H.
1914 Manuel of Insects. Family Buprestidae p. 548-550

Cook, A.J.
1874 Rept. Mich. State Bd. Agri. Insects Injurious to Farm Garden and Orchard, p. 1-47
1887 Entomologia Amer. III, A Letter on Brachys, p. 59.
1890 Rept. Mich. Bd. of Agri. The Willow Buprestid (Agrilus torpidus) p. 119
1896 The Rural Californian, Feb. p. 66
1896 The Californis Cultivator, Dec. p. 362

Cooke, M.
Injurious Insects to the farm and Garden. A. ruficollis p. 313

Cooley, R. A.
1900 Mont. Exp. Sta. Bul. #23 Injurious Fruit Insects (C. femorata) p. 77-78
1903 Mont. Exp. Sta. Bul. #51 The Flat-headed Apple tree Borer. p. 224-227.

Coquillett, Danial W.
1892 Ins. Life IV, Notes on the habits of some Calif. Coleoptera p. 260-262.

Cordley, A.B.
1897 Ore. Exp. Sta. Bul. #45. Insects of the Prune p. 99-127 (Buprestidae p. 108-109).

Cox, D.G.
1901 31st. Ann. Rept. Ent. Soc. Ont. Notes on Insects of the year 1900. Toronto district. p. 39-40.

Crotch, G. R.
1871 Check List of Coleoptera. Buprestidae p. 70-80.
1873 Proc. Acad. Nat. Sci. Phila. XXV, Notes on the Species of Buprestidae found in the United States. p. 84-96

Crow.
1897 Calif. Tree Grower #1, p. 4

Couper, Wm.
1874 Can. Ent. VI, Anticosti Coleoptera. p. 137-138. (Bupr. p. 137)

Cuvier, Baron.
See Gray.

- D -

Daggett, Frank
1895 Ent. News VI, Notes on Collecting Coleoptera. p.311-314

Davis, G. C.
1891 Ins. Life, IV, Notes on a Few Borers. p. 64-67.
1892 22d. Ann. Rept. Ent. Soc. Ont. Notes on a few Borers. p. 80-82.
1894 Proc. Mich. Hort. Soc. Borers the Horticulturist must fight p. 78-83
1895 Mich. Bul. #121 The Pests of Orchard and Garden 80 pp. (Buprestidae p. 22)

Davis, W. T.
1912 Journ. N.Y. Ent. Soc. XX, Notes on Brachys ovata. p.305
1919 Journ. N.Y. Ent. Soc. XXVII Notes on Brachys. p. 112.

Davis, W. T. and Leng, Chas. W.
1912 Journ. N.Y. Ent. Soc. XX, Insects on a recently felled tree. (Cleveland, Fla.) p. 119-121
1914 Journ N.Y. Ent. Soc. XXII, Notes on Spring Collecting in North Carolina p. 267

DeGeer, Baron Karl.
1774 Memoires des Insects IV, Des Buprestes p. 122-144

DeJean, Pierre Fran. Marie Auguste.
1821 Catalogue des Coleopteres. 2nd. Ed. Fam. Bupr. (Sternoxes) p. 28-30

1833-36 Catalogue des Coleopteres. Fam. Bupr. p. 74-94.
1837 Catalogue des Coleopteres, 3rd. Edit. Fam. Bupr. p. 84-94 (Sternoxes).

Deyrolle, Henri.
1864 Ann. Ent. Soc. Belgi. VIII, Description des Buprestides de la Malairie recucillis par M. Wallis. p. 1-272 col. plates.

Douglas,
1911 4th Ann. Rept. Indiana Ento. Injurious Insects p. 105-143
1912 5th Ann. Rept. Indiana Ento. Flat-headed Borer p. 59-60

Dozier, H.
1918 Ent. News XXIX. An Annotated List of Gainsville, Florida, Coleoptera p. 331.

Drury, D.
1770 Illustrations of Natural History of Exotic Insects. Bups. Vol. I p. 64 plata XXX fig. 3
1838 Same as above, with figures names by J. O. Westwood. Vol. I p. 61 plate XXX fig. 3

Duges, Dr. Eugenio,
1891 La Naturleza, 2nd. series, vol. II, Description de Coleopteros indigenas de la familia do los Buprestidos, p. 1-38 plates 1 & 2 (Mexico)

Dury, Chas.
1908 Ent. News XIX, An Interesting New Agrilis from Cincinnati, Ohio. (A. ferrisi). p. 368

Duval, Jacquelin.
1857 Histoire deL'ile de Cuba (By M. Sagre) Coleo. by Duval. Buprestidae p. 56-65.

- E -

Easton, Norman S.
1909 Psyche XVI, A List of Coleoptera Collected within ten miles of Fall River, Massachusetts p. 49-57 Bupr. 50

Elliott, L. R.
1870 American Ento. & Botanist, II, Flat-headed Borer, in Soft Maple. p. 309

Engelhardt,
1912 Journ. N.Y. Ent. Soc. XX, Early Spring Collecting. p. 221

Erichson, Wilheim Fredrick
1840 Wiegmann Archiv fur Naturgeschichte, (6th year Vol II)

Bericht uber die Leistungen un Gebiete der Entomologie wahrend des Jahres 1839 p. 217-262 Buprestides p. 240-242

Eschscholtz, Friedrich.
1829 Zoologische Atlas I, Berlin 1829 Bupr. p. 7-9

Essig, O. E.
1915 Bul. Calif. Hort. Soc. Injurious and Beneficial Insects of California, Buprestidae p. 233-236

Evans, John D.
1895 Can. Ent. XXVII, The Insect Fana of the Sudbury District Ontario, p. 141-146. (Bupr. p. 146).
1897 Can. Ent. XXIX, List of Coleoptera from Halifax, N.S. p. 320-321
1903 Can. Ent. XXXV, List of Canadian Coleoptera, Bupr. p. 291
1906 Can. Ent. XXXVIII, List of the Coleoptera in the Collection of J. D. Evans, Trenton, Ont., which have not heretofore been recorded as having been taken in Canada p. 96-100

- F -

Fabricius, Jean C.
1775 Systema Entomologia p. 216-223
1777 Genera Insectorum (Genera only) p. 64
1781 Species Insectorum p. 237-277
1787 Mantessa Insectorum I (List) p. 175-184
1792 Entomologia Systametica Pt. I. p. 188-214
1793 Ento. Syst. Pts. II & III p. 185-215
1794 Ento. Syst. Pt. IV.
1798 Supplementum Entomologias Systematicae. p. 192
1801 Systema, Eleutheratorum II. p. 188-218

Falderman, Francois
1833 Bul. Soc. Imp. Nat. Hist. Mosc. Meme, Bul. Tom VI, Species novae Coleopterorum Mongoliae et Sibireae in colorum p. 46-47.

Fall, H.C.
1893 Ent. News IV, California Notes, p. 235.
1895 Ent. News V, Collecting in the Sierras of So. California, p. 97-101
1897 Can. Ent. XXIX, List of the Coleoptera of the So. Calif. Islands with notes and descriptions of new species. p. 233-244. (Bupr. p. 237).
1899 Journ. N.Y. Ent. Soc. VII, Synopsis of the Species of Acmaeodera of America North of Mexico. p. 1-37.
1900 Ent. News XI, List of a small collection of Coleoptera from Artic Alaske. p. 459-460.
1901 Occasional Papers Cal. Acad. Sci. VII, List Coleo. So.

Calif. Notes, Habits and Distribution. (Buprestidae) p. 22-23 p. 115-121.
1905 Can. Ent. XXXVII, New Species of Coleoptera, chiefly from the Southwest. p. 270-276.
1901 Trans. Amer. Ent. Soc. XXIII, American Coleoptera Acmaeodera p. 307-308.
1905 Ent. News XVI. Notes on Some California Buprestidae p. 71-74.
1906 Ent. News XVII, On the Genus Trachykele, with notes and descriptions of other North American Buprestidae, p. 160-168.
1907 Can. Ent. XXXIX, New Coleoptera from The Southwest. p. 235-243.
1907 Ent. New. XVIII, Coleopterological Notes, Synonymical and Descriptive. p. 174-177
1910 Trans. Amer. Ent. Soc. XXXVI, Miscellaneous Notes and Descriptions of N. A. Coleoptera, p. 89-197 Bupr. p. 138-139.
1910 Journ. N. Y. Ent. Soc. XVIII, On Chrysobothris Californica and Allies p. 45-52
1912 Can. Ent. XLIV, New Coleoptera, Chiefly from the Southwest, p. 40-42.
1917 Ent. News XXVIII, A New Genus and Species of Buprestidae. p. 68-68.

Fall, H. C. and Cockerell, T. D. A.
1907 Trans. Amer. Ent. Soc. XXXIII, The Coleoptera of New Mexico p. 145-272. Bupr. p. 179-181, 235-235.

Felt, E. P.
1898 Country Gentleman, Dec. 15, Vol. 63. A Destructive Borer (A. anxius) p. 993.
1899 Country Gent. Nov. 9. Chrysobothris femorata p. 917
1900 15th Rept. N. Y. State Entomologist. Insects reported 556-605.
1900 Bul. N. Y. State Museum, vol. 8 #7, Injurious and Beneficial Insects (A. anxius) p. 24
1900 16th Rept. N. Y. State Ento. Agrilus anxius in Erie Co., Pa. p. 1007.
1901 17th Rept. N. Y. State Ento. Buprestidae p. 792, 839, 859, 834, 874.
1902 18th Rept. N. Y. State Ento. Recently Introduced Species (Agrilus sinuatus) p. 122.
1902 Bu. Ent. Bul. #31, Observations on Forest and Shade Tree Insects in New York State p. 63-68.
1903 N. Y. State Mus. Bul. #76, Diseased and Dying trees and Insect Attack p. 167-173.
1903 19th Rept. N. Y. State Ento. A Note on Chalcophora virginensis p. 215.
1904 7th Rept. N. Y. Fish and Game Comm. Insects Affecting Forest Trees. p. 449-531.
1904 20th Rept. N. Y. State Ento. Synopsis of the last p. 419
1905 21st Rept. N. Y. State Ento. Plate II Work of Agrilus anxius.
1905 N. Y. State Mus. Memoir No. 8 vol. I. Insects affecting Park and Woodland trees. Buprs. p. 86-87, 280-283,

284-287 pl. 20. pl. 40 p. 257-51-261.
1906 N. Y. State Mus. Memoir No. 8 vol. II. Insects affecting Park and Woodland trees. p. 333-753
1909 N. Y. State Museum Bull. No. 141 Shade Tree Pests. p. 98, 106.
1911 Country Gentleman May 25 Vol. 76. Insects (A. anxius) p. 502.
1911 27th Rept. N. Y. State Ento. The Bronze Birch Borer p. 108-109. The two lined Chestnut Borer p. 113-114. 127
1912 28th Rept. N. Y. State Ento. The Bronze birch Borer p. 101.
1912 Garden Magazine Feb. Vol. 15, Bronze Birch Borer p. 36.
1914 Journ. Econ. Ent. Concord. VII, Notes on Forest Insects, p. 373-375.

Fisher, W. S.
1917 Can. Ent. XLIX, A New Species of Agrilus from California. p. 287-288.
1918 Proc. Ent. Soc. Wash. XX, #4, A New Species of Agrilus from Florida, P. 67-68.
1918 Proc. Ent. Soc. Wash. #8. Chryscbothris tranquebrica Gmel. versus C. impressa Fab. p. 173-177.
1919 Proc. Ent. Soc. Wash. XXI, Descriptions of a new genus and species of Buprestidae from Arizona. p. 91-93.

Fiske, W. F.
1902 Proc. 26th Ann. Meeting. Ga. State Hort. Soc. Flat-headed borers in Pecan. p. 68-75 fig. 7.

Fiske,
1908 Proc. Ent. Soc. Wash., IX, Notes on Insect Enemies of Woodboring Coleoptera, p. 23-27,

Fitch, Asa.
1855 1st. Rept. Insects of N. Y. Insects Affecting Fruit Trees. p. 1,138. Infesting Hickory p. 147-166. Infesting Forest trees 167-169.
1856 3rd Rept. Insects of New York. Insects Infesting Fruit Trees p. 322-386. The hickory 438-462.
1856 The Cultivator IV, p. 240-251
1856 The Country Gentlemen Vol. VIII, July 10
1857 Trans. N. Y. Agri. Soc. IV, 4th. Report on the Noxious and Other Insects of the State of N. Y. Insects Infesting Evergreen Forest Trees. Buprs. p. 697-707.
1857 5th Ann. Rept. N. Y. State Agri. Soc. The tooth-legged Buprestid p. 793-794.
1858 4th Rept. Nox. and Other Ins. of N. Y. Insects infesting Evergreen trees p. 688-780.
1858 5th Ann. Rept. N. Y. Agri. Soc. Insects Infesting Deciduous Forest Trees. p. 782-854.

Fletcher, James.
1878 8th Rept. Ent. Soc. Ont. (1878-79) An Outline Sketch of the Canadian Buprestidae p. 46-54.
1884 14th Rept. Ent. Soc. Ont. A Note on B. fasciata. p. 16.
1886 16th Rept. Ent. Soc. Ont. A Note on P. cyanipes. p. 10.

1896 Farmers Advocate of Ontario. C. femorata p. 187
1901 Ann. Rept. Exp. Farms of Canada. (Issued 1902) Fruit Pests p. 197, 237-249.
1902 32nd. Ann. Rept. Ent. Soc. Ont. Notes of Captures, Coleoptera p. 106-107.
1904 34th. Ann. Rept. Ent. Soc. Ont. Notes of Captures, Coleoptera p. 95-97
1906 36th Rept. Ento. Soc. Ont. Notes of Captures. Coleoptera p. 100-102.
1907 37th Rept. Ent. Soc. Ont. Notes of Captures, Coleoptera p. 100-101

Fleutiaux, Ed. et. Salle, A.
1889 Ann. Soc. Ent. de Fr. 6 ser IX, Liste des Coleopteres de la Guadelupe. p. 358-484, Buprs. p. 403-405

Foville, E.E. and Parrott, P.J.
1898 Kansas Bul. #77. Some Insects Injurious to Orchards. The Flat-headed Borer p. 47-49.

Forbes, Stephen A.
1890 Psyche V. The American Plum Borer. p. 295.

Frost, C.A.
1909 Psyche XVI Coleoptera taken at Farmingham, Mass. p. 67-68.
1910 Journ. N.Y. Ent. Soc. XVIII, A New Species of Chrysobothris from Maine p. 43-45.
1912 Can. Ent. XLIV, New Species of Coleoptera of the Genus Agrilus. p. 245-252
Collecting Coleoptera in a Maine Sawmill yard p. 304-308
1915 Can. Ent. XLVII, June Collecting in Maine. p. 141-145.
1915 Ent. News XXVI, List of Coleoptera Collected from Tangle-Foot p. 269-270.
1916 Can. Ent. XLVIII, Collecting Notes and Random Observations on the Maine Coleoptera. p. 381-390.

Fuller, A.S.
1880 American Entomologist III, 2nd ser. vol. I, The Insect Enemies and Diseases of our Small Fruits. p. 91-93.

Fyles, Rev. Thomas W.
1906 36th Rept. Ent. Soc. Ont. Forest Insects. p. 56-61.

- G -

Garcia, Fabian
1918 New. Mexico Bul. #68 Injurious Insects. C. femorata, p. 48.

Gardiner, F.
1879 Psyche II, Coleoptera of the White Mountains p. 211-213

Garman, H.
1908 Ky. Exp. Sta. Bul. #133. Apple Orchard Pests of Kentucky

p. 14-62.
1916 Ky. Exp. Sta. Bul. 200. The locust borer and other enemies of the Black Locust p. 101-135.

Garnett, R. T.
1918 Ann. Amer. Ent. Soc. XI,
1918 Ent. News XXIX Beetle Hippomelas sphenicus prey of Wasps p. 142
1920 Can. Ent. LII Variations in Buprestis viridisuturalis p. 17-18. plate

Gay, Claudio
See Solier, A.J.J.

Gebler, Frederic Aguste.
1830 Libed. Reise II, Notes et Additions au Catalogue de la Siberia Occidentates et des confines de la Sibérie. Bul. Soc. Imp. Nat. Mosc. VIII, p. 41-80.

Gemminger, Dr et Harold, B. de.
1869 Catalogue Coleopterous Synonymicus et Systamaticus, vol. V. Buprestidae p. 1385-1422.

Germar, E.F.
1824 Insectorum Species Novae aut minus cognitae, Descriptionibus Illustratae Buprestidae p. 37-40.

Germain F.
1916 Ottawa Naturalist, V. Buprestidae known to occur in the Ottawa district, p. 129-130

Gibson, Arthur.
1904 34th Rept. Ent. Soc. Ont. Basswood, or Linden Insects p. 50-61
1907 37th Rept. Ent. Soc. Ont. Basswood, or Linden Insects p. 78-80
1908 38th Rept. Ent. Soc. Ont. Notes of Capture. Buprestidae p. 125-126
1909 39th Rept. Ent. Soc. Ont. Report of Captures. Coleoptera p. 107-109 (C. angulicollis 109).
1910 40th Rept. Ent. Soc. Ont. Report on the Insects of the year p. 9-14.
Notes of Captures p. 122
1911 41st Rept. Ent. Soc. Ont. Notes on Captures. Bupr. p. 114.
1912 42nd Rept. Ent. Soc. Ont. Report on the Insects of the year p. 24.
Notes of Captures Buprestidae p. 100
1913 43rd Rept. Ent. Soc. Ont. Captures of the year. Coleo. p. 124-130, Bupr. p. 126
1914 44th Rept. Ent. Soc. Ont. Notes of Captures Bupr. p. 116.
1915 45th Rept. Ent. Soc. Ont. Notes of Captures Bupr. p. 137
1917 47th Rept. Ent. Soc. Ont. Notes of Captures Bupr. p. 149
1918 48th Rept. Ent. Soc. Ont. Notes of Captures Bupr. p. 112

Gillette, C. P.
1887 Can. Ent. XIX, Brachys aerosa and Brachys ovata. p. 138-139.
1889 Iowa Bul. #5 Important Injurious Insects "Borers" p. 177-178.
1902 Colo. Bul. #71 Insects and Insecticides "C. femorata" p. 10,40.

Glover, Towend
1869 U.S.D.Agri. Rept. for 1868 Food Habits of Beetles. (Bupres. p. 91-92)
1871 U.S.D.Agri.Rept. for 1870 and Rept. U.S.Ento. & Curator of Mus. 1870 p. 65-75
1878 Illustrations of North American Entomology (no text) Vol. I, Coleoptera plates X, XI, XVI, XX, XXXIII, XXXIV, XXXVI, XXXVIII, XL, XLI, XLII, XLIV, XLV, C.

Gmelin,
See Linne.

Goeze, J.A.E.
1777-1789 Entomologeische Beitrage zu des Rittes Linne Zwofften Ausgabe des Natursystems I (1777) p. 9et 736; II (1778) p. 72 et 352; III pt. I (1779) p. 40 et 390; pt. II (1781) p. 48 et 439.

Gory, H.
1836-1841 Monograph des Buprestidae. See Laporte.

Gray,
1832 The Animal Kingdom vol. XIV, Class Insects Vol. I Supplement on the Sericornes p. 356-383. Bupr. 357-358.

Grant, C. E.
1915 45th Rept. Ent. Soc. Ont. Insects of Orillia District p. 16 (A. ruficollis)

Griffith, H.A.
1900 Ent. News XI, Coleopterous Fauna of Phoenix Arizona and Surrounding Regions. p. 561-570 (Buprestidae p. 568)

Griffith, Edward.
See Gray.

Grossbeck, J. A.
1912 Journ. N.Y.Ent. Soc. XX, Habits of Cerceris fumipennis. p. 135

Gundlach, Dr. Juan.
1893 Contribucion a la Entomologie Cubana, III, pt. 5 Coleoptera p. 159-169
1894 Funa Puerto Riquena. Ann. de la Soc. Espanola de Hist. Nat. ser. II, vol. II. p.

Gurguard,
1886 16th Rept. Ent.Soc.Ont. Insects and Orchids (Ottawa) p.47

Gyllenhal, Lenardo
1808 Insecta Svecica (Coleoptera) vol. I. Fam. Bupres. p. 439-461.

- H -

Hamilton, John
1886 Can. Ent. XVIII, Natural History Notes on Certain Coleoptera(№I) p. 26-30.
1888 Can. Ent. XX, Natural History Notes on Coleoptera (No. 4) p. 61-67
1889 Trans. Amer. Ent. Soc. XVI, Catalogue of the Coleoptera common to North America, Northern Asia and Europe, with distribution and bibliography. p. 88-162. Bupr. p.138-139.
1889 Can. Ent. XXI, A Correction, D. prolongata. p. 105.
1891 Ins. Life IV, Comment, on the 5th Rept. of U.S.Ent. Commission. p. 129-132.
1893 Can. Ent. XXV, List of the Coleoptera taken at Sparrow Lake Ontario, p. 272-279.
1894 Trans. Amer. Ent. Soc. XXI, Catalogue of the Coleoptera of Alaska with Synonomy and distribution p. 1-38 Bupr. p. 29.
Cat. of Col. common to N.A., N. Asis and Europe, with distribution and bibliography p. 345-416 Bupr. p. 391
1894 Can. Ent. XXVI, Coleoptera taken at Lake Worth, Fla. p. 250-256.
1895 Trans. Amer. Ent. Soc. XXII, Catalogue of the Coleoptera of Southwestern Pennsylvania, with notes and descriptions p. 317-381. Bupr. p. 334, 364.
1895 Can. Ent. XXVII, Coleoptera taken at Lake Worth, Fla. p. 317-319.
1896 Ent. News VII, Random Notes on Coleoptera. p. 291-293
1896 Can. Ent. XXVIII, Notes on Coleoptera. p. 261-265. Bupr. p. 263

Hansen, J.F.
1886 Can. Ent. XVIII, Note on Dicerca obscura. p. 78

Harrington, W. Aague.
1879 Rept. Ent. Soc. Ont. p. 35, 52.
1879 Can. Ent. XI, A Note, p. 119
1881 Trans. Ottawa Field Naturalist's Club No. 2, On Some Coleo. Injurious to our Pines. p. 28-33
1882 12th Rept. Ent. Soc. Ont. Field Notes. 1881 p. 25
1882 Can. Ent. XIV, Field Notes. p. 7
1883 Can. Ent. XV, A Note. p. 60. A Note p. 79-80
1883 13th Rept. Ent. Soc. Ont. Insects Collected in 1882 p. 35-38.
1883 Ottawa Field Naturalist's Club vol. II, List of Ottawa Coleoptera. p. 23
1884 14th Rept. Ent. Soc. Ont. (Insects collected in 1882 at Ottawa. p. 35-36)
Injurious Insects Infesting the Hickory p. 42-52.

1884 Can. Ent. XVI, Additions to the Canadian List of Coleopter. p. 70-73 and p. 101-102.
A Note p. 218.
1885 15th Rept. Ent. Soc. Ont. Notes on a June Ramble. p. 30-31.
1887 17th Rept. Ent. Soc. Ont. Insects Infesting Maple Trees. p. 22-33 Bupr. p. 31
1890 Can. Ent. XXII, On the List of Coleoptera, published by the Geological Survey of Canada. Bupr. p. 159
1890 20th Rept. Ent. Soc. Ont. (1889) Insects Infesting Willows. Bupr. p. 51-58.
1891 21st Rept. Ent. Soc. Ont. (1890 Hymenoptera Parasitica. p. 64-73 Bupres. p. 70-71
1894 Can. Ent. XXVI, An Entomological Trip to Cooper Cliff, Ont. p. 9-16.
1894 25th Rept. Ent. Soc. Ont. (1894) Notes on a few Canadian Coleo. p. 47
1897 27th Rept. Ent. Soc. Ont. Some Beetles occurring upon Beech. (Ottawa) p. 69-76
1903 33rd Rept. Ent. Soc. Ont. Notes on Insects Injurious to Pines p. 114-117.
1907 37th, Rept. Ent. Soc. Ont. p. 70-71.

Harris, T. C.
1890 Ins. Life II, A Curious Case, p. 369

Harris, T. W.
1829 New England Farmer, VIII, p. 8
1852 Insects Inj. to Vegetation (1st ed.) p. 42-50
1862 Insects Inj. to Vegetation (3rd ed.) p. 48
1869 Bost. Soc. Nat. Hist. I Entomological Correspondence of T. W. Harris, p. 36, 224-225, 357-359.
1899 Psyche VIII, Manuscript Notes by the Late T. W. Harris on Say's insects and papers p. 411-414

Harvey, F. L.
1888 Rept. Me. Exp. Sta. C. femorata p. 155-157
1899 Maine Bul. #56 Apple Insects of Maine. (C. femorata) p. 109

Harvey, F. L. and Knight, O. W.
1897 Psyche VIII, Insects collected at Jackson, Maine p. 77-79

Hayward, R.
1883 Quarterly Journal Boston Zoological Soc. II, A Note on Acmaeodera culta p. 56

Henshaw, Samuel.
1874 Psyche I List of Coleoptera Collected in the vicinity of Cliftondale, Mass. June 12, 1873, Bupr. p. 17
1885 Check list of North American Coleoptera. Bupr. p. 72-75
Supplement No. 1
Supplement No. 2
1895 Supplement No. 3
1886 Ent. Amer. II, Record of some Contributions to the Literature of North American Beetles, published in 1885, p. 93-95.

Hentz, N. M.

1827 Journ. Acad. Nat. Sci. Phila. V. part II, Description of some new species of North American Insects p. 373

Herbert, F. B.
1919 Journ. Econ. Ent. XII No. 4 Insect Problems of Western Shade Trees p. 333-337

Herbst, Jean Fredric.
1801 Natursnstem aller betannten in und auslandischen Insecten der Kefer IX. American Buprestidae p. 79-253.

Heyne, Allexander, and Taschenberg, Otto.
1908 Die Exastischen Kafer in Wort und Bild. Family Buprestidae p. 123-146 - Plates 22-24.

Hillman, F. H.
1897 Nevada Bul #36, Some Injurious Insects of Western Navada Flat-headed Apple Tree Borer p. 2-4.

Hitchings, E. F.
1907 3rd Rept. Maine Ento. Principal Insects of the Orchard, p. 94-102. Insects collected from under Burlap. p. 13 (C. femorata).

Holdeman, S.S.
1846 Quart. Journ. Agri. and Science, IV, Agrilus ruficollis p. 300
1846 Reprinted Trans. N.Y. Agri. Soc. VI, The Agrilus ruficollis p. 374, fig. 1

Holland, W. J.
1888 Can. Ent. XX, List of the Coleoptera taken at Nanaimo, (Canada), June 20, 1887, p. 91-92
1900 Ent. News IX, Alaska Insects. p. 416-423

Hopkins, Dr. A. D.
1890 3rd Ann. West Va. Rept. The Raspberry Gouty-Gall Beetle p. 160-163 fig. 1
1890 Ins. Life III. A Parasite of Agrilus. The Lady-bird Parasite p. 19
1891 Ins. Life III Entomological Work in W. Va. p. 435
1891 W. Va. Bul. #15. The Raspberry gouty-gall beetle A. ruficollis pp. 81-84 figs.
1891 Reprint of the above as a circular p. 1-6.
1892 Ins. Life IV, Some bred West Va. Branconidae. p. 256-259
1893 W.Va.Agri.Exp. Sta. Bul. #32 Catalogue of West Virginia Forest and Shade Tree Insects p. 171-251 Bupr. p. 181-184.
1894 Ins. Life VII, Notes on some discoveries and observations of the year in W.Va. p. 145-151
1894 Ent. News V, A Note on A. bilineatus. p. 251
1896 Can. Ent. XXVIII, Some notes on Insect Enemies of Trees p. 243-250. Bupr. 246.
1896 9th Ann. Rept. W.Va. Exp. Sta. - Rept. of Entomological Dept. Part II & III p. 94-155 (Issued 1897)

1898 Proc. 19th Ann. Meeting Soc. Promo. Agri. Sci. Agrilus p. 103, 108.
1898 U. S. D. Agri. Div. Ent. Bul. #17 new ser. Buprestid Beetles breeding in seasoned hickory p. 46 - Buprestid larva destructive to living White Pine timber p. 47-48
1899 W. Va. Exp. Sta. Bul. #56 Report on Investigations to Determine the Cause of Unhealthy conditions of the spruce and pine from 1880-1893. pp. 1-461. (Fam. Buprestidae p. 255 and 436-437.)
1902 Bu. Ent. Bul. #32 n.s. Insect Enemies of Pine in the Black Hills Forest Reserve. p. 1-24
1903 U. S. Dept. Agri. Yr. Book. Insects Injurious to Hardwood Forest trees p. 313-328
1904 U. S. Dept. Agri. Div. Ent. Bul. #48 Catalogue of Exhibits of Insect Enemies of Forests and Forest Product. L. P. Exp. St. Louis 1904 pp. 56, pls. 22. Bupr. p. 21,22, 38, 39, 46
1907 Proc. Ent. Soc. Wash. VIII, Note on A. bilineatus. p. 99
1909 Bu. Ent. Bul. #58 pt. 5 B. apricans, p. 62

Hopping, Ralph.
1902 Ent. News XIII, Notes on Acamaeodera maricopa, p. 202

Horn, Dr. Geo. H.
1866 Proc. Ent. Soc. Phila. VI, Notes on the Habits of a few California Coleoptera p. 289-293
1868 Trans. Amer. Ent. Soc. II, Catalogue of Coleoptera from South West Virginia p. 123-128
New Species of Coleoptera from the Pacific District of the United States. p. 129-140.
1870 Trans. Amer. Ent. Soc. III, Contributions to the Coleopterology of the U. S. p. 69-97.
1875 Trans. Amer. Ent. Soc. V, Synonymical Notes and Descriptions of North American Coleoptera p. 126-156. Bupr. p. 147-48
1878 Trans, Amer. Ent. Soc. VII, Revision of the Species of Acmaeodera of the United States p. 2-27
1880 Trans. Amer. Ent. Soc. VIII, Contributions to the Coleopterology of the U. S. p. 139-154
1882 Trans. Amer. Ent. Soc. X, Revision of the Species of some Genera of Buprestidae p. 101-112.
1883 Trans. Amer. Ent. Soc. X, Miscellaneous notes and short studies of North American Coleoptera. p. 269-312. Bupr. p. 286-288
1884 Can. Ent. XVI, A Note on the Genus Xenorhipis, p. 147
1885 Trans. Amer. Ent. Soc. XII, Contributions to the Coleopterology of the U. S. No. 4 p. 128-162; Bupr. p. 144-147.
1886 Trans. Amer. Ent. Soc. XIII, A Monograph of the Species of Chrysobothris inhabiting the U. S. p. 65-124 pl. 2-8
1886 Trans. Amer. Ent. Soc. XIII, Review of the Species described by Oliver in the "Entomologie". p. 135-144; Bupr. p. 137,
1887 Ent. Amer. III, Some Additional Synonomy p. 145
1889 Ent. Amer. V, Synonymical Notes,. p. 198-199
1891 Trans. Amer. Ent. Soc. XVIII. The Species of Agrilus of Boreal America. p. 277-336.
New Species and Miscellaneous Notes p. 32-47 (Bupr. p. 45-47)

1893 Trans. Amer. Ent. Soc. XX, Miscellaneous Coleopterous Studies p. 136-138
1894 Proc. Calif. Acad. Sci. IV, The Coleoptera of Baja California, p. 302-449 (Bupr. p. 327-329, 366-379)
1896 Ent. News VII, A Note on Buprestis Synonymy p. 247

Horsfall,
1904 Mo. Fru. Exp. Sta. Bul. #9 C. femorata p. 31

Houghton, C. O.
1905 Ent. News XVI, A List of Coleoptera p. 50-51.
1908 Can. Ent. XL, Coleoptera Affecting the Honey Locust. p. 160-163.

Houser, J. S.
1918 Ohio Ag. Exp. Sta. Bul. 332. Destructive Insects Affecting Ohio Shade and Forest trees 487 pp. A. anxius p. 326-327.

Howard L.O.
1894 Ins. Life VII, A New Pear Insect p. 258-261
1901 Bu. Ent. Bul. #30 Notes from Correspondence (Melanophila) p. 97
1916 Journ. Econ. Ent. IX, A Note on C. impressa. p. 452

Hubbard, H. G.
1877 Psyche II, Beetles which Infest Elm Trees, p. 40

Hubbard, H. G. and Schwarz, E. A.
1878 Proc. Amer. Philos. Soc. XVII, Coleoptera of Michigan. p. 593-669.
Part 2, List of Coleo. found in the Lake Superior Region. p. 627-643; Bupr. p. 636
Part 3, List of the Coleoptera of the Lower Peninsula of Mich. p. 643-666; Bupr. p. 655-656.

Huguenin, J. C.
1915 Ent. News XXVI, An observation on a Buprestid, p. 364

Hutchings, C. B.
1917 9th Ann. Rept. Que. Soc. for the Protection of Plants etc. Two Destructive Shade tree Borers. p. 65-70.

- I -

Illiger, Karl
1800 Wiedem Arch IV, I, 14 Nouveaux insects de la Collection d'Hellwig. p. 122
1802 Magizine für Insektenkunde Vol. I, part 9, Prüfende Uebersicht des 1801 aufgestellten neuen Guttungen und Arten. p. 242-252.
1805 Magazine für Insektenkunde, vol. IV, Zusatze, Berichtigungen und Bemerkungen Zu, Fabr. Syst. Eleu. Fam. Bupr. p. 85-96.

- J -

Jack, John G.

1894 Trans. Mass. Hort. Soc. Part I Notes on some Injurious Insects p. 133-150

Jarvis, T. D.
1907 37th Rept. Ent. Soc. Ont. Insect Galls of Ontario, p. 56-72.

Johnson, Harry L.
1901 American Agriculturist Sept. 7, C. femorata p. 220
1915 Ent. News XXVI, Coleoptera found in the vicinity of Meriden Connecticut, p. 307-319. Bupr. p. 312

Jones, J. Matthew
1870 Contributions to the Natural History of Nova Scotia. Insects, Coleoptera pt. 1 (15 page pamphlet) Bupr. p. 8-9

- K -

Kerremans, Chas.
1892 Memo. Soc. Ent. Belq. No. 1, Catalogue Synonymque des Buprestides decrits de 1758 a 1890 pp. 304.
1896 Ann. Belgique Ent. Soc. VII, p. 302-333 Trachydes Nouvaux
1897 Memoires Soc. Ent. Belgique VI. Buprestides du Brazil p. 1-146.
1900 Ann. Soc. Ent. Belg. XLIV, Buprestides Nouveaux et Remarques Synonymiques. p. 282-351.
1902-3 Genera Insectorum, Fasc. 12 Family Buprestidae, pt. I 1902 pt. II, III, and IV, 1903
1906-1914 Monographie des Buprestides.
Vol. I 1906 Vol. IV 1909-10
Vol. II 1906-07 Vol. V 1910-11-12
Vol. III 1908-09 Vol. VI 1912-13
Vol. VII 1913 (Not complete)

Kilman, A.H.
1894 Can. Ent. XXVI, Additions to the List of Canadian Coleoptera. p. 48-50

Kirby, Rev. Wm.
1837 Fauna Boreal America vol. IV, Buprestidae p. 151-162
1885 Text Book on Entomology.

Knaus, Warren
1903 Ent. News XIV, Coleoptera of the Scramento Mountains of New Mexico p. 172-180. Bupr. p. 175-176
1905 Can. Ent. XXXVII, Central Texas Coleoptera. p. 348-352
1908 Can. Ent. XL, Notes on Coleoptera. p. 91-92

Knull, Josef N.
1920 Ent. News XXXI, Notes on Buprestidae with Descriptions of New Species. p. 4-12

Kunze, R. E.
1904 Ent. News XV, Protective Resemblance. p. 239-244. (Bupr. p. 242-243)

Kwiat, Alex.
1915 Ent. News XXVI, A Note p. 237

- L -

Lacordaire, J. F.
1857 Nouveller Suites a Buffon Coleo. IV, Historie Naturelle des Insects, Genera des Coleopteres. Buprestes, Family No. 32 p. 1-89 (Mostly on Tribes and Genera)

Laporte, F. L. de, Comte de Castleman et Gory, H.
1835 Silbermann's Revue III, Etudes Entomologiques, on Descriptions d'insects nouveaux p. 157-166 (Some Amer. genera)
1835-1841 Historie Naturelle et inconographie des Insects Coleopteres. Monograph des Buprestides.
1837 Vol. I
1841 Vols. II, III, & IV, by Gory alone.

Larsen, L. T.
1916 U.S.D.Agri, Bul. #426 Sugar Pine. "Insects" p. 6-7

Larsen, John
1902 3rd. Rept. Mich. Acad. Sci. p. 46-49. A Disease of White Birch.

Laurent, Philip
1892 Ent. News III, Some of the Insects Collected at Julesburg, New Jersey., July 4 1891, p. 36-38
1894 Ent. News IV, Coleoptera of the Mountain Regions of North Carolina. p. 6-7

Le Baron, Dr. Wm.
1874 4th. Illinois Report. On Noxius and Beneficial Insects of Illinois. Family Buprestidae p. 94-96.

Leconte, Dr. John L.
1850 (See Agassiza) Remarks on the Coleoptera of the Lake Superior Region. Bupr. p. 227
1852 Proc. Acad. Nat. Sci. Phila. VI. Remarks on some Coleopterous Insects collected by S. W. Woodhouse, M.D., in Missouri territory and New Mexico p. 65-68
1854 Proc. Acad. Nat. Sco. Phila. VII. Descriptions of some New Coleoptera from Oregon, collected by Dr. J. G. Cooper p. 16-20.
Notes of some Coleopterous Insects from the Collections of the Mexican Boundary Commission p. 79-85.
1857 Proc. Acad. Nat. Sci. Phila. IX, Index to the Buprestidae of the United States. Described in the Work of Laporte and Gory, with Notes. p. 6-10
1857 Rept. Pac. Explor. 47th. Parallel. Insects vol. XII, p. 1-72
1858 Proc. Acad. Nat. Sci. Phila. X, Description of New Species of Coleoptera, chiefly collected by the U.S. and Mexican Boundry Commission p. 59-71 Table of Polycesta.
1858 Journ. Acad. Nat. Sci, Phila. ser. 2, IV p. 9-42
1859 Proc. Acad. Nat. Sci. Phila XI Catalogue of the Coleoptera of Fort Tejon, California. p. 69-90. Bupr. p 71-72
1859 Trans. Amer. Phil. Soc. 2d. ser. XI, Revision of the

Buprestidae of the United States. p. 187-258 pl. 12 fig. 1-8.
1861 Proc. Acad. Nat. Sci. Phila. XIII, New Species of Coleoptera Inhabiting the Pacific district of the United States p. 338-359. Bupres. p. 346
1863-1866 Smithsonian Misc. Coll. vol. VI, pt. I, New Species of North American Coleoptera pp. 1-178. (3 n.sp)
1863 List of N.A. Coleoptera p. 41-44
1866 Proc. Acad. Nat. Sci. Phila. List of Coleo. coll. near Ft. Whipple, Ariz. by Dr. E. Couse 1864-65 p. 348-349 Additions to the Coleopterous Fauna of the United States No. I. P. 361-401; Bup. 383-386
1873 Proc. Acad. Nat. Sci. Phila. XXV, Synonymical Remarks upon North American Coleoptera. p. 321-337; Bupres. p. 330-333.
1878 Bul. U.S. Geological and Geographical Survey of the Territories Vol. IV, The Coleo. of the Alpine Reg. of the Rocky Mountains p. 447-480. Bupres. p. 459-464, 467, 472.
1878a Proc. Amer. Philo. Soc. XVII p. 353-472.
1878 Proc. Amer. Philo. Soc. XVII, Remarks on Geographical distribution. p. 470-471.
1882 Geological and Natural History Survey of Canada, Report of Progress for 1880-81-82. List of the Coleoptera Collected in 1881 by Dr. Bell and others in the Lake Superior Region and in the Northwest Territory. Eleven Lists, 1-2-3-5-6-8-9 & 10, mention species of Buprestidae. (No pagination).
1883 Complete Writings of Thomas Say, Edited by Leconte. Fam. Buprestidae.
Vol. I p. 300
Vol.II p. 587-599

Leng, Chas. W.
1884 Bul. Brooklyn Ent. Soc. VII, North Carolina Notes p. 76-77.
1886 Ent. Amer. I, Note on Chrysobothris azurea p. 231.
1912 Journ. N.Y. Ent. Soc. XX, Larva of Brachys in Oak. p.193 Collecting Beetles in Georgia, p. 298
1914 Journ. N.Y. Ent. Soc. XXII, Note on G. carolinensis. p. 183

Leng, C. W. & Mutchler, A.J.
1914 Bul. Amer. Mus. Nat. Hist. vol. 33, art. 30. A Preliminary List of the Coleoptera of the West Indies. Buprestidae p. 429-31.
1917 Bul. Amer. Mus. Nat. Hist. vol. 37, art. 5. A supplement to the List of W. Ind. Coleo. p. 191-220.

Linne, Caroli A.
1758 Systema Naturea -(Original Description Agrilus viridis p.410)
1760 Systema Naturea 10th Ed.* p. 408
1767 Syst. Natu. 12th Ed.* p. 661

*Note: There were several editions of the Systems Naturea

published, 1760, 1767, 1789, 1790. That part of these editions dealing with species of Buprestidae found in the U. S. seems to be identical.

1788 Syst. Natu. Gemlin Edition XIII, Fam. Bupres. p. 1926-1941
1789 Entomologia I, (A description of the Genus Buprestis and 41 species including a few American species) p. 327-340 pl. 1

Lintner, A. J.
1880 Country Gent. vol. 45, April 1, p. 215
1885 2nd Rept. N.Y. State Ento. A Wash for the Apple tree Borer. p. 27-28.
1889 42nd. Rept. N.Y. State Mus. (5th Rept. on Inj. and Other Ins. of N.Y.) Collections in Adirondac Regions. 283-286. A note on Agrilus torpidus p. 317.
1890 (6th Rept. N.Y. State Ento.) 43rd Report N.Y. State Mus. Nat. History pp. 103-203.
1894 48th Rept. N.Y. State Mus. Nat. Hist. (1895) (10 Rept. on Injurious and Other Insects of N.Y.) Injurious Insects A. ruficollis p. 406-407 - Coleoptera p. 526-529.
1897 Country Gent. April 1, Chrysobothris femorata p. 307

Lovell, J. H.
1915 Psyche XXII, A Preliminary List of the Authophilous Coleoptera of New England. p. 109-117. Bupr. p. 112.

Lugger, Otto.
1884 Psyche IV, Food-plants of Beetles Bred in Maryland. p. 203
1890 Ann. Rept. Minn. State Hort. Soc. Insects Injurious to Small Fruits p. 164-170. A. ruficollis p. 165
1898 Mich. Exp. Sta. Bul. #66, p. 85
1898 Ann. Rept. Mich. Hort. Soc.
1899 5th Ann. Rept. of the Entomological State Experiment Station Minn. Coleoptera of Minnesota Bupr. p. 50-61

- M -

Manee, Rev. A.H.
1913 Ent. News, XXIV, Observations on Buprestidae at Southern Pines, North Carolina. p. 167-171.

Mannerheim, Charles Gustave.
1837 Bulletin de la Sosiete Imperiale des Naturalistes de Moscou X, #8. Enumeration des Buprestides et descriptions de nouvelles especes de cette faville de Sternaxes (Buprestids) de sa Collection. 269 spv. p. 3-126. (Revised by Chevrolat in Silber Rev. V. p. 196-204)
1843 Bul. Soc. Imp. Mosc. XVI, #2, Beitrag zur Kaffer Funa des Aleutischen inselin, des Insel Sitkha und Neu Californiens. p. 175-314. Bupres. p. 236-237.

Marlott,
1891 Prox. Ent. Soc.Wash. II, Note on the food habits of Psiloptera drummondi L-G p. 43

Marseul, S. A. de.
1865 L'Abeille II, Monograph des Buprestidae pp. 1-540 (One new genus and species from the U.S. Trachykele blondeli p. 149)

Marten, J.
1890 Prarie Farmer Sept. 6, p. 7.
1892 Prarie Farmer Dec. 4, The Red Necked Cane borer p. 24.

Matz, J.
1918 Florida Exp. Sta. Bul. #147. Diseases and Insect Pests of the Pecan. p. 135-162. Bupr. p. 157-159 fig. 20

McCarthy, Gerald
1893 N. Carolina Bul. #92 part II. The Diseases and Insects Affecting Fruit Trees and Plants. Flat-headed Borer p. 95, 129.

McClatchie, A. J.
1903 Ariz. Bul. #47. Combating the Flat headed Borer p. 307-310

MacGillivory, Alex & Houghton, C. C.
1902 Ent. News XIII, A List of Insects taken in the Adirondack Mountains of N.Y. p. 247-253. Bupres. p. 251

McMillan, Conway.
1888 Neb. Exp. Sta. Bul. #2 Vol. I Twenty-two Common Insects of Nebraska. Flat-headed Borer p. 84-86

Melsheimer, Fred Val.
1806 A Catalogue of the Insects of Pennsylvania, Bupres. p. 45-46
1844 Proc. Acad. Nat. Sci. Phila. II, Descriptions of New Species of Coleoptera of the United States p. 134-160. (Bupres. p. 142-148)
1853 Catalogue of the described Coleoptera of the United States. Revised by S. S. Holdeman and J. L. Leconte. Bupr. p. 62-66

Moffat, J. A.
1900 30th Rept. Ent. Soc. Ont. Notes on the Season of 1899 p. 98-100. Bupr. p. 100

Morris, Francis J. A.
1908 Can. Ent. XL, Some Beetle Haunts. p. 441-449
1909 39th Rept. Ent. Soc. Ont. Some Beetle Haunts p. 56-63
1911 41st Rept. Ent. Soc. Ont. Beetles found about foliage p. 45-49
1916 46th Rept. Ent. Soc. Ont. A Note, p. 19
1917 47th Rept. Ent. Soc. Ont. Report on the Insects of the Year. p. 15-23

Motschulsky, Victor de
1852 Etudes Entomologiques. Nouveates. Bupres. p. 77
1859 Bul. Soc. Imp. Nat. Mosc. vol. 32 III, Coleopteres Nouveaux de la Californie, Bupres. p. 180-185.

1860 Coleopteres de la Siberia Orientale, Bupr. p. 107-109

Murtfeldt, Mary E.
1888 Colmans Rural World, vol. 41, #13, Mar. 29, 1888. The Flat-headed Apple Tree Borer. p. 99

Mutthowski, Richard A.
1910 Bul. Wis. Nat. Hist. Soc. VIII, #3. A New Species of Chalcophora from Wisconsin p. 135-356

- N -

Nicolay, Alan S.
1917 Bul. Brooklyn Ent. Soc. XII, Buprestidae and Cerambycidae from Maine. p. 92-94.
1917 Journ. N.Y. Ent. Soc. XXV. A Note on B. connexa, p. 88 A Note on B. striata and B. impedita. p. 136
1919 Bul. Brooklyn Ent. Soc. XIV, A list of the Cerambycidae and Buprestidae on Long Island, N.Y. p. 17-20.
1919 Ent. News XXX Additions to the Insects of New Jersey No. 7, p. 276-79.

Nicolay, A. S. & Weiss, H. B.
1918 Journ. N.Y. Ent.Soc. XXVI, A Review of the Genus Buprestis in North America. p. 75-109, pl. I-II
1918 Psyche XXV. Notes on Closterocerus cinctipennis Ashm. in New Jersey pp. 128-130.
1919 Can. Ent. LI Notes on the Life History and early stages of Brachys ovatus Web. and Brachys aerosus Mels. pp. 85-88 pls. 5-6.

Notman, Howard.
1917 Journ. N.Y. Ent. Soc. XXV Collection of Adirondack Buprestidae. p. 145.

- O -

Obenberger, Von Phil. St. Jan.
1914 Entomologesche Blatter, X, Drei neue nordamerikamische Anthaxiens p. 25-26

Oliver, M.
1790 Entomologia au Histoire Naturelle des Insects, Coleoptera vol. II. Genera No. 32 Buprestes p. 1-96.
~~Encycl~~ ~~Methodica~~

Osborn, Herbert
1880 Western Stock Journ. and Farmer, X.
1882 Iowa State Leader, Sept. 30 p. 3
1890 The Orange Judd Farmer, April 27, Chrysobothris femorata p. 261
1892 Trans. Iowa Sta. Hort. Soc. Fruits and Forest Insects p. 96-127

- P -

Packard,
1873 3rd Ann. Rept. Inj and Benef. Ins. of Mass. (20th Ann. Rept. Sec. Mass. Bd. Agri. pp. 237-265, Am. Naturalist Sept. 1873, VII pp. 524-548)
Brachys aeruginosa and Metonius leavigatus p. 247
1877 Rept. U.S.Geo.Sur. (1875-77) Report on Rocky Mt. Locust Etc. Insects Imperious to deciduous - trees p. 803-805.
1877 The American Naturalist XI, (Summary of the above p. 22-29)
1878 Guide to the Study of Insects, Buprestidae 457-459.
1881 U.S.Ent. Com. Bul. #7. Insects Injurious to Forest and Shade trees. pp. 275. figs.
1883 3rd Rept. U.S.Ent.Com. Scientific Results, Chapter IX, Forest Insects p. 251-262.
1890 5th Rept. U.S.Ent. Com. (House Miscellaneous Documents Vol. 41) 922 pages.

Pallas P.S.
1782 Iconograph, p. 69

Panzer,
1793-1813 Fauna Insectorum (Index by Saunders 1888) American Species of Buprestidae.
1799 Heft 68, p. 19-22
1809 Heft 101, p. 10-11

Patch, E. M. and Johannsen, O.A.
1904 Bul. Me. Exp. Sta. Apple Tree Insects of Maine. p. 1-67 (C. femorata p. 7-8)

Paykull, Gustavi
1799 Fauna Suecica vol. II, Insecta. Bupres. p. 213-234

Perkins, G. H.
1897 Vermont Exp. Sta. Bul. #60 Insects of the Year, p. 1-16. Apple tree borers p. 14-16.

Petch, J. E.
1913 43rd Rept. Ent. Soc. Ont. Ins. of Quebec for the year 1912 p. 72-75
1915 45th Rept. Ent. Soc. Ont. Injurious Insects of Southern Quebec (1914) p. 70-71

Pettit, R. H.
1870 Can. Ent. II, Captures at North Douro, Ont. p. 67
List of Coleoptera taken at Grimsby, Ont. p. 102
1900 Mich. Exp. Sta. Bul. #186 (1st Rept. Upper Peninsula Exp. Sta). C. femorata p. 36-37.
Partial list of Insects collected in Alger Co. Mich. Buprestidae p. 41.
1904 Mich. Special Bul. #24 - Insects Injurious to Fruits in Michigan p. 1-60.

Piper, C. V.
1895 Wash. State Exp. Sta. Bul. #17. Insect pests of the farm, garden and Orchard, p. 1-64 (C. femorata p. 31-32).

Poppius, B.
1905 Festschr f Palmen, No. 12 p. 175
1910 Fauna Artica, Die Coleopteren des arktischen Gebietes Bupres. p. 411

Provancher, Le Abbe L.
1877 Le Naturaiste Canadian IX, Additions and Corrections a la Faund Coleopterologique de la Provienca de Quebec, p. 312-313. Separates p. 12-13
1877 Petite Faune Entomolegique du Canada, I, Les Coleopteres. Buprestidae p. 343-361.
1878 Le Natur. Can. X, Additions, Corrections a la Faune Coleo. de la Prov. Quebec. p. 375-376
Separates p. 7

- Q -.

Quaintance, A. L.
1913 Proc. Wash. Ent. Soc. XV, Remarks on some of the Injurious Insects of other countries Bupr. p. 76

- R -

Randall, J. W.
1838 Bost. Journ. Nat. Hist. II, #1 Descriptions of New Specie of Coleopterous Insects inhabiting the State of Maine. p. 1-52

Reinick,
1896 Ent. News VII, A Note on Xenorhipis brendelli p. 284

Ricksecker, L. E.
1885 Ent. Amer. I, A Note. p. 97
1891 Ins. Life III, Some new Parasites from Californis. p. 412

Riley, C. V.
1869 Amer. Ento. I, A Letter p. 120. A Note p. 168
1869 1st. Rept. on the Noxious Ins. of Mo. Apple tree Borers p. 42-47.
1870 Amer. Ento. & Boton. II, Galls and their Architects. p. 103-6
1875 7th Rept. Nox., Beneficial and Other Ins. of Missouri. Habits and Parasites of Chrysobothris femorata. p. 71-79.
1880 Amer. Ent. vol. I, new ser. A Note on A.ruficollis. p. 107
1883 3rd. Rept. U.S. Ent. Com. See Packard.
1893 Proc. Ent. Soc. Wash. III, Notes from Sunbury, p. 92
1894 Ins. Life VI, Notes from Sunbury, p. 206

Riley, C. V. and Howard, L. O.
1890 Ins. Life II, p. 348-353 Some of the Bred Parasitic Hymenoptera in the national collection.
1891 Ins. Life III, Some Bred Parasites (continued) p. 460-464. Some New Parasites from California p. 412.

Roberts, C. H.

1886 Ent. Amer. II, On Some Species of Anthaxia. p. 16-17
A Note. p. 20

Robinson, Col. Wirt.
1915 Journ. N.Y. Ent. Soc. XXIII, Dicerca obscura and Dicerca lurida p. 151-152

Rohwer, S. A.
1919 Proc. Ent. Soc. Wash. XXI, Descriptions of three Parasites of Agrilus angelicus. p. 4-8 fig. 1

Rossius, Perrus
1790 Fauna Etrusca-Sestens Insecta quae in Provincus Florentina et Pisana, Praesertim colleget. vol. I. Fam. Bupres. p. 183-191.

Ruggles, A. G.
1918 17th Rept. Sta. Entomo of Minnesota. Life History of an Oak Twig Grdler Agrilus arcuatus Say, var. torquatus Lec. Plate p. 15-19 figs.

- S -

Saunders, Wm.
1871 Catalogue Buprestidae. American Species p. 21-126
1874 4th Rept. Ent. Soc. Ont. Insects Injurious to Raspberry p. 7-17
1879 Amer. Ent. XI.
1880 Ann. Rept. Ent. Soc. Ont. Address of the President (Chalcophora liberta p. 5)
1883 Insects Injurious to Fruits. The Flat headed Apple tree borer p. 20. Dicerca divaricata p. 201. The Red Neck Agrilus p. 302-308
1884 14th Rept. Ent. Soc. Ont. Insects Injurious to White Pine (P. strobus) p. 52-62

Say, Thomas
1824 American Entomology vol. II. This work is not paged, the descriptions of Buprestidae are in connection with plate No. 26
1825 Ann. Lyceum Nat. Hist. N.Y. Vol. I part 2 Descriptions of New N.Amer. species of the Genus Buprestis etc. p. 249-269 (Leconte Ed. Vol. I, p. 386)
1832 New Harmony (Indiana) Jan. New Species of North American Insects - Chiefly from Louisiana p. 3 (Reprinted p. 300. Vol. I. Complete works of T. Say)
1836 Trans. Amer. Philosophical Soc. VI. Descriptions of New North American Insects. and Observations on some already described p. 155-190; Bupr. p. 157-164
(Leconte Ed. Vol. II, p. 587-599)

Schaeffer, Chas.
1904 Journ. N. Y. Ent. Soc. XII, New Genera and Species of Coleoptera; Bupres. p. 205-212.
1905 Brooklyn Mus. Bul. I, #6 Additions to the Coleoptera of the United States. Bupr. p. 127-131. Table of Cinyra
1905 Br. Mus. Bul. I, #7. Some additional New Genera and Species of Coleoptera Found within the limits of the U.S. Bupr. p. 147-150 Table of Mastigenus

1906 Can. Ent. XXXVIII, Two New Oncideres, with Notes on some other Coleoptera p. 18-23; Bupr. p. 21-23 Table of Polycesta.
1909 Br. Mus. Bul. I, #15 New Coleoptera Chiefly from Arizona. Buprs. p. 376-378.
1918 Journ. N. Y. Ent. Soc. XXVI, Miscellaneous Coleopterological Notes and Descriptions. p. 212-214
A Note p. 239
1919 Bul. Brook. Ent. Soc. XIV A Note on Dicerca asperata p. 147

Schonherr, C. J.
1817 Synonymiam Insectorum I, pt. 3 Buprestis p. 212-265
Appendix Synonymiam Insectorum Descriptions Novarum specerum. Bupr. p. 118-128

Schwarz, E. A.
1878 Proc. Amer. Philo. Soc. XVII, The Coleoptera of Florida p. 353-469. Bupres. p. 363-364 and 451-452
1887 Ent. Amer. III, "A Voice from the Wilderness" (Chry. chalcophoroides). p. 39.
1888 Proc. Ent. Soc. Wash. I, Remarks on the Coleopterous Fauna of Key West p. 93.
1891 Proc. Ent. Soc. Wash. II, Coleoptera on Black Locust (Robenia pseudo-cacia) p. 73-76
1893 Proc. Ent. Soc. Wash. III, Some Notes on Melsheimer's Catalogue of the Coleoptera of Pa. p. 135-138

Scott, W. S.
1901 Bu. Ent. Bul. #31 Jarring for the Curculis - in Georgia with list of insects caught. p. 24-36.

Sharp,
1909 Cambridge Nat. Hist. II, pt. 2

Sherman, Franklin.
1903 No. Carolina Bul. #183 Insects and Fungus Enemies of the Apple, Pear and Quince pp. 45-82.
1914 Journ, N. Y. Ent. Soc. XXII, Note on B. fasciata p. 337

Skinner, Henry
1902 Trans. Amer. Ent. Soc. XXIX, Insects of Beulah, New Mexico; Coleoptera p; 38-41. Bupres. p. 40
1903 Ent. News XIV, Notes on Buprestidae with descriptions of New Species. p. 236-239. Table of Tyndaris.

Slingerland, M. V.
1899 Proc. West N. Y. Hort. Soc.
1906 Cornell Univ. Bul. #234. The Bronze Birch Borer p. 65-78

Slosson, Annie Trumbell
1894 Ent. News V. List of Insects taken in the Alpine Region of Mt. Washington, p. 1-6.
1895 Ent. News VI, Additional List of Insects taken in the Alpine Reg. of Mt. Wash. p. 316-321.
1897 Ent. News VIII, Additional List of Insects taken in the Alpine Reg. of Mt. Wash. p. 237-240.

1902 Ent. News XIII, Additional List of Insects taken in the Alpine Reg. of Mt. Wash. p. 1-6; Bupres. p. 6

Smith, G. Warren
1891 Ins. Life III, A Cherry-tree Borer in Maine. p. 422.

Smith, John B.
1884 Bul. Brok. Ent. Soc. VII, A Note p. 76
1891 Ins. Life IV, Notes on Blackberry Borers and Gall-makers. p. 27-30
1891 Special Bul. "N" N. Jersey Exp. Sta. pp. 15 Insects Injurious to blackberry p. 4-8
1892 Ins. Life IV, Insects Injurious to the Blackberry. p. 232.
1892 22nd. Rept. Ent. Soc. Ont. Notes on Blackberry Borers and Gall-makers. p. 52-54.
1892 N. J. Rept. 13th Ann. Rept. of the Ento. (Reprint of Bul. "N". 1891) p.
1892 Garden and Forest V. A. ruficollis p. 456
1892 Ins. Life V. Notes of the Year in New Jersey. p. 93-99
1893 Ann. Rept. N. J. State Ed. Agri. 1893, p. 157-176. A. ruficollis
1894 15th Rept. N. J. Entomologist Imported pear Borer(A. sinuatus) p. 429-30, 550-561
1894 Ent. News V. Introduced Insects. p. 311, 323
1894 Ins. Life VII, A New Pear Insect. p. 258-260
1895 American Agriculturist Jan. 26 p. 85
1895 N. J. Exp. Sta. Bul. #109 The Sinuate Pear Borer p. 13-24
1900 21st Ann. Rept. N. J. Exp. Sta. Sinuate Pear borer p. 482-483
1900 N. J. Exp. Sta. Cir. 314
1901 22nd Ann. Rept. N. J. Exp. Sta. Sinuate Pear borer p. 484-485
1902 N. J. Exp. Sta. Bul. #155 The Entomologist's Experiment Orchard. Sinuate pear borer p. 28-32
1909 Rept. N. J. Sta. Mus. Insects of New Jersey. Bupr. p. 290-296

Smith, R. I.
1904 Georgia Board of Entomology Bul. #13

Snyder, Thomas E.
1917 Journ. N. Y. Ent. Soc. XXV, Note on Chrysobothris imperssa. p. 136
1919 Journ. Agri. Research XVI, Injury to Casuarina Trees in Southern Florida by the Mangrove Borer. p. 155-163, pl. 18-21

Solier, A. J. J.
1833 Ann. Ent. Soc. France II, Essae sur les Buprestides p. 261-316
1849 Gay, Histori de Chili IV, Insects Buprestidae (Sernoxianos) p. 478-508.

Somes, M. P.
1915 Mo. Fru. Exp. Sta. Bul. #25 Fruit tree Pests p. 13-14

Spinola, M. Maximilien
1838 Ann. Ent. Soc. Fr. VII, Essai sue les especes des Gmeres Steraspis et Acmaeodera p. 303-394.

Sprague, P. S. and Austin, E.P.
1875 Boston Soc. Nat. Hist. Proc. XVII, The Species of Coleoptera Described by Mr. J. W. Randall p. 373-385; Bupr. p.376

Stephens,
1830 Illustrations British Entomology Vol. 3, p. 239

Stevenson, Chas.
1905 Rept. Ent. Soc. Ont. Notes of the Season p. 91-92

Stoner, Dayton
1915 Ent. New. XXVI, Notes on two Beetles Reared from dead Wistaria Sticks. p. 226-227

Stormberg, Chas. W.
1894 Can. Ent. XXVI, Notes on Coleoptera p. 36-37

Strinson, J. T.
1895 Ark. Exp. Sta. Bul. #33 Insects Injurious to Fruit and Vegetables. The Flat-headed Borers. p. 71-72.

Sturm, Jacob
1826 Catalogmeiner Insecten-Sammlung Sternoxi (Bupr) p. 9
1843 Catalog-der Coleoptera Stermoxa Buprestida p. 55-63

Swaine, J. M.
1911 41st Rept. Ent. Soc. Ont. Insects Notes from Ste. Annes. p. 88-99
1911a 3rd Rept. Que. Soc. for Protect. of Plants. "An Outline for the Control of Garden and Orchard Insects of Quebec. p. 91
1913 5th Rept. Que. Soc. for Protection of Plants etc. Some Insect Enemies of Shade trees p. 43-59 (A. anxius p. 56)
1913 43rd Rept. Ent. Soc. Ont. Notes on Some Forest Insects of 1912 p. 87-91
1914 6th Report Quebec Soc. Protection. Plants from Insects and Fungi. Insects and the Forest p. 53-56
1915 7th Rept. Que. Soc. for Protection of Plants from Insects and Fungi. "Shade tree Insects of Quebec." A. anxius p. 106
1917 47th Rept. Ent. Soc. Ont. Some features of interest in connection with our studies of Forest and Shade tree Insects. p. 95-107 Bupres. p. 95, 102-105.
1919 Report of Canadian Artic Expedition 1913-18 Vol. III part E. Forest Insects p. 12E-13E
1918 Canadian Forest Journal XIV No. 10. A New Forest Insect Enemy of White Birch pp. 1928-1929. (A. anxius)
1919 11th Ann. Rept. Que. Soc. Pro. Plants from Insects and Fungus Diseases (1918-1919) pp. 46-48 (A. anxius)

- T -

Thomas, Cyrus.
1876 6th Rept. Illinois Entomologist. The Borers - p. 33-38 and The Buprestidae p. 109-114.

Thomson, C.S.
1863 Skandinaviens Coleoptera VI, Synopliskt Bearbelade p. 1-39

Thomson, James
1857 Archives Entemologiques. Art. 2. Fragment antomique sur le canal degestif du Dicerca aenea. p. 377
1878 Typi Buprestidarum p. 78-113
1879 Appendix to Typi, Bupres. p. 1-86. (One N. Amer. Spec. T. lecontei mentioned p. 6)

Thunburg, Carol Pet.
1785 Museum Naturalium Acadamiae Upsaliensis IV, Continut II Buprestis p. 51-52.

Tolman, Adams
1889 Ins. Life I, Some additions to Packard's Forest Tree Insects. p. 343

Townsend, C. H. Tyler
1884 Psyche IV, Notes on some Coleoptera Taken in So. Louisiana p. 219-222
1885 Can. Ent. XVII, A List of Coleoptera collected in Louisiana on or south of Parallel 30° p. 66-73
Notes on Acmaeodera pulchella. p. 231-232
1889 Psyche V. Contributions to a list of the Coleoptera of the Lower Peninsula of Michigan, p. 231-235. Bupr. p. 233
1892 Ins. Life V, Biologic Notes on New Mexico Insects. p. 37-40.
1893 Can. Ent. XXV, Some Notes on Michigan Insects, Principally Coleoptera, affecting Forest Trees. p. 201-204
1895 Can. Ent. XXVII, On the Coleoptera of Nex Mexico and Ariz. including Biologic and other Notes. p. 42-44.

Traet, Mary
1889 Injurious Insects of Farm and Garden. Agrilus ruficollis p. 213. Apple tree borer p. 144
1891 Garden and Forest IV

Treherne, R. C.

Insects attacking small fruits and vegetables p. 24 (A. ruficollis)

Tucker, Elbert S.
1906 Ent. News XVII, Determinations of some Texas Coleoptera with records. p. 10-14

-U-

Uhuler, Philip R.
1855 Proc. Acad. Nat. Sci. Phila. VII, Descriptions of a few species of Coleoptera, supposed to be new. p. 415-418

-V-

Van Dyke, Dr. Edwin C.
1902 Journ. N.Y. Ent. Soc. X, Notes upon the Buprestidae of California p. 172-173

1902 Ent. News XIII, The Faunal Areas in California as seen by a Field Coleopterist p. 199-201
1916 Ent. News XXVII, New Species of Buprestidae from the Pacific States. with notes concerning a few others p. 405-412.
1918 Journ. N.Y.Ent. Soc. XXVI. A Note on Acmaeodera cubaecola p. 229
1918 Ent. News XXIX, New Species of Buprestidae from the Pacific States p. 53-58
1919 Ent. News XXX, New Species of Buprestidae from the Western United States, with Supplementary notes concerning others. p. 151-156, 186-190 pl. VII
1919 Ann. Ent. Soc. Amer. XII The Distribution of Insects in Western North America p. 1-12

- W -

Walker,
1866 The Naturalist in British Columbia (By J. K. Lord), Coleoptera by Walker. Buprestidae p. 322-324

Walker, E. M.
1912 42nd Rept. Ent. Soc. Ont. Some Injurious Forest Insects at De Grassi Point, Lake Simcoe. p. 55-63

Walker, Ernest
1901 Ark. Exp. Sta. Bul. #71 Why Apples Fail. (C.femorata p.22)

Walsh,
1862 Journ. Illinois State Agri. Soc.
1866 Practical Ent. Vol. II, #4, Borers p. 25-32. A Note p. 471

Walsingham, Lord
1889 Ins. Life II, Steps towards a revision of Chamber's Index with Notes and Descriptions of New Species. p. 79

Washburn, F. L.
1890 Ore. Exp. Sta. Bul. #5 The Flat-headed Apple-tree Borer p.10
1892 Ore. Exp. Sta. Bul. #18 Insects Injurious to young fruit trees. C. femorata p. 7
1895 Ore. Exp. Sta. Bul. #38 Work with a combined Fungicide and Insecticide, Buprestids p. 7, 21.
1908 Minnesota Exp. Sta. Bul. (Press) #33

Waterhouse, Chas. O.
1882-1889 Biologia Centrali Americana, Insecta, Coleoptera, Buprestidae Vol. III, part I, pp. 1-167 and supplement pp. 168-193
pages 1-32 published 1882
pages 33-48 " 1887
pages 49-193 " 1889

Watson, J. R.
1911 Natural Resources of New Mexico. A Contribution to the Study of Ecological Distribution of Animal Life in N.M. with Especial attention to Insects p. 67-117.

Weber, Fredric
1801 Observationes Entomologicae I, Buprestis p. 72-76

Webster, F. M. and Newell, W.
1902 U. S. D. Agri. Bul. #31. Div. Ent. Insects of the Year in Ohio. p. 84-90

Webster, F. M.
1889 Ohio Bul. vol. II, #I, Apple Tree Borers p. 4
1892 Ohio Bul. #45 Insects Affecting the Blackberry and Raspberry. A ruficollis p. 191-193
1894 Ins. Life VII, Insects of the Year p. 202-207
1894 Ohio Bul. #58. p. 29-30
1894 Ohio Farmer May 3. A. ruficollis p. 357
1897 Ohio Bul. #77 The Chinch bug and other destructive insects p. 42-45.

Weed, C. M.
1888 Ohio Bul. #3 2nd ser. Spring and Summer Treatment of Apple Orchards to prevent Insect Injury p. 26-38

Weilandy, J. F.
1870 Amer. Ent. and Botanist II, Apple Tree Borers. p. 146-148

Weiss, Harry B.
1914 Journ. Econ. Ent. VII, Notes on Three Imported Insects Occurring in New Jersey p. 250-251.
Agrilus politus Infesting Rose p. 438-50
1915 Ent. News XXVI, Additions to the Insects of New Jersey. p. 101-107
1916 Ent. News. XXVII, A Note on Agrilus viridis p. 287
Agrilus viridis in New Jersey p. 436
1918 Sta. N. J. Agri. Dept. Bul. Unusual Nursery Insects. p. 5-8

Weiss, Harry and Nicolay, A. S.
1918 Psyche XXV Notes on Closterocerus cinctipennis Ashm. in New Jersey p. 128-130
1919 Can. Ent. Notes on the life-history and early stages of Brachys ovatus and B. aerosus p. 86-88

Wenzel, Harry W.
1906 Ent. News XVII, Coleoptera from Tybee Island Georgia, p. 38
1908 Ent. News XIX, A Note on B. decora p. 343
1909 Ent. News XX, A Note on B. ultramarina p. 45

White,
1848 Nomenclature of Coleopterous Insects in the Collection of the British Museum Part 3, Buprestidae p. 1-52

Wickham, H. F.
1891 Ent. News II, Through the Pinal Mts. Ariz. p. 130-133
1893 Ent. News IV, Collecting in the Far North. p. 2
1898 Iowa Lab. Nat. Hist. Bul. IV, The Beetles of So. Arizona p. 295-312 (Buprestidae p. 304-305)

1898 Ent. News IX, Recollections of Old Collecting Grounds, III, p. 39-41
1899 Ent. News X, Recollections of Old Collecting Grounds. part V, p. 195-198 part VI, p. 235-238
1903 Can. Ent. XXXV, New Coleoptera from Western U. S. p. 67-74
1903 The Ottawa Naturalist, XVII, Beetles of an Oregon Beach. p. 49-52
1904 Ent. News XV, "Protective Resemblance in Arizona" p. 307
1905 Can. Ent. XXXVII, New Species of Coleoptera from Southwest U. S. p. 165-170
1909 Iowa Lab. Nat. Hist. Bul. vol. VI. A List of the Coleoptera of Iowa. Buprestidae p. 23-24.
1914 Bul. Mus. Comparative Zoology vol. 58, No. 11

Wilson, H. F.
1914 Ore. Exp. Sta. Cir. Bul. No. 15 Two Apple Tree Borers, p. 1-6

Wolcott, A. B.
1896 Ent. News VII, Coleoptera of Central Illinois, p. 234-238

Woodworth, Dr.
1913 Guide to California Insects. Bupres. p. 195-196

Wright, Julia D. E. and Coolidge, Karl R.
1908 Ent. News XIX, Notes on the Coleoptera of Placer, Co. Calif. p. 66-69

-Y-

Young, D. B.
1902 18th Rept. N. Y. State Ento. List of Coleoptera taken at Newport, Herkimer Co. N. Y. p. 153-161.

-Z-

Zeigler, Rev. Daniel
1845 Proc. Acad. Nat. Sci. Phila, II, Descriptions of New North American Coleoptera p. 266-272.

Zesch, Frank and Reinecke, Ottoman
1880 North Amer. Ent. I, appendix, List of the Coleoptera observed and collected in the vicinity of Buffalo. p. ii-xii. Bupres. p. vii.