

# Catalog and Evaluation

## of the Pear Collection at the Oregon Agricultural Experiment Station

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# Catalog and Evaluation

## of the Pear Collection at the Oregon Agricultural Experiment Station

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### Introduction

The pear collection at the Oregon Agricultural Experiment Station consists of 272 named varieties, types, and species which are largely the survivors of trials carried on over a 43 year period. The collection was originally assembled and maintained by the Oregon Station, but as of July 1, 1955, has been perpetuated under a cooperative W-6 project involving states and territories of the Western Region. The contributing project dealing directly with the collection and for which the Oregon Station is responsible, is entitled "Maintenance of a Repository for Germ Plasm of Pears and the Evaluation of New Germ Plasm."

### History and sources of materials

As a first step in assembling this collection, in 1913 the Southern Oregon Branch Experiment Station obtained approximately 450 named *Communis* varieties from the firm of Pepinieres André Leroy, of Angers, France. While many succumbed to blight and other troubles during the rigorous tests to which they were subjected, 116 of the originals remain and have been preserved.

A considerable number of varieties, types, and species were added to the collection following two explorations into Northern China, Korea, and Japan. These explorations were made in 1917 and 1919 by F. C. Reimer, then superintendent of the Southern Oregon Station. Materials acquired on these expeditions consisted of named varieties of *P. ussuriensis*, named varieties of *P. ussuriensis* hybrids, and a miscellaneous assortment of oriental-type pears, including a number of important species. Most of these forms survived and are now a part of the collection.

Other accessions came from a wide variety of sources. Some were introductions and releases of the U. S. Department of Agriculture. Some came from state experiment stations, while a few types and species came from institutions such as Kew Gardens and the Arnold Arboretum. A number of varieties came from nursery firms

in the United States while some came from private investigators engaged in pear selection and testing at the time.

A number of blight-resistant *Communis* seedlings in the collection are selections made at the Southern Oregon Station after drastic blight-resistant tests. Other acquisition consisted of promising local seedlings, bud sports, and tetraploid forms.

Within recent years, the Station has not attempted to acquire all pear varieties being introduced but has made efforts to obtain introductions seeming to offer promise for some specific purpose.

### **Facilities for testing and maintaining pear varieties**

The Oregon Agricultural Experiment Station with its branch stations at Medford and Hood River offers favorable conditions for maintenance and testing of pear materials. The Home Station at Corvallis is located in the Willamette Valley, an area which experiences comparatively mild winters and is free of blight. This makes it possible to maintain types that may be tender to cold or have high susceptibility to blight, with little danger of loss. By contrast, the Southern Oregon Branch Station is located in the Rogue River Valley. Here blight is very severe, giving an opportunity to test for blight resistance. At the Mid-Columbia Branch Experiment Station, it is possible to carry on tests for cold hardiness, since the Station is located in the Hood River Valley, which may experience low winter temperatures or unseasonal freezes. Both Southern Oregon and Mid-Columbia Branch Stations enjoy the advantage of being situated in important, commercial pear-growing regions.

### **Evaluations of materials**

Evaluations recorded in this bulletin are based almost entirely on observations of performance of varieties, types, and species in Oregon, particularly under conditions of the Rogue River Valley. These descriptions and appraisals may therefore differ considerably from those applicable to other situations and localities and this should be taken into account when attempts at comparisons are made.

**EVALUATION OF BLIGHT RESISTANCE:** Since blight control in pears has been a major project at the Oregon Experiment Station for many years, nearly all materials in this collection have been evaluated as to resistance or susceptibility to blight. Most of the materials have been subjected to blight-resistance tests, some over a period of 40 years or more. Not only have the varieties, types, and species been exposed to natural blight infection in the field, but many have been subjected to repeated artificial inoculations with the blight organism.

During the early years of variety trials at the Southern Oregon Branch Station tests for blight resistance involving natural infection

were particularly severe, due to a combination of circumstances. At the beginning of the trials the trees were all young, succulent, and very susceptible to blight. Sprays for blight prevention were then unknown and blight-cutting as a control measure was in its infancy. A number of "test years" with especially severe blight conditions were encountered during which the disease took a heavy toll both in the Station variety block and in the region's commercial orchards.

Severity of these tests is indicated by over two-thirds of all the *Communis* varieties then under test succumbing to blight. Any pear tree surviving these trying years, and now living, can be assumed to possess some degree of resistance to the disease. It seems reasonable that practically all highly susceptible types would have contracted the disease during the testing period. In fact, it is known that many varieties succumbing during this period can now be grown in the Rogue River Valley with little difficulty, provided modern techniques of blight control are employed.

Resistance to blight has played a leading role in shaping the present composition of this pear collection. Of the many varieties killed by the disease, only a limited few were replaced in subsequent years.

This bulletin does not attempt to relate in detail the blight-resistance research of the Southern Oregon Branch Station. It merely tries to record resistance or susceptibility of the materials in a general way. For more information regarding this phase of the Station's work, the reader is referred to Reimer (5), Oregon Agricultural Experiment Station Bulletin 214 and to Reimer (7), Oregon Agricultural College Experiment Station Bulletin 485.

**EVALUATION OF DESSERT AND KEEPING QUALITY:** Practically all varieties in this collection evaluated for their dessert and keeping quality have been subjected to time of picking and storage tests. One hundred and seventy-two of the varieties were subjected to such tests during the past two years.

While costly and time-consuming, such tests are indispensable if eating quality and longevity of pear fruits are to be fully appraised. Keepability of a commercial variety must be based on the length of time it will keep in cold storage. Some pear varieties, particularly some of the late-keeping sorts, may not ripen at all unless previously subjected to refrigeration, and no pear develops its maximum flavor unless it is picked at the proper time.

**EVALUATION OF PERFORMANCE ON QUINCE ROOTS:** Among the *Communis* varieties received from France and planted at the Southern Oregon Branch Station in 1913 were a comparatively large number of trees budded or grafted on quince roots. The type of quince used in this case was not indicated, but presumably was the common type

of Angers quince, often used as a pear rootstock in Europe at that time. The varieties had all been worked directly on the quince roots without benefit of intermediate stocks.

During the intervening years, many of the original trees propagated on quince died of blight and other causes, but 62 of the varieties are alive and included in this collection. Their performance and present status are indicated in the variety descriptions that follow.

### **Nomenclature**

In preparing the manuscript for this bulletin, no attempt was made to follow or abide by any particular code, or rules of nomenclature. Almost without exception, names listed are those under which the varieties were received and first entered in Station records. This simple expedient has the virtue of maintaining the status quo and does not of itself add new complications to what is already a much confused nomenclature picture. No other fruit rivals the pear in perplexity of nomenclature.

No attempt was made to give the complete synonymy of the varieties listed. References are given however, making it possible to trace the synonymy should this be desired.

In the case of the assortment of *Communis* varieties which the Southern Oregon Branch Station obtained from France in 1913, there is merit in retaining the names as they were written at the time. These varieties, almost without exception, were correctly named according to European rules of nomenclature supported by actions of the many pomological congresses held in France and Belgium during the last 60 years of the 19th century. Retention of these names facilitates ready access to extensive European literature treating of pear varieties. Too, while these names are often long and cumbersome, attempts to shorten or simplify them leads only to confusion as shown by past experience.

### **References**

The list of references given in this bulletin has been purposely held down to a small number. The well known work entitled "The Pears of New York," by U. P. Hedrick and his associates, as well as Volumes I and II of the "Dictionaire Pomologie," by André Leroy, are often referred to for the obvious reason that these are still the most comprehensive and authoritative works on pear taxonomy.

Attention should be called here to the almost forgotten monogram entitled "Nomenclature of the Pear," by W. H. Ragan. This was issued as U. S. Department of Agriculture, Bureau of Plant Industry Bulletin 126, in 1908. In this exhaustive treatise, Ragan, in cooperation with the American Pomological Society, not only en-

deavored to catalog all of the varieties of pears then known in this country, but also attempted revision of the names themselves.

While Ragan's revised nomenclature of the pear is seldom used or heard of now, the Ragan names have left an imprint on American pomological literature. For that reason, these names are also listed in this bulletin. This is not done with the thought of reviving the Ragan nomenclature, but rather to simplify access to literature and clarify certain aspects of the nomenclature problem. Ragan's publication contains a fairly complete synonymy of pear names, as well as a valuable list of references on pear varieties as existing prior to 1908.

### **Why pear materials should be preserved**

While most pear materials in this, and similar collections elsewhere, may never contribute directly to American pomology, there is reason to believe that their preservation is of considerable importance. Sources of pear materials, once abundant in this country, are rapidly disappearing. The great collections of varieties built up and maintained by pear fanciers have all but disappeared. Commercial growers who once took pride in growing many varieties of pears now confine their efforts to a few. Even experiment stations find it difficult to maintain their variety collections because of pressure from other activities. What is true of the United States is also true of Europe and other regions abroad. France and Belgium, long considered repositories for pear materials, are rapidly reducing their variety collections for economic reasons.

This leads to only one conclusion. Pear materials as known in the past will soon disappear unless the few remaining collections are preserved. It is true that the maintenance of these collections involves effort and expense but one can never adequately anticipate future needs. Materials that appear to be worthless now may ultimately become valuable as parent stocks in future pear improvement programs. Standards by which varieties are judged also change from time to time, and varieties now held in low esteem may conceivably become important in the future.

### **Future plans**

Under the new W-6 project arrangement, the pear collection at the Oregon Agricultural Experiment Station is not only to be maintained but new accessions are to be added as deemed wise by those in charge of the project and these accessions are to be evaluated on the basis of their performance. In addition, the portion of the collection now at the Southern Oregon Branch Station is to be repropagated and moved to a new location. This phase of the work is now in prog-

ress. The pear materials now at the Home Station and at the Mid-Columbia Station are to be maintained and added to from time to time.

Whenever the abbreviation A.P.S. appears in the following text it is used to represent American Pomological Society. The abbreviation, P.I., indicates Plant Introduction (number).

## **Communis Varieties Obtained from France**

### **Amelie Baltet**

Listed in the 1912 catalog of Pepinieres André Leroy, Angers, France.

Fruit medium to large in size, shaped much like Vicar of Winkfield. Skin smooth, waxy, deep yellow in color, often blushed with brilliant crimson, very attractive. Flesh white, fairly fine, buttery but not melting, moderately juicy. Sweet, pleasing flavor, better than average in dessert quality. Midseason. Holds up remarkably well in ripe stage.

Tree moderately vigorous, true dwarf on quince. Some resistance to blight.

### **Barillet Deschamp**

Listed in the 1912 catalog of Pepinieres André Leroy, Angers, France.

Fruit small in size and resembling Winter Nelis in form and coloration. Develops considerable russeting, unattractive. Flesh reasonably firm, juicy, medium fine. Fairly sweet but lacking in flavor and texture characteristics. Late keeper, ripens very slowly after removal from cold storage.

Tree fairly vigorous, good semi-dwarf on quince. Moderately susceptible to blight.

### **Baronne Leroy**

Listed as Baron Leroy By Hedrick (1) and as Baronne Leroy by Ragan (2).

Brief description, Hedrick (1) page 259.

Place of origin was France, exact location not given. Said to be a seedling of Bonne de Prentemps. First reported, 1859.

Fruit small in size, roundish with large stiff stem. Skin tough, greenish in color with some russet, sometimes blushed on sunny side, unattractive appearance. Flesh buttery, very juicy, some grit at center. Spicy, vinous, Seckel-like flavor. Equal to Seckel in dessert quality. Midseason.

Tree vigorous and productive. Good semi-dwarf on quince. Moderately susceptible to blight.

### **Belle de Beugny**

Listed in the 1912 catalog of Pepinieres André Leroy, Angers, France.

Fruit medium in size and bergamot in form. Skin rather tough, light grayish-green in color, some russeting, not attractive. Flesh white, fairly fine, some grit at the center, buttery and juicy. Moderately sweet with mild, pleasing flavor. Above average in dessert quality. Very late in season and holds up well in ripe stage.

Tree vigorous, productive, with dark green foliage, moderately susceptible to blight.

### **Belle de Féron**

Listed by Ragan (2) as Ferron.

Brief description, Hedrick (1), page 264. Full description, Leroy (3), page 198.

Believed to have originated at Féron near Avesnes, France in 1840.

Fruit medium in size, turbinate in form, stem fleshy at base. Skin very smooth, waxy, golden yellow, slightly blushed, attractive. Flesh fairly firm, mealy in texture, lacking in juiciness. Dessert quality poor. Early in season.

Tree vigorous and spreading in habit, productive, moderately susceptible to blight.

### **Belle Poitevine**

Listed as a then recent variety in the 1912 catalog of Pepinieres André Leroy, Angers, France.

Fruit resembles Bartlett in form and size. Skin smooth, golden yellow in color, usually with a red blush on sunny side, attractive. Flesh fairly fine, tender but not melting, moderately juicy. Sweet but rather bitter in taste. Definitely inferior to Bartlett in dessert quality. Keeps somewhat longer than Bartlett and holds up well in the ripe stage.

Tree vigorous, clean, productive, with lusty green foliage, moderately susceptible to blight.

### **Bergamote d' Automne**

Listed as Bergamote d' Automne by Ragan (2), who states that the variety must not be confused with Autumn Bergamote mentioned by Manning and other American authors. Leroy (3) gives 10 synonyms for the variety.

Brief description, Hedrick (1), page 270. Full description, Leroy (3), page 223.

Origin of this ancient pear is somewhat obscure. Hedrick (1) comments as follows: "Benedict Curtius, Florentine author writing in 1536, thought it had birth at Bergamo in Lombardy. But in 1644, Jean Bodaeuse, a Dutch physician, in his translation of the *Historia Plantarum* of Theophrastus, states that the Bergamote came from Asia, whence the Romans had imported it to Italy and that it was known to them as *Pirum Regium* or pear of kings. If it originated in Asia, the probability is that its birth place was Pergamun, a village of Asia Minor between the Aegean and Morona Seas. This view was accepted in the 18th century by such authorities as Lacour, Manger, Ménage and later by Leroy."

While it is probable that certain of the old varieties of pears still extant date back to antiquity, the fact cannot be definitely established because descriptions left by Pliny and other ancient writers are too meager to provide a direct basis of comparison. In the present instance, the name Bergamote could refer to a type of pear rather than to a specific variety.

Fruit small in size, true bergamot in form. Skin greenish-yellow in color with numerous small dots. Flesh white, somewhat coarse, buttery, fairly juicy. Sweet, insipid, disagreeable in flavor. Mid-season.

Tree vigorous, healthy, productive, semi-dwarf on quince, moderately susceptible to blight.

### **Bergamote d' Eté**

Leroy lists 18 synonyms for this old variety. Apparently differs from the variety Bergamote d' Eté listed by Ragan (2) as a synonym of Hampden.

Brief description, Hedrick (1), page 271. Full description, Leroy (3), page 237.

Place and time of origin unknown. Mentioned by Le Lectier in 1628 under the name of Milan de la Beuveriere.

Fruit medium in size and generally globular in form, sometimes slightly turbinate. Skin pale green in color, occasionally tinged with yellow, occasionally blushed, numerous dots. Flesh white, fairly fine, quite free of grit, juicy. Moderately sweet, somewhat acidulous, pleasing flavor. Rather early in season.

Tree vigorous, with grayish foliage. Moderately susceptible to blight.

### **Bergamote Sargeret**

Listed by Ragan (2) as Sargeret.

Brief description, Hedrick (1), page 279. Full description, Leroy (3), page 250.

Originated near Paris, France, from seed sown in 1815. Seed from tree of an unnamed variety.

Fruit small in size, bergamot in form. Skin grayish-green in color, some russetting around lenticels. Flesh white, fine in texture, fairly juicy with considerable grit at the core. Reasonably sweet but lacking in desirable flavor and texture characteristics. Late keeper, holds up well after ripening.

Tree vigorous, fairly productive, semi-dwarf on quince. Moderately susceptible to blight.

### **Besi d' Hery**

Listed as Heri by Ragan (2) who gives 14 synonyms for the variety.

Brief description, Hedrick (1), page 280. Full description, Leroy (3), page 273.

Originated in Brittany, France, about 1598.

Fruit medium or smaller in size, globular in form. Skin deep yellow, usually with prominent red cheek, quite free of blemish, very attractive. Flesh moderately fine, hard in texture, lacking in juiciness. Fairly sweet but somewhat bitter in taste. Late keeper.

Tree reasonably vigorous, wide spreading in habit, average foliage, moderately susceptible to blight.

### **Besi de la Motte**

Listed by Ragan (2) as La Motte. Leroy (3) lists seven synonyms for the variety.

Brief description, Hedrick (1), page 280. Full description, Leroy (3), page 281.

Origin obscure. First reported by La Quintinye, creator of the gardens of Louis XIV, about 1685.

Fruit medium or below medium in size and ranging in shape from obovate to blunt pyriform. Skin bright green in color with large russet dots. Flesh fine, buttery, juicy, some grit at the core. Mild and sweet but lacking in distinctive flavor. Late midseason.

Tree vigorous, productive, semi-dwarf on quince. Moderately susceptible to blight.

### **Beurré Alexandre Lucas**

Listed by Ragan (2) as Alexander Lucas.

Brief description, Hedrick (1), page 283.

Originated as a chance seedling in the Department of Loire et Cher, France, 1866.

Fruit resembles that of Beurré d' Anjou in size and form. Skin smooth, quite free of blemish, greenish-yellow with green dots, quite attractive. Flesh white, medium fine, buttery, juicy. Sweet with pleasing flavor, equal or superior to Beurré d' Anjou in dessert quality. Apparently keeps as long as Anjou in cold storage, ripens easily and retains its quality for some time afterwards. Somewhat softer than Anjou in texture and more susceptible to pressure bruises.

Tree vigorous, clean, and productive. Semi-dwarf on quince. Moderately susceptible to blight.

### **Beurre' d' Amanlis**

Leroy (3) gives 15 synonyms for this variety. Robert Hogg—The Fruit Manual (1862), mentions the variety under the name of D' Albert. Ragan (2) lists it as Amanlis.

Brief description, Hedrick (1), page 283. Full description, Leroy (3), page 294.

Reported to have originated at Amanlis, a village near Rennes, France, during the latter part of the 18th century.

Fruit large, obtuse-pyriform but more or less irregular in form. Skin greenish-yellow, often with brown or reddish cheeks, sometimes russeted. Flesh greenish white, fine, melting, juicy. Rich spicy flavor, some acidity, second rate in dessert quality. Early midseason.

Tree vigorous, fairly productive. Used to some extent as an intermediate trunk stock in England. Moderately susceptible to blight.

### **Beurré d' Amanlis Panachée**

Listed by Ragan (2) as Amanlis Panachee.

Full description, Leroy (3), page 296.

Apparently a sport or off-shoot of Beurré d' Amanlis, first mentioned by Poiteau in 1848. Leroy (3) believes it came from Angers, France.

Appears to be identical with Beurré d' Amanlis, except for variegation of fruits, leaves, and twigs.

### **Beurré d' Angleterre**

Leroy gives seven synonyms for this variety. Ragan (2) lists it as Angleterre.

Brief description, Hedrick (1), page 284. Full description, Leroy (3), page 207.

First described by Le Lectier in 1628. Believed to have originated in England.

Fruit medium in size and resembles Louise Bone de Jersey in form. Skin greenish-yellow in color with dark green dots, inclined to russet around stem, not attractive. Flesh white, moderately fine, juicy, buttery. Fairly sweet with pleasing flavor but only average in dessert quality. Midseason.

Tree of medium vigor and productivity. Moderately susceptible to blight.

#### **Beurré Auguste**

Not to be confused with Beurré Auguste Benoist or Benoist which is a distinct variety.

Listed in the catalog of Pepinieres André Leroy, Angers, France, 1912.

Fruit resembles that of Bartlett in size and form but is smoother in finish. Skin very clear, waxy, uniform yellow color, very attractive but susceptible to friction bruising. Flesh white, fairly fine, tender, moderately juicy. Reasonably good in dessert quality but generally inferior to Bartlett. A little later than Bartlett in season.

Tree fairly vigorous and productive. Good semi-dwarf on quince. Moderately susceptible to blight.

#### **Beurré Baltet Pere**

Listed by Ragan (2) as Baltet Pere. Also known as Baltet Senior.

Brief description, Hedrick (1) page 286.

Originated at Troyes, France, about 1865.

Fruit large, turbinate in form, regular. Skin greenish-yellow, smooth, quite free of blemish, attractive. Flesh fine, melting, very juicy. Much like Packhams Triumph in flavor. Holds up well after ripening. Season about the same as that of Beurré d' Anjou.

Tree vigorous, clean, productive. Moderately susceptible to blight.

#### **Beurré de Bollwiller**

Listed by Ragan (2) as Bollwiller.

Brief description, Hedrick (1), page 288. Full description, Leroy (3), page 319.

Originated at Colmar, Alsace, France. First propagated, 1842.

Fruit medium in size, obtuse-pyriform in shape. Skin, smooth, clear, golden-yellow, usually blushed with bright crimson, attractive. Flesh chalky white, firm even at maturity, reasonably juicy, fairly fine. Sweet, but lacking in desirable flavor and texture characteristics. Late keeper.

Tree vigorous and fairly productive. Good semi-dwarf on quince. Moderately susceptible to blight.

### **Beurré Bosc**

Listed by Ragan as Bosc.

Full description and color plate, Hedrick (1), page 130. Full description, Leroy (3), page 320.

American and British authors have generally attributed the origin of Beurré Bosc to Belgium, on the assumption that it is the variety introduced by Van Mons as Calabase Bosc in 1807. The descriptions of Calabase Bosc given by European authors however, in no way agree with the characteristics of the pear now recognized as Bosc or Beurré Bosc in England and America. More likely, the present day Bosc pear of American and English pomology is the variety described by Leroy (3) under the name of Beurré Bosc. This sort is obviously of French origin, having been named in honor of Louis Bosc, an eminent French horticulturist. Calabase Bosc, on the other hand, was named by Van Mons after the French naturalist, M. Bosc, no relative of Louis Bosc. For further details as to the origin of Beurré Bosc see Leroy (3), page 320.

Fruit medium or larger in size, acute-obovate-pyriform with long, tapering neck. Skin usually deep yellow but at times greenish in color, covered with russet which varies in intensity and character depending upon climatic and cultural conditions. Very attractive when deep yellow in color with russetting smooth and well distributed. Flesh yellowish white, some grit at the center, buttery but not melting, very juicy. Rich vinous, aromatic flavor, rates among the best in dessert quality when properly grown. Usually does not ripen at low temperatures and may die in cold storage while still hard and green in color. Mid-season.

Tree vigorous, upright, spreading, productive, difficult to shape during formative years but well shaped and stately at maturity. Quite susceptible to blight.

### **Beurré Clairgeau**

Listed by Ragan (2) as Clairgeau.

Full description and color plate, Hedrick (1), page 132. Full description, Leroy (3), page 335.

Originated at Nantes, France, about 1830. Said to be an unguarded seedling of Duchess d' Angoulême.

Fruit medium to large in size, roundish-acute-pyriform. Skin thick, granular to the touch, deep yellow, usually with prominent red cheeks, many small russet dots, very attractive when well grown. Flesh white, fairly firm, moderately juicy. Sweet, aromatic, but

lacking in desirable flavor characteristics. Disappointing in dessert quality considering its aroma and fine appearance. Mid-season.

Tree sturdy, vigorous, upright, productive. Very desirable orchard tree. Quite susceptible to blight.

### **Beurré Chaudy**

Listed by Ragan (2) as Chaudy.

Brief description, Hedrick (1), page 290. Also Guide Prat., 86, 1895.

Medium to above medium in size. Resembles Doyenné du Comice in form. Some specimens green in color, some yellow, others mottled green and yellow. Very heavily waxed. Flesh greenish-white, fairly fine in texture, buttery, moderately juicy. Very sweet but lacking in distinctive flavor. Late in season.

Tree moderately vigorous, spreading in habit, with small, dark green leaves. Moderate susceptibility to blight.

### **Beurré Diel**

Leroy (3) gives 20 synonyms for Beurré Diel. Ragan (2) lists it as Diel.

Full description and color plate, Hedrick (1), page 133. Full description, Leroy (3), page 349.

Originated at Brussels, Belgium in 1805. Parentage not indicated.

Fruit medium in size, ovate-obtuse-pyriform. Skin thick and granular, dull greenish-yellow in color, considerable blemish and russet markings, usually unattractive. Flesh white, fairly firm but usually buttery at maturity, considerable grit at center, fairly juicy. Aromatic, moderately sweet, but lacking in desirable flavor and texture characteristics. Midseason.

Tree medium in size, with fair vigor, spreading, fairly productive, moderately susceptible to blight.

### **Beurré Fouqueray**

Brief description, Hedrick (1), page 295.

Originated in France prior to 1885.

Fruit medium to large in size, obtuse pyriform, quite regular in shape and size. Skin smooth, quite free of blemishes, greenish-yellow in color, fairly attractive. Flesh somewhat coarse in texture, buttery, very juicy. Rich acidulous flavor but not equal to the best in dessert quality. Midseason.

Tree of average vigor, good orchard habits, clean dark-green foliage, productive. Moderately susceptible to blight. Semi-dwarf on quince.

### **Beurré de Ghelin**

The tree at the Southern Oregon Branch Experiment Station listed as Beurré de Ghelin is obviously misnamed, since its fruit does not conform to that of the descriptions of Beurré Ghelin given by Hedrick (1) and Leroy (3). We are unable to identify this variety.

### **Beurré Giffard**

Listed by Ragan (2) as Giffard.

Full description and color plate, Hedrick (1), page 134. Full description, Leroy (3), page 369.

Originated at Foussiérs, France, 1825. Apparently a chance seedling.

Fruit resembles that of Beurré Clairgeau in size, form, and coloration. Flesh yellowish, granular at the center, melting, very juicy. Vinous, aromatic flavor. Rates among the best of the early pears in dessert quality. Fruit holds up well considering its season.

Tree reasonably vigorous, open in habit, fairly productive. Moderately susceptible to blight.

### **Beurré Gris**

Leroy (3) gives 29 synonyms for this variety. Listed by Ragan (2) as Brown. Must not be confused with Beurré Gris d' Hiver Nouveau or with Beurré Gris d' Ete, which are distinct varieties.

Brief description, Hedrick (1), page 296. Full description, Leroy (3), page 371.

A very old pear, the origin of which is lost in antiquity. Mentioned by Olivier de Serres in 1651 and by C. Millet in 1652. Listed by Rea as being grown in England in 1655 under the name of Boeure de Roy.

Fruit medium in size, roundish or bergamot in form. Skin greenish-yellow, sometimes blushed, occasionally russeted, fairly attractive. Flesh fine, melting, juicy. Acidulous, vinous flavor, high in dessert quality except for grit at the center.

Tree resembles that of Beurré Hardy in form and foliage characteristics. Quite susceptible to blight.

### **Beurré Gris d' Hiver Nouveau**

Leroy gives seven synonyms for this variety. Listed by Ragan (2) as Gray Winter and by Hedrick (1) as Beurre de Luçon.

Brief description, Hedrick (1), page 300. Full description, Leroy (3), page 374.

Originated at Luçon, Vendée, France about 1830.

Fruit medium or larger in size, roundish in form but halves unequal. Skin thick, wrinkled, gray-green in color, sometimes blushed. Flesh fairly fine, some grit at the center, buttery and very juicy. Sweet, aromatic, vinous flavor, good to very good in dessert quality. Fairly late keeper.

Tree reasonably vigorous, moderate susceptibility to blight.

### **Beurré Hardy**

Listed by Ragan (2) as Hardy.

Full description and color plate, Hedrick (1), page 135. Full description, Leroy (3), page 379.

Originated at Boulogne-sur-mer, France, 1830.

Fruit medium or larger in size, obtuse-pyriform, symmetrical. Skin usually granular, tender, dull greenish-yellow, often with some russetting, dots numerous and sometimes conspicuous. Flesh somewhat granular, buttery, juicy. Rich, aromatic flavor when properly grown and handled. Inclined to be bitter in taste if picked too early and susceptible to core breakdown if left on the trees too long. Fruit a little too soft to withstand commercial handling. Midseason.

Tree of good growth habits, vigorous and productive. Often used as an intermediate trunk stock on quince. Semi-dwarf on quince. Fairly susceptible to blight.

### **Beurré Millet**

Listed by Ragan (2) as Millet.

Brief description, Hedrick (1), page 300. Full description, Leroy (3), page 394.

Originated at Angers, France, 1847.

Fruit small in size and resembles Seckel in form. Skin dull green in color with considerable russetting, unattractive. Flesh greenish-white, tender, abundant watery juice, some grit. Pleasing in flavor but not outstanding in dessert quality. Midseason.

Tree of fair vigor, spreading in habit, reasonably productive, fruit borne in large clusters. Moderately susceptible to blight.

### **Beurré de Nantes**

Listed by Ragan (2) as Nantes.

Brief description, Hedrick (1), page 302. Full description, Leroy (3), page 403.

Found as a wilding by M. Francois Maisonneuve of Nantes, France. First published 1845.

Fruit medium or larger in size, and similar to Beurré Clairgeau in form. Skin greenish-yellow in color, usually blushed, waxy, attrac-

tive. Flesh fine, fairly firm in ripe stage, lacking in juiciness. Poor in dessert quality. Midseason.

Tree rather vigorous, fairly productive, true dwarf on quince but tree shows evidence of decline at 43 years of age. Moderately susceptible to blight.

### **Beurré Oudinot**

Listed by Ragan (2) as Andrews.

Brief description, Hedrick (1), page 302. Full description, Leroy (3), page 406.

Origin obscure. First published by Leroy in 1849, who states that the variety probably came from Nantes, France. First reported in America in 1852.

Fruit medium to larger in size, turbinate in form, more or less irregular. Skin grayish-yellow in color, dotted with brown, sometimes blushed. Flesh white, fine, melting, juicy, quite free of grit. Sweet with vinous flavor but not superior in dessert quality. Keeps a little longer than Bartlett in cold storage.

### **Beurré Phillippe Delfosse**

Listed by Ragan (2) as Delfosse. Leroy (3) gives four synonyms for the variety.

Brief description, Hedrick (1), page 323. Full description, Leroy (3), page 409.

Originated at Jodoigne, Belgium, 1830.

Fruit medium or below medium in size. Skin golden yellow, sometimes marbled with fawn, fairly free of blemish. Flesh white, buttery, very juicy, some grit at core. Very sweet, spicy, aromatic flavor. Midseason.

Tree moderate grower, true dwarf on quince, moderately susceptible to blight.

### **Beurré de Saint Nicolas**

Listed by Hedrick (1) as Duchesse d' Orléans and by Ragan (2) as Orléans.

Full description and color plate, Hedrick (1), page 156. Full description, Leroy (3), page 427.

Originated as a chance seedling at Angers, Maine-et-Lorre, France, 1839.

Fruit medium or larger in size, turbinate and regular in form. Skin greenish-yellow in color with dark green dots, unusually free of blemishes, attractive. Flesh fine, melting, very juicy. Moderately

sweet, pleasing but lacking in flavor characteristics. Too soft to withstand commercial handling. Early in season.

Tree vigorous, well formed, productive. Almost standard size on quince. Moderately susceptible to blight.

### **Beurré Superfin**

Listed by Ragan (2) as Superfin.

Full description and color plate, Hedrick (1), page 137. Full description, Leroy (3), page 432.

Originated at Angers, France, from unguarded seed sown in 1837. Added to A.P.S. catalog list in 1858.

Fruit medium to large in size, roundish-obovate with pointed neck and fleshy stem. Skin smooth, greenish-yellow in color, occasionally blushed. Flesh very fine extremely juicy, quite free of grit, melting. Sweet with acidulous or vinous spicy flavor. Rates among the best in dessert quality. Probably too soft in texture to withstand commercial handling. Midseason.

Tree vigorous, spreading in habit, clean, productive. Moderately susceptible to blight.

### **Blanquet Précoce**

Brief description, Hedrick (1) page 311. Full description, Leroy (3), page 446.

The date and place of origin of this variety are unknown, although some European authors believe it came from Germany. Diel reported it as being grown at Coblenz and Mayenne in 1803. First appearance of the variety in France dates to 1839.

Fruit small, pyriform with long tapering neck. Skin canary yellow at full maturity, smooth, fairly free of blemish. Flesh granular, semi-breaking, not very juicy. Sweet and musky in taste, rates low in dessert quality. Very early in season.

Tree fairly vigorous, productive. Moderately susceptible to blight.

### **Bon Chrétien Bonnamour**

Brief description, Hedrick (1), page 313.

Originated at Rhone, France, 1895.

Fruit medium to large in size, generally pyriform but displaying a great deal of form irregularity. Skin pale, grayish-green with considerable russeting around stem. Not attractive. Flesh medium fine, buttery but not melting, moderately juicy. Extremely sweet, rich flavor similar to that of Winter Nelis. Late keeper, holds up well in ripe stage.

Tree vigorous and productive. Semi-dwarf on quince. Moderately susceptible to blight.

### **Bon Chrétien de Vermont**

Listed by Hedrick (1) as Bon Chrétien Vermont.

Brief description, Hedrick (1), page 315. Also Guide Prat., 88-1895.

Reported to be a cross of Rousselet de Reims and Belle Angevine obtained by M. Sannier about 1890.

Fruit large, true pyriform, regular in size and shape. Skin yellow in color, usually with prominent red blush, quite free of blemish, attractive. Flesh yellowish, fine, moderately juicy, buttery but fairly firm. Sweet, pleasant flavor but not outstanding in dessert quality. Long keeper, holds up well in ripe stage.

Tree vigorous, upright-spreading, lusty green foliage, productive. Moderately susceptible to blight.

### **Bonne d' Ezée**

Leroy (3) gives five synonyms for this variety. Listed by Ragan (2) under the name of Brockworth Park.

Brief description, Hedrick (1), page 316. Full description, Leroy (3), page 478.

Originated at Ezée, Touraine, France, about 1788.

Fruit medium to large in size and resembles Bartlett in form and general appearance. Skin fairly thick, waxy, lemon-yellow in color, fairly free of blemish, attractive. Flesh white, fine, melting, very juicy. Sweet, aromatic, slightly acidulous flavor but inferior to Bartlett in dessert quality. Early in season.

Tree fairly vigorous, spreading in habit, dark green foliage, productive, moderate susceptibility to blight.

### **Chasseurs (des)**

Common synonyms—Poire des Chasseurs, Hunter, Sportsman. Listed by Hedrick (1) as Poire des Chasseurs and by Ragan (2) as Chasseurs.

Brief description, Hedrick (1), page 502. Full description, Leroy (3), page 354.

Supposed to have originated with Van Mons, Louvain, Belgium, about 1830.

Fruit small to medium in size, typically pyriform in shape. Resembles P. Barry in coloration and finish. Flesh buttery but not melting, medium fine, moderately juicy. Very sweet but with a pronounced disagreeable flavor. Considerable bitterness in skin. Early midseason.

Tree fairly vigorous, highly productive, good semi-dwarf on quince. Moderately susceptible to blight.

### **Citron de Carmes**

Nomenclature of this variety is somewhat confused. Hedrick (1) states that it has been known by no less than 50 different names. In France and England its official name is Citron de Carmes but in America it has been generally recognized as Madeleine. Listed by Hedrick (1) and Ragan (2) as Madeleine.

Full description and color plate, Hedrick (1), page 195. Full description, Leroy (3), page 503.

Origin uncertain. Cultivated by Le Lectier in France as early as 1628. Fairly wide distribution in United States about 1830. Added to A.P.S. catalog list in 1848.

Fruit small in size, roundish-obtuse-pyriform. Skin tender, fairly smooth, dull green in color, numerous small dots. Flesh tinged with yellow, fine, melting, very juicy. Sweet, rich, vinous flavor. Among the earliest in season. Short lived, subject to core breakdown if left on trees too long. Too tender to withstand shipping.

Tree moderately vigorous, spreading in habit, grayish green foliage, productive. Fairly susceptible to blight.

### **Colonel Marchand**

Listed in 1912 catalog of Pepinieres André Leroy, Angers, France, as a comparatively recent variety at that time.

Fruit small in size, resembles Bartlett in form. Skin rough, tough, and unattractive. Flesh tough, dry and somewhat coarse in texture. Sweet but lacking in desirable flavor and texture characteristics. Wilts badly in storage. Late keeper.

Tree fairly vigorous, reasonably productive, true dwarf on quince. Moderately susceptible to blight.

### **Columbia**

Leroy gives four synonyms for this variety. Listed by Ragan (2) as Columbia. According to Hedrick (1), the variety Barseck has sometimes been erroneously listed as "Columbia" in nursery catalogs.

Full description, Hedrick (1), page 144. Full description, Leroy (3), page 372.

Originated as a chance seedling in Westchester County, New York and came to attention in 1835. Added to A.P.S. catalog list in 1862.

Fruit medium in size, generally pyriform in shape. Skin greenish-yellow in color, fairly smooth, waxy, few small green dots. Flesh fairly firm, medium fine, not very juicy. Lacking in desirable flavor and texture characteristics.

Tree of fair vigor, spreading in habit, small healthy leaves. Moderately susceptible to blight.

### **Comte de Lambertye**

Listed by Ragan (2) as Lambertye.

Brief description, Hedrick (1), page 346.

Originated from a seed of Beurré Superfin grown in France. First displayed in 1894.

A reasonably large pear, globular or beregamot in form. Skin straw-colored with some russeting. Flesh fine, melting, juicy. Fairly sweet, pleasing flavor but somewhat inferior to Beurré Superfin in dessert quality. Appears to keep a little longer than Bartlett.

Tree fairly vigorous, productive, true dwarf on quince. Moderately susceptible to blight.

### **Comte Lelieur**

Listed by Ragan (2) as Lelieur (Comte).

Brief description, Hedrick (1), page 346.

Originated at Troyes, France, 1865.

Fruit medium in size and resembles Beurré Superfin in form and general appearance. Skin clear, greenish-yellow, quite free of blemish. Flesh melting, fine, juicy, free of grit. Extremely sweet but lacking in acidity and other flavor characteristics. Keeps about as late as Beurré d' Anjou.

Tree fairly vigorous, productive, true dwarf on quince, moderately susceptible to blight.

### **Comte de Paris**

Listed by Ragan (2) as Paris.

Brief description, Hedrick (1), page 346. Full description, Leroy (3), page 593.

Originated at Geest, Saint Renny, Belgium, from seed sown by Van Mons. First reported in 1847.

Fruit below medium in size and resembles Bartlett in form. Skin greenish-yellow with some green dots, reasonably smooth. Flesh yellowish in color, juicy, fairly fine. Sweet, aromatic, pleasing flavor. Early midseason.

Tree moderately vigorous, with some susceptibility to blight.

### **Conférence**

Listed by Ragan (2) as Conference.

Brief description, Hedrick (1), page 347.

Originated in England and introduced in 1894.

Fruit medium in size, oblong-pyriform with tapering neck. Skin pale yellow in color, very susceptible to blemishes from sprays or adverse weather. Flesh yellowish-white, somewhat granular, buttery

but not melting, moderately juicy. Sweet but generally flat and insipid in taste. Highly rated in Europe but has not come up to expectations in Oregon. Midseason.

Tree well formed, moderate in vigor and productivity. Moderately susceptible to blight.

### **Délices d'Avril**

Listed in 1912 catalog of Pepinieres André Leroy, Angers, France.

Fruit medium or smaller in size, blunt pyriform in shape. Skin delicate yellow in color, waxy, smooth, attractive. Flesh somewhat firm at maturity, not very juicy. Very sweet but insipid in taste. Midseason.

Tree vigorous, thrifty, productive. Good semi-dwarf on quince. Moderately susceptible to blight.

### **Delices d' Hardenpont d' Anger**

Listed by Ragan (2) as Hardenpont (Ang.). Not to be confused with Hardenpont (Belg.) or with Delices d' Hardepont which are distinct varieties.

Full description, Leroy (4), page 13.

Supposed to have originated with Van Mons, Louvain, Belgium. Date of origin not recorded.

Fruit very small in size, true pyriform in shape. Skin yellow in color with considerable "cinnamon" russeting. Flesh medium fine, not juicy, somewhat firm at maturity. No outstanding flavor characteristics, mediocre in dessert quality.

Tree medium in vigor, healthy, fairly productive. True dwarf on quince. Moderately susceptible to blight.

### **Directeur Hardy**

Listed by Ragan (2) as Directeur Hardy.

Brief description, Hedrick (1), page 360. Rev. Hort. 542, 1894.

From the seed beds of M. Fourasse and introduced by M. Baltet of Troyes, France, about 1894.

Fruit resembles that of Beurré Hardy in size, form and coloration but is obviously a distinct variety. Flesh moderately fine, buttery and juicy but firmer in texture than Beurré Hardy. Sweet, pleasing flavor but lacks in dessert quality. Midseason.

Tree of medium vigor, productive, true dwarf on quince. Moderately susceptible to blight.

### **Docteur Desportes**

Listed in the 1912 catalog of Pepinieres André Leroy, Angers, France.

Fruit medium or larger in size, oblate but somewhat turbinate in form. Skin fairly tough, smooth, straw-yellow in color, reasonably free of blemish, attractive. Flesh, fairly fine, buttery but not melting, juicy, comparatively free of grit. Similar and equal to Bosc in flavor characteristics. Keeps longer than Bosc in cold storage and has long shelf life.

Tree vigorous, spreading, productive. Semi-dwarf on quince, moderately susceptible to blight.

This variety appears promising as a commercial variety for areas in which it is adapted.

### **Docteur Jules Guyot**

Listed by Hedrick (1) and Ragan (2) as Guyot. Sometimes called the French Bartlett.

Full description and color plate, Hedrick (1), page 173.

Raised in the nurseries of Baltet Brothers, Troyes, France, about 1870. Brought to America about 1885.

Fruit resembles Bartlett in form and coloration but is usually larger in size. Flesh somewhat granular, reasonably juicy, buttery. Fairly sweet, sprightly flavor at the optimum stage of ripeness but quickly becomes mealy and insipid in taste. Very susceptible to core breakdown. Overly tender and too transitory in character to rate as a commercial variety. Somewhat earlier than Bartlett in season.

Tree considerably more vigorous than Bartlett but definitely a shy bearer. Moderately susceptible to blight.

### **Dorset**

Full description and color plate, Hedrick (1), page 149.

Raised from a seed planted by Lemuel Clapp of Dorchester, Massachusetts. Date of origin uncertain. Introduced by Ellwanger and Barry, 1895.

Fruit medium or larger in size, obovate-obtuse-pyriform, regular in size and form. Skin reasonably smooth, greenish-yellow in color, often blushed, fairly attractive. Flesh white, medium fine, buttery but not melting, somewhat juicy. Sweet with pleasing flavor but not among the best in dessert quality. Late keeper, slow in ripening with long shelf life.

Tree moderate grower, spreading in habit, very productive. Fairly susceptible to blight.

### **Doyenné Boussoch**

Leroy (4) gives 12 synonyms for this variety. Listed by Ragan (2) as Boussock.

Full description and color plate, Hedrick (1), page 152. Full description, Leroy (4), page 58.

Supposed to have been raised by Van Mons at the beginning of the nineteenth century. It was placed on sale at Brussels in 1819 and was brought to America in 1841. Added to catalog list of A.P.S. in 1856.

Fruit medium in size, obtuse-ovate-pyriform. Skin thin, pale yellow in color, more or less netted with russet, often blushed. Flesh white, buttery, juicy, fairly fine. Briskly sub-acid in flavor which is objectionable to some people. Susceptible to core breakdown if left on tree too long. A little later than Bartlett in season.

Tree outstanding in vigor, form, and productiveness. Fairly susceptible to blight.

### **Doyenné du Comice**

Listed by Ragan (2) as Comice.

Full description and color plate, Hedrick (1), page 153. Full description, Leroy (4), page 60.

From the first seed bed in the fruit garden of Comice Horticole, Angers, Department of Maine-et-Loire, France, 1849. Introduced into America, 1850. First recommended for general cultivation by A.P.S. in 1862.

Fruit medium to large, sometimes very large, obovate-obtuse-pyriform. Skin fairly thick, granular, susceptible to blemishes, sometimes russeted, greenish-yellow in color, often blushed. Flesh very fine, melting, extremely juicy, quite free of grit. Sweet, rich, aromatic, vinous flavor. Regarded by many as the standard of dessert quality among pears. Midseason. Fruit inclined to bruise easily in the ripe stage.

Tree large, stately, vigorous, but slow in coming into bearing. Semi-dwarf on quince, moderately susceptible to blight.

Doyenné du Comice is a temperamental variety which reaches perfection only under limited conditions of soil, climate, and location.

### **Doyenné Goubault**

Listed by Ragan (2) as Doyenne Goubault. Must not be confused with Beurré Goubault and Besi Goubault which are distinct varieties.

Brief description, Hedrick (1), page 367. Full description, Leroy (4), page 66.

Raised from seed by M. Goubault of Angers, France, about 1843.

Fruit below medium in size, roundish-oblate in form. Skin straw-yellow in color, often with red cheek, smooth, reasonably free of blemish. Flesh white, fairly fine, not very juicy, firm at maturity. Lacking in desirable flavor and texture characteristics. Late keeper, very slow to ripen.

Tree moderately vigorous, productive, spreading in habit, quite susceptible to blight.

#### **Doyenné de la Grifferaye**

Brief description, Hedrick (1), page 367. Full description, Leroy (4), page 68.

Originated in the seed beds of M. Le Gris, Angers, France, 1853.

Fruit medium in size, turbinate-oblate-obtuse in form, irregular. Skin usually unattractive in appearance due to blemishes and irregular patches of russet. Flesh white, fairly fine, buttery, juicy. Sweet, aromatic but only average in dessert quality. Inclined to wilt in storage. Midseason.

Tree of medium vigor, inclined toward biennial bearing, true dwarf on quince. Moderately susceptible to blight.

#### **Doyenné Gris**

Listed by Ragan (2) as Gray Doyenne. Leroy (4) gives 16 synonyms for the variety.

Brief description, Hedrick (1) page 367. Full description, Leroy (4), page 69.

Origin attributed to the garden of the Chartreux Monastery, Paris, France, about the middle of the 18th century. Apparently a russet sport of White Doyenne.

Fruit medium in size and gobular in form as in White Doyenne. Skin smooth, deep gold in color, uniformly overlaid with fine "cinnamon" russet, very attractive, flesh white, buttery, tender, extremely juicy. Sweet, spicy flavor, equal to Bosc in dessert quality. Keeps till about March 1 in cold storage. Has good shelf life and remains free of friction bruises.

Tree vigorous, strong, productive, and willowy in habit. Moderately susceptible to blight.

One of the most promising varieties in the collection.

#### **Doyenné Madam Levasseur**

Listed by Ragan (2) as Levasseur.

Listed in 1912 catalog of Pepinieres André Leroy, Angers, France, as a comparatively new variety at that time.

Fruit large and resembles that of Pound in form. Skin thick, tough, greenish-yellow in color, with some blemish. Flesh reasonably

firm in texture at maturity, somewhat coarse, moderately juicy. Mild in flavor, superior to Pound in dessert quality. Late keeper, ripens very slowly.

Tree extremely vigorous with lusty, dark green foliage. Moderately susceptible to blight.

### **Doyenné de Saumur**

Synonyms—Beurré Seringe, Doyenné Fondant. Listed by Ragan (2) as Saumur.

Brief description, Hedrick (1), page 369. Full description, Leroy (4), page 84.

Origin uncertain. Known in the districts of Saumur and Lyons, France, early in the 19th century.

Fruit medium or smaller in size, roundish or oblate in form, irregular. Skin rather smooth, straw colored with inconspicuous dots. Flesh white, fine, fairly juicy, tender. Aromatic with a slightly musky flavor. Early midseason.

Tree fairly vigorous, productive, good foliage, semi-dwarf on quince. Moderate susceptibility to blight.

### **Duchesse d'Angoulême**

Listed by Ragan (2) as Angouleme.

Full description and color plate, Hedrick (1), page 154. Full description, Leroy (4), page 98.

Found as a chance seedling near Maine-et-Loire, France. First propagated by M. Aneusson about 1808 at Angers, France. First fruited in America in 1830. Added to A.P.S. catalog list in 1862.

Fruit medium or above in size, oblong-obovate-pyriform. Skin dull, greenish-yellow in color, sometimes netted with russet, numerous russet dots. Flesh becoming buttery at maturity but not melting, somewhat granular, moderately juicy. Sweet, fairly pleasing in flavor but not outstanding in dessert quality. Early midseason.

Tree vigorous, stately, productive, hardy, and healthy. One of the best in the pear kingdom. Moderately resistant to blight. Semi-dwarf on quince.

### **Duchesse d'Angoulême Panachée**

Listed by Ragan (2) as Angouleme (Var.).

Brief description, Hedrick (2), page 371. Brief description, Leroy (4), page 102.

Originated in Leroy nurseries, Angers, France, 1840.

Identical with Duchesse D'Angoulême in fruit and tree characteristics except for variegation in fruits, leaves, and twigs.

### **Duchesse de Berry d' Eté**

The nomenclature of this variety is somewhat confused. Fourteen synonyms are given for the variety by Ragan (2) and Leroy (3). Ragan lists it as Summer Doyenne.

Brief description, Hedrick (1), page 371. Full description, Leroy (3), page 104.

Raised in seed bed in the Commune of Saint-Herblain, Department of Loire Inferieure, France, 1827.

Fruit medium in size, generally globular or bergamot in form. Skin yellow in color with grayish dots. Flesh white, fairly fine, juicy, melting. Aromatic with pleasing flavor. Bartlett season.

Tree fairly vigorous, productive. Good semi-dwarf on quince. Moderately susceptible to blight.

### **Duchesse de Bordeaux**

Listed by Ragan (2) as Bordeaux.

Brief description, Hedrick (1), page 371. Full description, Leroy (4), page 105.

Found among a collection of pear trees by M. Secher, Maine et Loire, France, 1850.

Fruit medium to large in size and resembles Doyenné du Comice in form. Skin rather tough, golden yellow in color, often blushed, somewhat susceptible to limb marks, usually quite attractive. Flesh tender, juicy, fairly fine, some grit at the center. Rich, sweet, vinous flavor when properly handled. Late keeper, ripens slowly and has a long shelf life. Requires long period in cold storage to insure proper ripening. Rates among the best of the late keeping pears but needs a long and hot growing season to properly mature.

Tree vigorous, fairly productive, strong, wide spreading, healthy foliage. Moderately susceptible to blight.

### **Duchesse de Brissac**

Listed by Ragan (2) as Brissac. Not to be confused with Belle de Brissac which is a different variety.

Brief description, Hedrick (1), page 372. Full description, Leroy (4), page 108.

Raised in a seed bed by August Benoist, Brissac, Maine-et-Loire, France. First fruited in 1861.

Fruit above medium in size, generally ovate but quite irregular in form. Skin greenish-yellow in color with some russetting. Flesh fine, buttery or melting, juicy. Sweet aromatic flavor. Rather early in season.

Tree fairly vigorous, semi-dwarf on quince. Moderately susceptible to blight.

### **Duchesse Bronzée**

Listed by Hedrick (1) as Duchesse d' Angoulême Bronzée and by Ragan (2) as Bronz Duchess.

Brief description, Hedrick (1), page 371.

Found in the garden of M. Weber, Dijon, France and introduced in 1873. Appears to be a sport of Duchesse d' Angoulême.

Resembles Duchesse d' Angoulême in tree and other characteristics but fruit is russeted and often displays a red blush. Superior to Duchesse d' Angoulême in dessert quality but appears to be somewhat smaller in size.

Tree vigorous, productive, true dwarf on quince. Moderately resistant to blight.

### **Duchesse de Mouchy**

Listed by Ragan as Mouchy.

Brief description, Hedrick (1), page 372. Full description, Leroy (4), page 112.

A chance seedling found by the Curé of Breteuil, France, 1862.

Fruit fairly large in size, irregular in form, usually globular or slightly turbinate. Skin fairly smooth but susceptible to limb rubs, deep yellow in color, waxy, often blushed. Flesh somewhat coarse, tender but not fully buttery, moderately juicy. Better than average in dessert quality but does not rate among the best. Holds up well after ripening. Midseason.

Tree vigorous, healthy, productive. Good semi-dwarf on quince. Fairly susceptible to blight.

### **Eva Baltet**

Listed by Ragan (2) as Eva Baltet.

Brief description, Hedrick (1), page 379. Report of Canada Experimental Farms, page 430, 1905.

Reported to be a seedling of Bartlett fertilized by Flemish Beauty.

Fruit large, generally pyriform but somewhat truncated. Skin quite smooth, light yellow in color, often blushed, few dots, attractive. Flesh fine, buttery, juicy. Aromatic, sweet, pleasing flavor. Of high dessert quality in Europe but rates only good as grown in the Rogue River Valley of Oregon. Season late.

Tree vigorous, productive, good foliage, good semi-dwarf on quince. Moderately susceptible to blight.

### **Fondant des Bois**

Nomenclature much confused. Leroy (4) gives 35 synonyms for the variety and Hedrick (1) states that it has been known by no less than 60 names. American authors have generally referred to it as Flemish Beauty. Ragan (2), lists it as Flemish.

Full description and color plate, Hedrick (1), page 163. Full description, Leroy (4), page 166.

A chance seedling found near Alost, East Flanders, Belgium, at the beginning of the 19th century. Propagated by Van Mons in 1810 and introduced by him a few years later. Introduced into the United States about 1830 and placed on the A.P.S. catalog list in 1848.

Fruit medium or larger in size, obovate-obtuse-pyriform, quite regular. Skin very smooth, quite free of blemish when well grown, creamy yellow in color, often blushed, attractive. Flesh white, firm, becoming buttery at maturity, somewhat granular, juicy. Aromatic with a trace of muskiness, fairly sweet. Good in dessert quality but cannot be rated among the best. A little later than Bartlett in season. Fruit loses ability to ripen if held for long periods in cold storage. After many trials this variety has failed to become a popular commercial sort, in spite of its many good traits.

Tree vigorous, of good orchard habits, very productive. Moderately susceptible to blight.

### **Fondant de Moulins-Lille**

Brief description, Hedrick (1), page 385. Full description, Leroy (4), 179.

Obtained in 1858 by M. Grolez-Duriez, Rouchin-lez-Lille, France, from a seed of Napoleon. Propagated in France since 1863.

Resembles Beurré d' Anjou in form and appearance but is a little smaller in size. Flesh white, fine, free of grit, melting, extremely juicy. Very sweet, slightly acidulous, rich vinous flavor. Of outstanding dessert quality but may be a little too soft in texture to withstand commercial handling. Midseason.

Tree fairly vigorous, annual bearer, good foliage. True-dwarf on quince. Moderately susceptible to blight.

### **Figue d'Alençon**

Leroy (4) lists nine synonyms of Figue d'Alençon but states that some other pears bearing the name "Figue" are not identical with this variety. Leroy also states that the variety described under this name by Charles Dowing is probably Longue Verte rather than Figue d' Alençon. Ragan (2) lists the variety as Figue.

Brief description, Hedrick (1), page 382. Full description, Leroy (4), page 156.

Apparently a chance seedling found at Alençon, Department of Orne, France, about 1829.

Fruit resembles Louise Bonne de Jersey in form and coloration. Medium in size. Flesh greenish-yellow, somewhat firm at maturity, not very juicy. Quite sweet but lacking in desirable flavor and texture characteristics. Midseason.

Tree of medium vigor, spreading in habit, fairly productive. Moderately susceptible to blight.

### **Frederick Clapp**

Listed by Ragan (2) as Fred. Clapp. Full description and color plate, Hedrick (1), page 169.

Raised by Lemuel Clapp of Dorchester, Massachusetts, about 1870. Believed to be a cross between Urbaniste and Beurré Superfin. Added to A.P.S. catalog list in 1877.

Fruit medium or larger in size, roundish or obovate in form, somewhat irregular in both size and form. Skin very smooth, waxy, free of blemish, clear straw-yellow in color, very attractive. Flesh fine, melting, juicy, quite free of grit. Spicy, acidulous flavor, rates high in quality during some seasons but only fair in quality at other times. Holds up well after ripening but is susceptible to Anjou scald after cold storage. Midseason.

Tree vigorous, productive, one of the best in the pear kingdom. Fairly susceptible to blight.

### **General Galliéne**

Listed in the 1912 catalog of Pépinières André Leroy, Angers, France, as a comparative recent variety at that time.

Fruit small or medium in size and resembles Bartlett in form. Skin yellowish-green in color, reasonably free of blemish. Flesh tough, medium fine, not very juicy. Fairly sweet but lacking in desirable flavor and texture characteristics. Late keeper.

Tree of moderate vigor, healthy, fairly productive, true dwarf on quince. Moderately susceptible to blight.

### **Grégoire Bordillon**

Listed by Ragan (2) as Bordillon.

Brief description, Hedrick (1), page 403. Full description, Leroy (4), page 237.

Raised by André Leroy of Angers, France, from seed of Graslin in 1855.

Fruit large, ovate in form, inclined to be lopsided. Skin pale-yellow in color with some mottling, not attractive. Flesh yellowish, fairly fine, melting, juicy. Sweet, pleasant flavor but not outstanding in dessert quality. Season about the same as Bartlett.

Tree fairly vigorous, productive, semi-dwarf on quince. Moderately susceptible to blight.

### **Grosse Louise**

Common synonym, Louise Bonne Butin.

Brief description, Hedrick (1), page 405. Full description, Leroy (4), page 253.

Apparently a chance seedling found in a garden at Tourcoing, France, during the early part of the 19th century.

Fruit large in size and resembles Beurré d' Anjou in form. Skin greenish-yellow, fairly attractive but bruises and discolors quickly in the ripe stage. Flesh white, fine, melting, very juicy. Perfumed, pleasing flavor but obviously too soft in texture to withstand commercial handling. Fairly early in season.

Tree remarkably vigorous, upright, stately, productive, with lusty, dark green foliage. Moderately susceptible to blight.

### **Henri Desportes**

Listed by Ragan as Henri Desportes.

Brief description, Hedrick (1), page 415. Full description, Leroy (4), page 276.

Raised from seed by André Leroy, Angers, France. First fruited in 1862.

Fruit large in size, generally roundish in form but quite irregular. Skin yellowish in color but often displaying large, dark green blotches, easily damaged by sprays and adverse weather conditions, unattractive. Flesh fine, buttery, juicy, fairly free of grit. Sweet, pleasing flavor after proper handling. Early midseason.

Tree medium in vigor, spreading in habit. Moderately susceptible to blight.

### **Hourdequin**

Listed in the 1912 catalog of Pepinieres André Leroy, Angers, France.

Fruit below medium in size, turbinate in form, quite regular. Skin dull, straw color with russet dots at lenticels. Flesh hard, tough, and lacking in juiciness. Decidely inferior in dessert quality. Very long keeper but wilts badly in storage. Fruit fails to soften even after

a long time in cold storage and extended periods at ripening temperatures.

Tree vigorous, spreading in habit, good foliage, productive. Moderately susceptible to blight.

### **Lady Clapp**

Listed by Ragan as Lady Clapp.

Brief description, Hedrick (1), page 441. Also described in catalog of Ellwanger and Barry, 1894.

Fruit medium or above in size resembling Bartlett in form but somewhat smoother and more regular. Skin greenish in color, waxy, free of blemish, very attractive. Flesh fine, melting, juicy. Fairly sweet, somewhat flat in taste with no outstanding flavor characteristics. Too soft to withstand commercial handling, short-lived in the ripe stage. Somewhat later than Bartlett.

Tree vigorous, of good orchard habits, good foliage, productive. Fairly susceptible to blight.

### **Lawson**

Listed by Ragan (2) as Lawson.

Full description and color plate, Hedrick (1), page 186.

Originated on the farm of a Mr. Lawson, Ulster County, New York, about 1800. Added to A.P.S. catalog list in 1899.

Fruit medium in size, and varying in form from obovate-obtuse-pyriform to ovate-obtuse-pyriform. Skin fairly smooth, pale yellow in color, heavily blushed with dull red, fairly attractive. Flesh firm, not very juicy. Lacking in desirable flavor and texture characteristics. Very early in season.

Tree moderate grower, upright in habit reasonably productive. Moderately susceptible to blight.

### **Le Brun**

Listed by Ragan (2) as Le Brun.

Brief description, Hedrick (1), page 443. Full description, Leroy (4), page 503.

Grown by M. Gueniot of Troyes, France, from mixed seed of Doyenné d' Hiver and Beurré d' Arenberg, 1855.

Fruit medium or above in size and comparable to Bartlett in form. Skin very smooth, waxy, deep yellow in color, but extremely susceptible to bruising in the ripe stage. Flesh white, fine, free of grit, melting, juicy. Resembles Bartlett in flavor but somewhat inferior to Bartlett in dessert quality. A little later than Bartlett in season.

Tree more vigorous than Bartlett, productive, good foliage, semi-dwarf on quince, fairly susceptible to blight.

### **Lieutenant Poidevin**

Listed by Ragan (2) as Poidevin.

Brief description, Hedrick (1), page 448. Full description, Leroy (4), page 344.

Grown from seed by M. Flon-Grolleau, Maine-et-Loire, France, 1845. Named in honor of Lt. Charles Wilfred Poidevin, a French hero of the Crimean War.

Fruit large and resembling Doyenné du Comice in form. Skin deep yellow in color, mottled with russet, fairly attractive. Flesh somewhat firm, medium fine, moderately juicy. Pleasing in flavor but too poor in texture to rate as a quality pear. Late keeper, slow to ripen, inclined to wilt in storage.

Tree vigorous, healthy, productive, good semi-dwarf on quince. Moderately susceptible to blight.

### **Longue Verte**

Nomenclature much confused. Leroy (4) gives 11 synonyms for the variety and Ragan (2) gives 14, most of which differ from those of Leroy. Leroy (4) describes the variety under the name of Longue Verte while Hedrick (1) and Ragan (2) list it under the name of Long Green. This sort should not be confused with the ancient variety known as Verte Longue d' Automne or Long Green of Autumn.

Brief description, Hedrick (1), page 449. Full description, Leroy (4), page 349.

Origin of this variety is uncertain. Belgian authorities generally attribute it to Van Mons, but Leroy (4) contends that it was grown in France long before the time of Van Mons.

Fruit medium in size, bell-shaped with long tapering neck, very graceful in form. Skin smooth, grass-green in color. Flesh greenish-white, moderately fine, some grit at the center, buttery, juicy. Moderately sweet with characteristic nut-like flavor. Second rate in dessert quality. Early midseason.

Tree of average vigor, heavy annual bearer, good foliage, semi-dwarf on quince. Fairly susceptible to blight.

### **Louis Pasteur**

Brief description, Hedrick (1), page 451. Rev. Hort. 223-1909.

Obtained by Arsène Sannier, Rouen, France, at an unknown date.

Fruit medium or smaller in size and resembles Winter Nelis in form. Skin somewhat gritty, fairly tough, greenish-yellow in color, overlaid with unattractive russet. Flesh white, fine, melting, very juicy, slight grit at the center. Very sweet, rich, vinous flavor, rates

among the best in dessert quality. Holds up well after ripening but susceptible to wilting in storage. Midseason.

Tree fairly vigorous, healthy, productive, good semi-dwarf on quince. Moderately susceptible to blight.

#### **Louis Vilmorin**

Listed by Ragan (2) as Vilmorin.

Brief description, Hedrick (1), page 451. Full description, Leroy (4), page 355.

Obtained from seed of Beurré Clairgeau by André Leroy, Angers, France, about 1863.

Fruit resembles that of Beurré Clairgeau in size, form, and coloration. Very much like Beurré Clairgeau in flesh and dessert characteristics. No improvement over Beurré Clairgeau. Very susceptible to pear scab.

Tree of medium vigor, fairly productive, semi-dwarf on quince. Moderately susceptible to blight.

#### **Madame André Leroy**

Listed by Ragan (2) as Leroy.

Brief description, Hedrick (1), page 455. Full description Leroy (4), page 372.

Obtained from his seed beds by André Leroy, Angers, France, and first fruited in 1862. Named in honor of Mrs. André Leroy.

Fruit large in size and resembles Beurré Clairgeau in form. Skin yellowish in color but mottled with dark green, susceptible to blemish, usually unattractive. Flesh white, fairly fine, buttery, moderately juicy. Fairly sweet but lacking in desirable flavor characteristics. Slight disagreeable after-taste. Midseason.

Tree vigorous, upright, spreading, productive, fine foliage. Moderately susceptible to blight.

#### **Madame Carolin d' Airoles**

Listed in the 1912 catalog of Pepinieres André Leroy, Angers, France.

Fruit small to medium in size, bergamot in form. Skin greenish-yellow in color, smooth, quite free of blemish. Flesh medium fine, tender but not buttery, not overly juicy. Reasonably sweet but lacking in desirable flavor and texture characteristics. Late keeper, very slow to ripen.

Tree fairly vigorous, productive, true dwarf on quince. Moderately susceptible to blight.

### **Madame Favre**

Apparently different from Favre and Favre (Souv.) listed by Ragan (2).

Brief description, Hedrick (1), page 458. Full description, Leroy (4), page 379.

Obtained by M. Favre, Shalon-sur-Marne, France. First fruited in 1861.

Fruit medium in size, globular in form, somewhat irregular. Skin generally yellow in color, reasonably smooth, quite free of blemish. Flesh more or less granular, tending to be juicy, buttery but not melting. Fairly sweet but only average in dessert quality. A little later than Bartlett in season.

Tree vigorous, productive, lusty foliage, good semi-dwarf on quince. Moderately susceptible to blight.

### **Madame Hutin**

Listed by Ragan (2) as Hutin.

Listed in 1912 catalog of Pepinieres André Leroy, Angers, France.

Fruit medium or less in size and resembles Winter Nelis in form. Skin straw-colored, often blushed, partially russeted. Flesh fairly fine, not very juicy, buttery but reasonably firm at maturity. Moderately sweet, pleasing flavor but not the equal of Winter Nelis in dessert quality. Midseason.

Tree fairly vigorous, productive, good semi-dwarf on quince. Moderately susceptible to blight.

### **Madame Lyé Baltet**

Listed by Ragan (2) as Madame Lye Baltet.

Brief description, Hedrick (1), page 458.

Obtained by Ernest Baltet, nurseryman at Troyes, France and placed in commerce in 1877.

Fruit small in size, roundish-turbinate in form. Skin generally yellow with considerable bronzing on sunny side. Flesh fine, juicy, buttery. Very sweet with pleasing flavor. Midseason.

Tree moderately vigorous, spreading in habit, fairly productive. Quite susceptible to blight.

### **Madame Treyve**

Listed by Ragan (2) as Treyve.

Brief description, Hedrick (1), page 459. Full description, Leroy (4), page 388.

Grown from seed by M. Treyve, Trévaux, France, 1848.

Fruit medium in size, obtuse-ovate in form with short, slender neck. Skin fairly smooth, greenish-yellow in color, sometimes blushed, and occasionally dotted or streaked. Flesh white, semi-fine, melting, juicy. Sweet, aromatic, slightly acidulous flavor. Rates highly as a dessert pear. A little later than Bartlett in season.

Tree fair in vigor, productive. Moderately susceptible to blight.

#### **Marguerite Marillat**

Listed by Ragan (2) as Marguerite Marillat.

Brief description, Hedrick (1), page 463.

Obtained by M. Marillat, Crappome, near Lyons, France, 1874.

Fruit large, sometimes very large in size, generally pyriform but somewhat variable in shape. Skin fairly smooth, waxy, deep golden yellow in color, often blushed with brilliant scarlet, attractive and showy. Flesh moderately fine, tender but not melting, some grit at the center, fairly juicy. Somewhat acidulous and slightly musky in taste, second rate in dessert quality but superior to most other large-fruited pears. Fruit holds up remarkably well in the ripe stage. Early midseason.

Tree vigorous, upright grower, fairly desirable as orchard tree, reasonably productive. Moderately susceptible to blight.

#### **Marie Louise**

Leroy (4) lists 15 synonyms for Marie Louise and Ragan (2) lists 20.

Full description and color plate, Hedrick (1), page 197. Full description, Leroy (4), page 399.

Raised from seed sown by the Abbé Duquesne, Mons, Belgium, 1809 and dedicated to Marie Louise, second consort of Napoleon Bonaparte. Introduced into the United States in 1823. Placed on the A.P.S. catalog list, 1862.

Fruit medium in size and resembles that of Louise Boune de Jersey in form and general appearance. Skin very smooth, greenish-yellow in color, often blushed, prominent "trout" spots. Flesh fine, juicy, melting, quite free of grit. Very sweet with honey-like flavor. Rates among the very best in dessert quality. Early midseason.

Tree fairly vigorous, not always productive. Moderately susceptible to blight.

#### **Messire Jean**

Leroy gives 24 synonyms for this old variety. Listed by Ragan (2) as Messire.

Brief description, Hedrick (1), page 471. Full description, Leroy (4), page 419.

Origin uncertain. Reference to the variety in French pomological literature dates back to 1550 or possibly to 1540. Listed in the catalog of Prince Nurseries, Long Island, New York as early as 1771.

A small-fruited pear resembling Winter Nelis in form, color, and general appearance. Flesh breaking, not very juicy. Sweet, somewhat pleasing flavor but decidedly inferior to Winter Nelis in dessert quality. Late keeper but withers badly in storage.

Tree fairly vigorous, true dwarf on quince, inclined toward biennial bearing. Moderately susceptible to blight.

### **Monchallard**

Leroy (4) gives four synonyms for this variety. Listed by Ragan (2) as Monchallard.

Found as a chance seedling by M. Monchallard, at Valeuil, Dordogne, France about 1810.

Fruit medium or larger in size, somewhat like Bartlett in form but smoother and more symmetrical. Skin clear, pale yellow, some green dots. Often slightly blushed, attractive. Flesh white, very soft or melting, very juicy, free of grit. Sweet, slightly acidulous vinous flavor. Rates high in dessert quality but seems too soft to withstand commercial handling. Season about the same as Bartlett.

Tree vigorous, productive, good foliage, healthy, semi-dwarf on quince. Fairly susceptible to blight.

### **Notaire Lepin**

Brief description, Hedrick (1), page 488. Hort. Rev., page 449, 1889.

Obtained by M. Rollet, Villefranch, Rhone, France about 1860.

Fruit large in size, obtuse-pyramid in form. Skin smooth, greenish-yellow in color, quite free of blemish, attractive. Flesh fine, buttery, juicy, quite free of grit. Moderately sweet, refreshing flavor but quite variable in dessert quality. Late keeper, holds up well in ripe stage.

Tree moderately vigorous, productive, of good orchard habits. Somewhat susceptible to blight.

This variety has many desirable characteristics but its dessert quality appears too variable to warrant acceptance as a commercial variety.

### **Omer Pacha**

Nomenclature much confused. Listed by Hedrick (1) as Saint Menin and by Ragan (2) as Menin. The name Omer Pacha was applied to the variety in France by André Leroy while the name Saint

Menin appears to have been applied to it in the United States. Later it was agreed by Charles Dowling and confirmed by Leroy that Omer Pacha and Saint Menin were identical. See Leroy (4).

Brief description, Hedrick (1), page 537. Full description, Leroy (4), page 478.

Place and manner of origin unknown.

Fruit medium in size resembling Flemish Beauty in form. Skin pale yellow in color with considerable blemish. Flesh fairly fine, buttery, juicy. Moderately sweet, pleasing in flavor but second rate in dessert quality. Bartlett season.

Tree vigorous, good foliage, productive, semi-dwarf on quince. Fairly susceptible to blight.

### **Passe Crassane**

Listed by Ragan (2) as Passe Crassane. Not to be confused with Crassane, Crassane (Bergamot) and Crassane (Sum.).

Brief description, Hedrick (1), page 491. Full description, Leroy (4), page 505.

Raised from mixed seed sown by M. Boisbunel, Rouen, France, 1845. First fruited in 1855.

Fruit medium to large in size, globular or bergamot in form. Skin thick, very tough, pale green or creamy yellow at maturity, slight tendency to russet but usually fairly clear. Flesh white, moderately fine, some grit at the center, buttery but not melting, fairly juicy. Sweet, rich, sprightly flavor, rates high in dessert quality when properly grown and handled. Late keeper, slow to ripen, unusually long shelf life. Said to be the most popular late pear in France at the present time. Skin probably too tough to satisfy American consumers.

Tree vigorous and productive, with lusty, dark-green foliage, desirable orchard form. Fairly susceptible to blight.

### **Petit Blanquet**

Listed by Ragan (2) as Little Blanquet. First known in Europe under the name of Perle. Leroy (4) gives 13 synonyms for the variety and Ragan (2) gives 14.

Brief description, Hedrick (1), page 495. Full description, Leroy (4), page 517.

Apparently there is no authentic record of the origin of this variety. According to Leroy (4) it was well known in French Gardens as early as the middle of the sixteenth century.

Fruit very small in size, usually obtuse-pyriform but quite variable in shape. Skin clear, straw-colored, waxy, few green dots. Flesh moderately fine, firm, not juicy. Sweet but lacking in desirable flavor and texture characteristics. Early in season.

Tree very vigorous, stately, lusty green foliage, fairly productive, semi-dwarf on quince.

Moderately susceptible to blight.

### **Pitmaston Duchess**

Listed by Hedrick (1) and Ragan (2) as Pitmaston.

Full description and color plate, Hedrick (1), page 207.

Raised by John Williams, at Pitmaston near Worcester, England, 1841. First fruited in America in 1870. Although receiving favorable comment from A.P.S., the variety was never added to the Society's catalog list. Believed to be a cross of Duchesse d'Angoulême and Glou Morceau.

Fruit medium to large in size, obovate-pyriform, symmetrical. Skin very smooth, free of blemish, delicate straw color, waxy, most attractive. Flesh white, fairly fine, buttery, moderately juicy. Rather sweet, acidulous flavor which varies from season to season. Generally good but not outstanding in dessert quality. A little later than Bartlett in season.

Tree vigorous with good foliage and orchard habits, very productive. Moderately susceptible to blight.

### **Poëte Béranger**

Brief description, Hedrick (1), page 501. Full description, Leroy (4), page 536.

Grown from seed sown by André Leroy, Angers, France. First fruited in 1867 and placed in commerce in 1870.

Fruit resembles that of Doyenné du Comice in size and form. Skin yellow in color, fairly free of blemish. Flesh fine, melting, juicy, quite free of grit. Sweet, but lacks desirable flavor. Develops a disagreeable taste as fruit becomes overripe.

Tree fair in vigor, reasonably productive, good true dwarf on quince. Moderately susceptible to blight.

### **Précoce Trévoux**

Listed by Ragan (2) as Trevoux.

Brief description, Hedrick (1), page 507.

Obtained by M. Treyve of Trévoux, Ain, France and first published in 1862.

Fruit medium in size, pyriform, often somewhat truncated in shape. Skin delicate, deep yellow in color, dotted with green, often streaked or blushed. Flesh fine, juicy, melting. Perfumed, sweet, rich flavor. Short-lived in the ripe stage. Normally matures ahead of Bartlett.

Tree of medium vigor, fairly productive. Moderately susceptible to blight.

### **Prenices de Maria Lesueur**

Listed by Ragan (2) as Maria Lesueur.

A small, unattractive, roundish pear with green color and heavy overlay of russet. Flesh fairly fine but gritty at the center, melting, and very juicy. Sweet vinous flavor similar to that of Louis Pasteur. Rates rather high in dessert quality. Late keeper, inclined to wilt in storage.

Tree reasonably vigorous, good foliage, fairly productive, true dwarf on quince. Moderately susceptible to blight.

### **Professeur Grosdemage**

Brief mention, Hedrick (1), page 514. Baltet Cult. Fr. 342, figure 343.

Fruit medium in size, oblong-pyriform, quite regular. Skin greenish-yellow in color, often blushed, reasonably blemish free. Flesh yellowish, medium fine, fairly firm, not very juicy. Sweet, pleasing flavor but not outstanding in dessert quality. Late keeper, slow to ripen, long shelf life.

Tree of medium vigor, fine foliage, fairly productive, true dwarf on quince. Moderately susceptible to blight.

### **Reliance**

Brief description, Hedrick (1), page 519.

Grown from seed in 1857 and introduced to the Georgia Horticultural Society by P. J. Berkman in 1890.

A small, apple-shaped pear, greenish-yellow in color, usually blushed, often blemished. Similar to Seckel in texture and approaching it in dessert quality. Susceptible to core breakdown if left too long on the tree. Somewhat earlier than Seckel in season. Generally inferior to Seckel as a variety.

Tree vigorous, productive, moderately susceptible to blight.

### **Roi Charles de Wurtemberg**

Listed by Ragan (2) as King Charles and by Hedrick (1), as König Karl von Württemberg. Also listed as King Karl in some recent nursery lists.

Brief description, Hedrick (1), page 438.

Obtained about 1894 by Herr Müller, gardener to the King of Württemberg.

Fruit very large in size and resembles Doyenné du Comice in form. Skin tough, glossy, deep golden yellow in color, usually blushed with bright crimson, subject to blemishes but usually attractive and striking in appearance. Flesh granular or coarse, firm, large grit cells at center, not juicy. Somewhat bitter in taste, low in dessert quality. Late midseason.

Tree vigorous, thrifty, fairly productive, almost a standard on quince. Moderate susceptibility to blight.

### **Rosee de Juillet**

Listed in the 1912 catalog of Pepinieres André Leroy, Angers, France. Also in Proceedings of A.P.S., 1930.

A very early pear of fine dessert quality. Below medium in size, bell-shaped with slender neck, deep yellow in color.

Tree fairly vigorous, spreading in habit, inclined toward biennial bearing. Moderately susceptible to blight.

### **Rousselet de Reims**

Listed by Ragan (2) as Reims. Ragan (2) gives 16 synonyms for this variety.

Brief description, Hedrick (1), page 530. Full description, Leroy (4), page 595.

An ancient variety believed by some European authorities to date back to the beginning of the Christian era. It is definitely known that the variety has been grown in the vicinity of Rheims, France, for several centuries. It is said to have been the favorite pear of King Louis XIV.

Fruit small in size, roundish-turbinate in form, somewhat irregular. Skin greenish-yellow in color, blushed with dull red on sunny side, sprinkled with gray russet dots. Flesh white, semi-fine, buttery but not melting, moderately juicy. Extremely sweet, aromatic, spicy flavor. Almost equal to Seckel in dessert quality. A little later than Bartlett in season. Susceptible to core breakdown.

Tree very vigorous, spreading and willowy in habit, almost standard tree on quince, productive. Moderately susceptible to blight.

### **Royale Vendée**

Listed by Ragan (2) as Royal Vendee.

Brief description, Hedrick (1), page 532. Full description, Leroy (4), page 607.

Obtained from seed by Count Eugene of Nouhes at la Cacaudiere in the Commune of Pouzauges, Vendée, France, 1860.

Fruit medium or larger in size, roundish-bergamot in form. Skin thick, fairly tough, bright green in color, very free of blemish, attractive. Flesh white, fairly fine, juicy, buttery, quite free of grit. Not very sweet but pleasing and refreshing in flavor. Superior to Beurré Easter which it resembles. A definitely late keeper, long shelf life, very good storage quality.

Tree vigorous, abundant dark-green foliage, good orchard habits, productive. Fairly susceptible to blight.

### **Saint André**

Listed by Ragan (2) as Saint Andre.

Brief description, Hedrick (1), page 534. Full description, Leroy (4), page 613.

Origin obscure. First observed by Leroy (4) in 1829. Received in the United States by Robert Manning, 1834 or 1835.

Fruit small to medium in size, generally ovate in form but quite irregular. Skin greenish-yellow in color, waxy, some green or gray dots. Flesh fine, melting, quite free of grit, very juicy. Sweet, aromatic, highly pleasing flavor. Midseason.

Tree moderately vigorous, spreading in habit, very productive, true dwarf on quince. Somewhat resistant to blight.

### **Saint Ghislain**

Listed by Ragan (2) as Ghislain.

Brief description, Hedrick (1), page 536. Full description, Leroy (4), page 629.

Raised by M. Dorlain, Jammapes, Hainant, Belgium and propagated by Van Mons about 1810.

Fruit small in size, roundish-turbinate in form. Skin smooth, fine yellow color at full maturity, fairly free of blemish. Flesh white, fine, melting, juicy, free of grit. Pleasing, spicy flavor. Season about the same as that of Bartlett.

Tree vigorous, deep-green foliage, productive, good semi-dwarf on quince. Fairly susceptible to blight.

### **Senateur Belle**

Listed in catalog of Fruit Trees on Trial at Experimental Farm, Agassiz, B. C., Canada, 1900. Also listed in the 1912 catalog of Pépinières André Leroy, Angers, France.

Fruit medium or above in size and resembles White Doyenné in form. Skin deep yellow in color, smooth but lacking in wax development. Flesh somewhat coarse, firm, not juicy. Sweet, but lacking in desirable flavor and texture characteristics. Very late keeper.

Tree moderate grower, fairly productive; true dwarf on quince but gives evidence of decline after 43 years. Moderately susceptible to blight.

### **Serrurier**

Listed by Ragan (2) as Serrurier.

Brief description, Hedrick (1), page 545. Full description, Leroy (4), page 600.

Grown from seed by Van Mons, Louvain, Belgium, about 1825.

Fruit medium in size, resembling Bartlett in form. Skin greenish-yellow in color, some tendency to russet. Flesh white, buttery but not melting, moderately juicy and sweet. Aromatic, somewhat tart, and often developing a disagreeable flavor. Midseason.

Tree of medium vigor, fairly productive, semi-dwarf on quince but shows evidence of decline after 43 years. Moderately susceptible to blight.

### **Succes de la Meilleraye**

Listed in the 1912 catalog of Pepinieres André Leroy, Angers, France.

Fruit medium in size, variable in form, usually roundish-turbinate. Skin deep yellow in color, waxy, few small dots, susceptible to blemish. Flesh coarse, tough, not very juicy. Fairly sweet but lacks desirable flavor and texture characteristics. Very late in season.

Tree fair in vigor, reasonably productive, true dwarf on quince but shows decline after 43 years. Moderately susceptible to blight.

### **Suzette de Bavay**

Listed by Ragan (2) as Suzette.

Brief description, Hedrick (1), page 558. Full description, Leroy (4), page 694.

Obtained by Major Esperen of Mechlin, Belgium. First fruited in 1843.

Fruit small to medium in size, roundish-oblate in form. Skin greenish-yellow in color, often blushed. Flesh medium fine, firm, not very juicy. Lacking in desirable flavor and texture characteristics. Midseason.

Tree of average vigor, spreading in habit, moderately productive. Fairly susceptible to blight.

### **Sucré Vert**

Listed by Ragan (2) as Green Sweet. Leroy (4) gives eight synonyms for this variety and Ragan (2) gives several in addition.

Brief description, Hedrick (1), page 554. Full description, Leroy (4), page 677.

Origin obscure. Believed to have come from Barmont, a chateau on the boundary of Burgundy. Described as early as 1598. Well known in Paris by 1670.

Fruit small in size, roundish-turbinate in form. Skin smooth, glossy, intense green in color with inconspicuous dots. Flesh white, fine, but with some grit at the center, buttery, juicy. Fairly sweet, nut-like aroma, pleasing flavor. Early midseason.

Tree vigorous, spreading in habit, very productive. Moderately susceptible to blight.

### **Triomphe de Vienne**

Listed by Ragan (2) as Vienne.

Brief description, Hedrick (1), page 566.

Raised by M. Jean Colland, Vienne, France, 1864. First distributed in 1874.

Fruit medium to large in size, obovate-pyriform. Skin greenish-yellow, some russetting, sometimes blushed, not particularly attractive. Flesh white, melting, juicy. Sweet, rich, spicy flavor. Early midseason.

Tree fairly vigorous, good foliage, reasonably productive. Very susceptible to blight.

### **Verte Longue d'Automne**

Listed by Hedrick (1) as Long Green of Autumn and by Ragan (2) as Long Green (Aut.) Not to be confused with Longue Verte or Long Green which is a distinct variety.

Brief description, Hedrick (1), page 449. Full description, Leroy (4), page 729.

The origin of this ancient variety is uncertain. It is known to have been grown extensively in France 450 years ago. The German author, Henry Munger, considered it identical with the variety *Viridium*, supposedly described by Pliny during the first century A.D. The validity of this deduction, however, was questioned by European authors of a later period.

Fruit medium in size, obtuse-turbinate in form, sometimes lopsided. Skin generally green in color with prominent gray dots. Flesh fine, melting, juicy. Usually quite sweet and pleasing in flavor but may be of mediocre quality unless properly grown and handled. Early midseason.

Tree vigorous, upright in habit, fairly productive. Quite susceptible to blight.

## **Communis Varieties Obtained from Miscellaneous Sources**

### **Ames**

This variety is not the one listed by Ragan (2) as Ames or as Ames Hardy. Its source was a large tree found growing in the city of Ames, Iowa. It closely resembles Orel but whether it is Orel or a seedling of Orel has not been determined.

The variety is of no consequence for its fruit but the tree is extremely vigorous, stately in habit, highly resistant to blight, and appears very hardy.

### **Ayer**

Listed by Ragan (2) as Ayer.

Brief description, Hedrick (1), page 257. Also U. S. Department of Agriculture Yearbook, 428 Plate 52, 1911.

Originated as a chance seedling on the farm of O. H. Ayer, Sibly, Kansas, 1880.

Fruit medium in size, resembling White Doyenne in form and coloration. Flesh fairly fine, buttery, moderately juicy. Mild, pleasing flavor but lacks distinctive dessert quality characteristics. Earlier than Bartlett in season.

Tree moderately vigorous, reasonably productive, of fair resistance to blight.

### **Barseck**

Common synonymns are Bar-Seck, Bar-Seckel, Bartlett-Seckel and Bartseckel. Listed by Ragan (2) as Barseck.

Brief description, Hedrick (1), page 260.

Originated at Brighton, New York and first reported in 1890. Presumed to be a Bartlett-Seckel cross.

Fruit medium in size, oblong-pyriform. Skin yellow in color, usually blushed with bright crimson, some tendency to blemish. Flesh buttery, juicy, somewhat granular. Pleasing vinous flavor but inferior to Seckel in dessert quality. Fairly early in season.

Tree vigorous, fairly productive. Moderately susceptible to blight.

### **Bartlett**

Listed by Ragan (2) as Bartlett. Known abroad as Williams or Williams' Bon Chrétien.

Full description and color plate, Hedrick (1), page 124.

According to Hedrick (1), this pear was found as a wilding by a Mr. Stair at Aldermaston, Berkshire, England. Later it was ac-

quired by a Mr. Williams, a nurseryman of Turham, Middlesex and distributed under the name of Williams Bon Chrétien. It was brought to the United States under this name in 1797 or 1799 by James Carter for Thomas Brewer of Roxbury, Massachusetts. In 1817, Enoch Bartlett of Dorchester, Massachusetts acquired the Brewer property, and not knowing the variety's true identity, propagated it under his own name. Hence, it became known in America as Bartlett. It was added to the A.P.S. catalog list in 1848 under the name, Bartlett.

Fruit medium or larger in size, oblong-obtuse-pyriform in shape, somewhat irregular. Skin fairly thin, somewhat tender, clear-yellow in color, occasionally blushed, surface somewhat uneven, some inconspicuous dots, fairly attractive. Flesh white, fine, quite free of grit, melting, juicy. Sweet, vinous flavor with a trace of muskiness. Rates high in dessert quality. Fairly early in season.

Tree medium or less in vigor, not well formed as an orchard tree, productive, fairly susceptible to blight.

In spite of blight susceptibility, Bartlett is quite cosmopolitan in adaptability and is now the world's leading commercial pear variety. It is highly prized for both dessert and processing qualities.

### **Beirschmidt**

Brief description, Proceedings of A.P.S., 1931.

Originated at Fairbanks, Iowa. Said to be a seedling of Bartlett.

Fruit medium to large in size, globular, sometimes pyriform, irregular in shape. Skin straw-color, some tendency to blemish, tender and susceptible to bruising. Flesh fairly fine, juicy, buttery, quite free of grit. Mild, pleasing flavor, rates rather high in dessert quality. Probably too tender of skin to withstand commercial handling. Keeps somewhat longer than Bartlett.

Tree fairly vigorous, spreading or willowy in habit, productive. Some resistance to blight.

### **Beurré d'Anjou**

The name and origin of Beurré d'Anjou are somewhat confused. American and British authors commonly refer to it as Anjou or Beurré d'Anjou but Leroy (3) and other continental European writers recognize the variety as *Nec Plus Meuris* and do not approve of Anjou or Beurré d'Anjou as being proper synonyms for this name. Apparently, the name Anjou or Beurré d'Anjou was erroneously applied to the variety when introduced into America and England.

Full description, Hedrick (1), page 127. Full description, Leroy (4), page 460.

American pomologists have generally attributed the origin of this variety to France, although they cite no specific data as to time or

locality. Leroy (4), on the other hand, states as a fact that the variety originated with Van Mons at Louvain, Belgium in 1819 and first appeared in the Van Mons catalog for 1823 under the name of Nec Plus Meuris. It is interesting to note that the tree labeled Nec Plus Meuris in the variety collection obtained from France in 1913 turned out to be identical with Beurré d'Anjou as the variety is known in the Pacific Northwest.

Fruit medium or larger in size, generally globular in shape, sometimes pyriform. Skin usually creamy-yellow in color but variable, clear when grown in dry climates but inclined to russet in wet climates. Quite attractive when properly grown. Flesh fairly fine, buttery, juicy, some grit cells at the center. Aromatic, spicy, sweet flavor when at its best. Inclined to become mealy and dry in texture if kept too long in cold storage. Also susceptible to Anjou scald and Butrytis rot.

Tree vigorous, upright, spreading, somewhat temperamental as to production. Moderately susceptible to blight.

Beurré d'Anjou is now the leading late pear in the Pacific Northwest.

### **Buffum**

Listed by Ragan (2) as Buffum.

Full description and color plate, Hedrick (1), page 141. Full description, Leroy (3), page 505.

Believed to have originated at Warren, Rhode Island, at the beginning of the nineteenth century. Presumed to be a seedling of White Doyenne.

Fruit medium or less in size, oblong-obovate-pyriform. Skin thick, fairly smooth, deep brownish-yellow, often blushed, small russet dots, very attractive. Flesh fairly firm, granular, moderately juicy. Sweet, aromatic flavor but lacking in desirable dessert quality. Early midseason.

Tree upright grower, stately, vigorous, productive, of desirable orchard habits. Moderately susceptible to blight.

### **Burkett**

Listed by Ragan (2) as Burkett. Synonyms found in the literature are Berkett, Birket, Birkit, Birkitt and Burkit. (American pomologists are prodigious spellers.)

There is some confusion as to the identity of this variety. Mathews and other authors have contended that it is identical with Sudduth. Trees labeled Burkett and Sudduth at the Southern Oregon Branch Station are identical in both tree and fruit characteristics. If

Burkett and Sudduth are one and the same variety, the name Burkett should have priority because, according to Hedrick (1), it was used in 1880, whereas the name Sudduth was not applied until 1895.

Full description and color plate, Hedrick (1), page 220 under the name, Sudduth.

Fruit small in size, roundish in form, greenish-yellow in color. Flat in taste with disagreeable after-taste. Of no value as fruit.

Tree very vigorous, healthy, spreading in habit, with dark green, abundant foliage. Highly resistant to blight and when crossed with some other blight-resistant variety produces a high percentage of blight resistant seedlings.

### **Cayuga**

Brief description, Proceedings of A.P.S., 1922. Also Brooks and Olmo (6), page 118.

An open pollinated seedling of Seckel. Introduced for trial in 1920 by New York Agricultural Experiment Station, Geneva, New York.

This variety has proved to be a shy bearer at the Oregon Agricultural Experiment Station, and its fruit has been of mediocre quality. Not fully evaluated as to blight resistance.

### **Clapp Favorite**

Listed by Ragan (2) as Clapp Favorite.

Full description and color plate, Hedrick (1), page 142.

Raised by Thaddeus Clapp of Dorchester, Massachusetts. Date uncertain. Favorably reported upon by Massachusetts Horticultural Society in 1860. Added to A.P.S. catalog list in 1867.

Fruit of this variety resembles that of Bartlett in size and form but is somewhat smoother and frequently has a clubbed stem. Skin, greenish-yellow in color, quite free of blemish, often blushed, attractive. Flesh fairly fine, melting, juicy, some grit at the center. Sweet, pleasing, aromatic flavor, rates among the best of the early pears in dessert quality. A little too soft in texture to withstand commercial handling. High susceptibility to core breakdown if left on tree too long.

Tree fairly vigorous, well formed, good foliage, productive. Very susceptible to blight.

### **Colonel Wilder**

Listed by Ragan (2) as Col. Wilder.

Full description and color plate, Hedrick (1), page 143.

Originated at San Jose, California, from seed sown by B. S. Fox, about 1870.

Fruit medium in size, ovate-pyriform. Skin pale yellow in color, some blemish, not attractive. Flesh buttery but somewhat firm, moderately juicy. Pleasing flavor but not outstanding in dessert quality. Late keeper, very slow to ripen, inclined to wilt in storage.

Tree fairly vigorous, spreading in habit, good foliage, moderately susceptible to blight.

### **Conseiller a la Cour**

P.I. 105, 425

Listed by Ragan (2) as Marechal and by Hedrick (1) and Leroy (4) as Marechal de Cour.

Brief description, Hedrick (1), page 462. Full description, Leroy (4), page 322.

Originated with Van Mons, at Louvain, Belgium, in 1841.

Fruit small in size, true pyriform. Skin greenish-yellow in color with dark green dots. Flesh somewhat coarse, dry in texture, fairly hard. Lacking in desirable texture and flavor. Late keeper.

Tree vigorous, spreading in habit, has lusty, dark green foliage, is fairly productive. Moderately susceptible to blight.

### **Dana Hovey**

Listed by Ragan (2) as Dana Hovey.

Common synonyms—Dana's Hovey, Dana's No. 16, Dana's Seedling, Hovey, Hovey's Dana, Christmas Seckel.

Full description and color plate, Hedrick (1), page 146.

Raised by Francis Dana of Roxbury, Massachusetts and named in honor of C. M. Hovey. Introduced about 1854. Added to A.P.S. catalog list in 1862. Believed a Seckel seedling.

Fruit resembles that of Seckel in size and form. Skin greenish-yellow at maturity, russeted, not blushed. Flesh somewhat granular but buttery and very juicy. Much like Seckel in flavor, equal to Seckel in dessert quality. Keeps longer than Seckel in storage and holds up well after ripening. Less susceptible to core breakdown than Seckel.

Tree large, vigorous, upright-spreading, productive, fairly susceptible to blight.

### **Darikerbirne**

P. I. 134, 831

Vigorous, spreading tree with dark green, lusty foliage. Not fully evaluated as to blight resistance. Fruit of no consequence.

### **Early Green Sugar**

Brief mention, Hedrick (1), page 374. Listed in J. Van Lindley catalog for 1921.

Fruit large in size, yellow in color, usually blushed, mediocre in quality. Early in season.

Tree vigorous, spreading, dark green foliage, moderately susceptible to blight.

### **Early Harvest**

Listed by Ragan (2) as Chambers.

Full description and color plate, Hedrick (1), page 158.

Originated in Maryland and brought to Kentucky by Captain William Chambers in 1800. Added to A.P.S. catalog list in 1875.

Fruit fairly large in size, obovate-obtuse-pyriform, regular and symmetrical. Skin smooth, greenish-yellow in color, often blushed or striped with dull red. Flesh generally firm, crisp, granular, moderately juicy. Lacking in desirable flavor and texture characteristics. Early in season.

Tree vigorous, upright-spreading in habit, dark green, abundant foliage, fairly productive. Fairly resistant to blight.

### **Easter Beurre**

Listed by Leroy (4) as Doyenné d' Hiver and by Ragan (2) as Easter Beurre. Leroy gives 24 synonyms for the variety while Mathieu gives 55.

Full description and color plate, Hedrick (1), page 159. Full description, Leroy (4), page 72.

Found in the garden of the Capucin Monastery at Louvain, Belgium and brought to attention in 1823. First propagated by Van Mons under the name of Pastorale. Brought to the United States about 1837 and added to the A.P.S. catalog list in 1862.

Fruit medium or larger in size, ovate-pyriform with thick neck. Skin, thick and somewhat tough, deep green in color, sometimes slightly russeted, occasionally blushed. Flesh somewhat coarse, gritty, buttery, moderately juicy. Fairly sweet, pleasing flavor when properly grown and handled. Usually fails to ripen unless previously held under refrigeration for several months. Very late in season.

Tree moderately vigorous, upright-spreading in habit, reasonably productive. Fairly susceptible to blight.

While many attempts have been made to grow Beurre Easter commercially, the variety has not become a popular market pear. It is sometimes used as a pollinizer for Beurré d' Anjou and other varieties.

### Elizabeth

Listed by Ragan (2) as Elizabeth. Other names given in the literature are Elizabeth (Van Mons), Elizabeth de Van Mons, and Manning's Elizabeth.

Full description and color plate, Hedrick (2), page 161. Full description, Leroy (4), page 126.

Originated with Van Mons at Louvain, Belgium. Came to the United States in 1935 under the name of Van Mons number 154. Named Elizabeth (Van Mons) by Robert Manning. Name later shortened to Elizabeth. Placed in A.P.S. catalog list in 1854.

Fruit small in size, obovate-obtuse-pyriform, symmetrical and uniform. Skin tough, glossy, yellow in color, usually blushed, quite free of blemish, attractive. Flesh granular, gritty at the center, buttery, very juicy. Sweet, aromatic, quite musky in taste, flavor disliked by many people. Early in season.

Tree medium in vigor, upright grower with dense top, fairly productive. Moderately susceptible to blight.

### Ewart

Brief description, Brooks and Olmo (6), page 119.

Introduced by Mortimer Ewart of East Akron, Ohio, 1928.

Fruit medium or larger in size, blunt-pyriform, irregular. Skin greenish-yellow in color, sometimes russeted, not particularly attractive. Flesh fairly fine, buttery, juicy, quite free of grit. Much like Bartlett in dessert quality, but at times has a disagreeable, tart flavor. About one month later than Bartlett.

Tree of medium vigor, willowy in habit, fairly productive, moderately susceptible to blight.

This pear is regarded as being highly promising in eastern and midwestern states but hardly merits such distinction in the Rogue River Valley of Oregon.

### Farmingdale

Discussed in considerable detail by Reimer in Oregon Agricultural Experiment Station Bulletins 214 and 485. Also in Proceedings of A.P.S., 1930.

Apparently a pure form of *P. communis* which originated as a chance seedling with Benjamin Buckman, at Farmingdale, Illinois.

Fruit size medium to large and resembles Beurré d' Anjou in form and coloration. Flesh white, fairly fine, buttery, moderately juicy, quite free of grit. Reasonably sweet but lacking in desirable flavor characteristics. Midseason.

While this pear is of little value for its fruit, it is quite remark-

able in other characteristics. Its tree is vigorous, well formed, fairly productive and has proven most blight resistant of all named *Communis* varieties tested at the Southern Oregon Branch Experiment Station. In the many tests at this Station, it has proven valuable as a blight-resistant trunk stock and as a source of blight-resistant seedlings. The cross of Old Home and Farmingdale for example, has consistently produced a high percentage of blight-resistant seedlings with good vigor, and of uniform growth habits.

### **Forelle**

Listed by Ragan (2) as Forelle. In English-speaking countries this variety is often referred to as the "Trout Pear" and in Germany it is recognized under the name of Forellenbirne.

Full description and color plate, Hedrick (1)\*, page 183.

Origin uncertain. Some authorities believe that it originated in Saxony early in the eighteenth century. From Germany it was taken to Flanders and from there to England. It was received by the Massachusetts Horticultural Society in 1823 and Leroy (3) gives 1830 as the probable date of its introduction into France.

Fruit medium in size, oblong-obovate-pyriform with neck varying considerably in length. Skin smooth, deep yellow in color, usually prominently blushed, distinctive "trout" spots, red or green in color, very attractive. Flesh unusually white, fine but slightly granular at center, sometimes buttery but often quite firm, moderately juicy. Sweet, aromatic flavor but quite variable in dessert quality. Often fails to ripen after cold storage. Midseason.

Tree moderately vigorous, upright and stiff, apple-like foliage, reasonably productive. Very susceptible to blight. The original tree of Forelle at the Southern Oregon Branch Station succumbed to blight.

### **Fox**

Listed by Ragan (2) as Fox. Sometimes listed as B. S. Fox or Fox Seedling.

Full description and color plate, Hedrick (1), page 168.

Raised by B. S. Fox, San Jose, California, from seed of Belle Lucrative about 1870.

Fruit medium to large in size and resembles Beurré d' Anjou in form. Skin greenish-yellow in color, inclined to develop blemishes or russetting which detracts from its appearance. Flesh white, fine, buttery, juicy, quite free of grit. Pleasing, slightly acidulous flavor, equal to Beurré d' Anjou in dessert quality. Midseason.

Tree fairly vigorous, of good orchard habits, medium in productivity. Moderately susceptible to blight.

### **Gorham**

Brief description, Proceedings of A.P.S., 1923. Brooks and Olmo (6), page 119.

A cross of Bartlett and Josephine de Malines made in 1910 at the New York Agricultural Experiment Station, Geneva, New York. Released for trial in 1923.

Fruit generally resembles Bartlett in size but inclined to be a little more roundish in form. Skin fairly smooth, waxy, deep yellow in color, slight russeting around the stem, attractive, Flesh very fine, white, free of grit, buttery, extremely juicy. Sweet, rich, vinous flavor equal to Bartlett in dessert quality. Keeps about one month longer than Bartlett in cold storage.

Tree vigorous, spreading in habit, very productive, superior to that of Bartlett as an orchard tree. Moderately susceptible to blight.

Performance of this variety has been outstanding at the Southern Oregon Branch Experiment Station.

### **Grand Champion**

Plant Patent 585

Brief description, Brooks and Olmo (6), page 119.

A russet sport of Gorham which originated in the W. F. Shannon orchard at Hood River, Oregon, in 1936. Introduced in 1943.

Fruit resembles Gorham in size and form. Skin very smooth, deep gold in color, overspread with uniform "cinnamon" russet, attractive. Very resistant to friction and pressure bruising. Flesh white, fine, juicy, buttery, but somewhat firmer than Gorham in texture. Sweet, rich, vinous flavor, rates among the best in dessert quality. Appears to keep a little longer than Gorham.

Tree identical with that of Gorham in vigor, form, productivity, and blight susceptibility.

Grand Champion appears outstanding among comparatively new pear varieties.

### **Grov Moltke**

Tree acquired in 1952. Observations insufficient to warrant appraisal.

### **Hofrath's Birne**

Fruit medium or larger in size, roundish in form. Skin straw yellow in color, reasonably free of blemish. Flesh fairly firm, medium fine, moderately juicy. Extremely sweet but mediocre in dessert quality. Midseason.

Tree very vigorous, upright-spreading, with lusty, dark green foliage, somewhat susceptible to blight.

### Howell

Listed by Ragan (2) as Howell.

Full description and color plate, Hedrick (1), page 174.

Raised in 1829 or 1830 by Thomas Howell of New Haven, Connecticut from a seed of a local variety named Jonah. Fruit first exhibited by Massachusetts Horticultural Society in 1840. Recommended by A.P.S. in 1856.

Fruit medium or larger in size, round-ovate, symmetrical in form. Skin quite smooth, waxy, pale yellow in color, numerous green dots, quite free of blemish, attractive. Flesh white, buttery, somewhat granular, fairly juicy. Moderately sweet, somewhat tart, second rate in dessert quality. Fruit loses ability to ripen if kept in cold storage too long. Early midseason.

Tree moderately vigorous, spreading habit, productive, fairly susceptible to blight.

After numerous trials, Howell has failed to establish itself as a commercial variety.

### Lawrence

Listed by Ragan (2) as Lawrence.

Full description and color plate, Hedrick (1), page 185.

Introduced by Wilcomb and King, Flushing, Long Island, New York, 1843. Said to be a cross of Saint Germain and White Doyenne.

Fruit medium or smaller in size and varies from obovate-obtuse-pyriform to globular-obtuse-pyriform in shape. Skin greenish-yellow in color with dark green dots, sometimes blushed. Flesh white, medium fine, juicy, tender but not melting, considerable grit at the core. Fairly sweet but lacking in distinctive flavor characteristics.

Tree of medium vigor, upright-spreading in habit, dark green, crinkly foliage. Moderately susceptible to blight.

### Lemon

Hedrick (1) lists two varieties under the name Lemon. One is designated as Lemon (Mass.) and the others as Lemon (Russia). The variety in this collection is obviously the latter. It is probably the variety listed by Ragan (2) as Kharkoff.

Brief description, Hedrick (1), page 445. Also Indiana Horticultural Society Report 1886 and Iowa Horticultural Society Report 1896.

Imported from Russia in 1879. Origin unknown.

Fruit medium in size, more or less roundish in form. Skin dull green in color with some russetting. Flesh coarse, tough, not juicy. Worthless as fruit.

Large, vigorous, stately tree with lusty, dark green foliage. Quite resistant to blight.

### **Lincoln**

Listed by Ragan (2) as Lincoln (Ill.)

Full description and color plate, Hedrick (1), page 190.

Grown as a seedling by Mrs. Maria Fleming, Curwin, Illinois, 1835. Added to A.P.S. catalog list in 1899.

Fruit medium or above in size, roundish in form with slightly tapering neck. Skin fairly thick, yellowish in color, sometimes with dots. Flesh yellowish in color, somewhat coarse or granular, firm with considerable grit, reasonably juicy. Sweet, somewhat aromatic, but lacking in desirable flavor characteristics. Rather early in season.

Tree vigorous, upright-spreading, very good foliage, fairly resistant to blight.

While Lincoln has been extensively planted in the past, it has not become popular except in the midwestern states.

### **Longworth**

Listed by Ragan (2) as Longworth.

Brief description, Hedrick (1), page 450.

Originated with William Longworth of Dubuque, Iowa. First reported in Illinois Horticultural Society Report for 1892.

Fruit medium in size, obtuse-ovate in form. Skin smooth, reasonably free of blemish, pale-yellow in color. Flesh white, fairly fine, quite free of grit, moderately juicy, tender. Very sweet but lacking in desirable flavor characteristics. Midseason.

Tree vigorous, upright-spreading in habit, dark green foliage, fairly productive. Quite resistant to blight.

While this variety is reported as hardy in midwestern states, it has not proven thoroughly hardy in Oregon.

### **Lucy Duke**

Listed by Ragan (2) as Duke.

Full description, Hedrick (1), page 190.

Grown from a seed of Bartlett by Mrs. Lucy Duke, Beaufort County, North Carolina, about 1880. Second parent believed to be Winter Nelis.

Fruit medium in size, acute-pyriform, sometimes oblong-pyriform. Skin fairly tough, greenish-yellow in color, overspread with dark russet, not overly attractive. Flesh fine, melting, very juicy. Sweet spicy flavor, aromatic, rates fairly high in dessert quality. Early midseason.

Tree medium in size, moderately vigorous, irregular in production. Quite susceptible to blight.

### **Louise Bonne de Jersey**

Listed by Ragan (2) as Louise. No less than 14 synonyms for this variety are found in the literature. French pomologists have generally recognized it under the name of Louise Bonne d'Avaranches while British and American authorities have preferred to call it Louise Bonne de Jersey. The variety was entered under this name in the A.P.S. catalog list for 1852 but was shortened to Louise in 1897. It should not be confused with Louise Bonne of the French which is obviously a distinct sort.

Full description and color plate, Hedrick (1), page 193. Full description, Leroy (3), page 482.

Raised from seed by M. de Longueval, Avaranches, France about 1780.

Fruit medium in size, oblong-pyriform, somewhat irregular in shape. Skin smooth, pale yellow in color, often displaying a faint blush, some "trout" spots, quite free of blemish, attractive. Flesh yellowish-white, somewhat granular. Buttery, juicy, some grit at the center. Sweet, vinous flavor but does not rate among the best in dessert quality. Early midseason.

Tree moderate in vigor, upright in habit, sturdy and productive, fairly susceptible to blight.

### **Maxine**

Origin unknown. Found as a seedling in Preble County, Ohio. Propagated by E. M. Buechly, Greenville, Ohio, about 1900.

Fruit medium in size, below medium during heavy crop years, generally ovate-pyriform in shape. Skin lemon-yellow in color, smooth and blemish free, fairly resistant to pressure and friction bruises, very attractive. Flesh white, fairly fine, quite free of grit, buttery, juicy. Moderately sweet, slightly acidulous, skin somewhat bitter, fair to good in dessert quality. Holds up well after ripening. A little later than Bartlett in season.

Tree moderately vigorous, of good orchard habits, fairly productive, good foliage, quite resistant to blight.

While this pear has many desirable characteristics it appears too variable in dessert quality to warrant acceptance as a commercial variety.

### **Max Red Bartlett**

Plant Patent 741

Brief description, Brooks and Olmo (6), page 120.

A bud mutation of Bartlett originating with A. D. Mackelvie, Zillah, Washington, in 1938. Introduced in 1947.

Identical with Bartlett in size, form, and dessert quality but develops intense red color under certain climatic and cultural conditions. When crossed with non-red varieties, a considerable percentage of the resulting seedlings may display the red characteristic in fruit, wood, or foliage.

Its tree resembles that of Bartlett except possibly having a little less vigor and displaying red color in wood and foliage, particularly in early spring. The variety has a tendency to revert back to the parent type.

Ability of the variety to transmit its red factor through hybridization has made it popular with plant breeders. It has awakened some trade interest, particularly in the role of a novelty fruit.

### **Mendel**

Brief reference, Brooks and Olmo, (6), page 120.

Originated with William Pfaender Jr. at New Ulm, Minnesota. Introduced in 1920.

Fruit medium in size, roundish or slightly pyriform in shape. Skin greenish-yellow in color, inclined to russet, some blemish. Flesh medium fine, moderately juicy, tender but not fully buttery at maturity. Sweet, pleasing flavor but somewhat lacking in desirable flavor and texture characteristics. Late midseason.

Tree fairly vigorous, willowy in type, with small, dark green leaves, fairly productive. Not evaluated for blight resistance.

### **Nye Russet Bartlett**

While this variety is known locally as Nye Russet Bartlett, its name has not been officially recorded.

Originated as a sport of Bartlett in the S. A. Nye orchard at Talent, Oregon, about 1937.

Fruit similar to Bartlett in form but appears a little smaller in size. Skin deep yellow, overlaid with a smooth "cinnamon" russet, very attractive for a russet sort. Flesh generally like that of Bartlett but somewhat firmer at maturity. Flavor sweeter and somewhat more spicy than that of Bartlett, rates among the very best in dessert quality. Keeps somewhat longer than Bartlett in cold storage and withstands handling operations unusually well. Its shelf life is longer than that of Bartlett.

Tree identical to that of Bartlett in performance and susceptibility to blight.

A very promising bud sport.

### Old Home

Originated as a chance seedling with B. O. Curtiss, at Paris, Illinois. Apparently, a pure form of *P. communis*.

While Old Home is of no consequence from the standpoint of its fruit, the variety is important because of other characteristics. The tree, which is vigorous and well formed, has proven highly resistant to blight in tests at the Southern Oregon Branch Experiment Station. It is now widely used as a blight-resistant trunk and framework stock, and is known to be a very good source of blight-resistant seedlings. When crossed with a variety such as Farmingdale, resulting seedlings are vigorous and uniform in growth and a high percentage are blight-resistant.

### Orel 15

Appears to be identical with Orel in tests at the Southern Oregon Branch Experiment Station.

Introduced from Russia, by Professor J. L. Budd, of the Iowa Agricultural Experiment Station, about 1880.

Fruit of no consequence. Tree vigorous, large, stately, highly resistant to blight.

### Packham's Triumph

Brief report, E. C. Whittaker, "Pear Growing," New South Wales, Department of Agriculture, Division of Horticulture, 1955. Also Ore. State Hort. Soc., Rpt. 10-1956.

Raised by Sam Packham of Molong, New South Wales about 1897. Now the leading pear in New South Wales and neighboring regions.

Fruit medium or large in size, obtuse-pyriform. Surface somewhat rough, particularly on young trees, greenish-yellow or yellow in color, reasonably free of blemishes, fairly attractive. Flesh white, fine, melting, very juicy, quite free of grit. Sweet, vinous flavor, rates among the best in dessert quality. Season late, keeps as long as Beurré d' Anjou in cold storage. Holds up well after ripening.

Tree moderately vigorous, spreading in habit, productive, fairly susceptible to pear scab and blight.

Rapidly gaining ground as a commercial pear variety in this country and abroad.

### Parburton

This variety is a tetraploid form of Bartlett which originated as a bud sport in the Hillcrest Orchard, at Medford, Oregon.

Its fruit is much larger than that of Bartlett, and in some seasons

displays a considerable amount of red color. Like most tetraploid pear forms, the fruit of this variety is more tart in flavor than that of Bartlett. Somewhat coarse in texture, often displaying a considerable amount of blemish. Not promising as a commercial variety.

### **P. Barry**

Listed by Ragan (2), as P. Barry. Not to be confused with Barry which is a different variety.

Full description and color plate, Hedrick (1), page 203.

Said to be a seedling of Belle Lucrative raised by B. S. Fox, San Jose, California in 1873. Named in honor of Patrick Barry, noted American nurseryman and pomologist. Added to A.P.S. catalog list, 1909.

Fruit medium in size, oblong-obovate-pyriform. Skin dull, deep gold at maturity, overlaid with thin russet, fairly attractive. Flesh medium fine, semi-buttery, moderately juicy. Sweet, aromatic, slightly acidulous flavor, at least good in dessert quality. Very late in season. With proper handling this pear has been known to keep 10 months or more in cold storage, actually requires a long period in cold storage before ripening properly.

Tree moderately vigorous, spreading in habit, reasonably productive, fairly susceptible to blight.

### **Phelps**

Brief description, Proceedings of A.P.S., 1925. Also, Brooks and Olmo (6), page 120.

A cross of Winter Nelis and Russet Bartlett made in 1912 by New York Agricultural Experiment Station, Geneva, New York. Introduced for trial in 1925.

Fruit resembles that of White Doyenne in size, form, and general appearance, except that its stem is fairly long and slender. Skin smooth, waxy, quite free of blemish, greenish-yellow in color. Flesh white, fairly fine, buttery, moderately juicy. Sweet, but slightly acid in flavor leaving a somewhat disagreeable after-taste. Early midseason.

Tree of medium vigor, somewhat spreading in habit, light green foliage, moderately susceptible to blight.

The peculiar after-taste noted in this variety may be attributable to locality, since it has not been reported as occurring in other regions.

### **Phil Dick**

Brief mention, Proceedings of A.P.S., 1928.

Introduced by Bohlender Peter and Sons, Tippecanoe City, Ohio. The original tree situated on the farm of Phil Dick, Tippecanoe City,

was said to be 80 to 100 years old at the time of introduction and is believed by some to be an old French variety. The tree under this name at the Southern Oregon Branch Station is identical with that of Duchesse d'Angoulême.

#### **Pierre de Corneille**

Tree acquired in 1952. Observations insufficient to warrant appraisal.

#### **Pulteney**

Brief description, Proceedings of A.P.S., 1925. Also Brooks and Olmo (6), page 121.

A cross of Winter Nelis and Russet Bartlett made in 1912 by New York Agricultural Experiment Station, Geneva, New York. Introduced for trial in 1925.

Fruit medium or smaller in size and resembles Bartlett in form. Skin pale yellow in color, fairly free of blemish. Flesh white, very fine, melting, juicy. Rates fairly high in dessert quality but not equal to Bartlett in this respect. Midseason.

Tree of average vigor, somewhat spreading in habit, fairly productive, moderately susceptible to blight.

#### **Reeder**

Variously known as Reeder, Doctor Reeder and Reeder's Seedling. Listed by Ragan (2) as Reeder.

Full description, Hedrick (1), page 211.

A seedling raised by Dr. Henry Reeder of Varick, New York, from a seed of Winter Nelis about 1855. Since the parent tree stood near a Seckel it is assumed that the variety is a cross of Winter Nelis and Seckel.

Fruit small in size, resembles Winter Nelis in form and appearance. Flesh white, medium fine, not very juicy, buttery. Generally inferior to Winter Nelis in dessert quality and does not keep as long.

Tree fairly vigorous, spreading in habit, moderately susceptible to blight.

#### **Schiveiger's Wasserbirne**

P. I. 182, 230

Fruit medium in size, roundish in form. Skin yellow in color, considerable blemish. Flesh white, not juicy, potato-like in texture. Undergoes practically no softening during ripening. Disagreeable flavor. Of no consequence as a fruit.

Tree extremely vigorous and stately, has lusty, dark green foliage, not fully evaluated as to blight resistance.

### Seckel

Although listed as Seckel by most authors, this variety has been known under such synonyms as Sycle, Seckle, Sicker and Shakespear.

Full description and color plate, Hedrick (1), page 215. Full description, Leroy (4), page 656.

According to Hedrick (1), the original tree of Seckel was found in the outskirts of Philadelphia, Pennsylvania by Dutch Jacobs, a sportsman, who distributed the fruit among his friends but who kept the location of the tree a secret for many years. The date of discovery was approximately 1760. At a later date, the property on which the tree stood was acquired by a Mr. Seckel, who named and introduced the pear prior to 1817. The variety was introduced into England in 1819 and into France in 1831. It was placed on the A.P.S. catalog list at the Society's first meeting in 1848.

Fruit very small in size unless heavily thinned and properly grown. Obovate-pyriform in shape, usually symmetrical. Skin dull brownish-yellow in color, usually overlaid with russet and blushed dull red. Flesh somewhat granular, some grit at the centers, buttery and very juicy. Noted for sweet, aromatic, spicy flavor. Rates among the best in dessert quality. Early midseason. Susceptible to core breakdown if held on the tree too long and does not ripen properly if harvested prematurely. Does not respond well to cold storage.

Tree moderately vigorous, sturdy, strong, very productive with a tendency to overbear. Somewhat resistant to blight.

### Sheldon

Usually listed as Sheldon by both American and European authors.

Full description and color plate, Hedrick (1), page 217. Full description, Leroy (4), page 662.

Developed from a seed grown by Major Sheldon, Huron, New York. Added to A.P.S. catalog list in 1856.

Fruit medium or larger in size, roundish, slightly turbinate and truncated at the base. Skin thick, somewhat granular, tender, dull yellowish-green in color, overspread with light russet, sometimes blushed, numerous dots, not particularly attractive. Flesh white, slightly granular, buttery or melting, very juicy. Sweet, aromatic, vinous flavor, rates among the best in dessert quality. Midseason.

Tree sturdy, vigorous, upright grower, moderately productive. Fairly susceptible to blight.

### **Smyth**

Listed by Ragan (2) as Smyth. Also known as Miss F. Smyth. Originated in England where it is believed to be a seedling of Bartlett.

Fruit resembles that of White Doyenne in size and coloration but is more oblong in form. Flesh white, fairly fine, somewhat firm, buttery at times, not very juicy. Pleasing in flavor but lacking in desirable flavor and texture characteristics. Later than Bartlett in season.

Tree fairly vigorous, resembles that of Beurré Bosc in form and foliage, not very productive, moderately susceptible to blight.

### **Snyder**

Brief description Proceedings of A.P.S., 1930. Also New Mexico Agricultural Experiment Station bulletin 165. Believed identical with Hoesenchenck by some authorities.

Fruit resembles that of Beurré d' Anjou in size and form but develops more yellow color. Quite free of blemish, waxy, very attractive. Flesh fine, free of grit, moderately juicy, semi-buttery in texture. Mild, pleasing flavor but not outstanding in dessert quality. Holds up well after ripening. Possibly a little later than Bartlett in season.

Tree fairly vigorous, well formed, productive, fairly resistant to blight.

### **Starking Delicious**

While this variety appears to be identical with Maxine, the tests at the Oregon Agricultural Experiment Station are too meager, at this time, to warrant positive conclusions as to its identity.

### **Striped Bartlett**

This sport, or offshoot of Bartlett, found in the Rogue River Valley of Oregon, is identical with Bartlett except for variegation of fruits, leaves, and twigs. While variegated or "panachee" types of pears have been known in Europe for a long time, this one is the first to come to the author's attention as having been found in the United States. There is some question among certain horticulturists and geneticists as to whether or not variegated pears are true bud sports.

### **Stout**

Listed by Ragan (2) as Stout.

Reported in Indiana Horticultural Society Report, 1899.

Said to have originated at Monrovia, Morgan County, Indiana.

Fruit medium or less in size, oblate-bergamot in form. Skin greenish-yellow in color, smooth, quite free of blemish. Flesh white, fairly fine, some grit at the center, buttery, moderately juicy. Mild, agreeable flavor. Late keeper.

Tree very vigorous with dense, lusty foliage, upright-spreading, productive, fairly susceptible to blight.

### **Sudduth**

Appears to be identical with Burkett.

### **Superb**

Brief reference, California State Board of Horticulture Report, 1889-1902.

Said to have originated at Santa Clara, California.

Fruit much like Bartlett in form and size. Skin granular, tender, greenish-yellow in color, often slightly russeted, less attractive than Bartlett. Flesh yellowish, fine, melting, very juicy, some grit at the core. Sweet, spicy flavor but not the equal of Bartlett in dessert quality. Midseason.

Tree medium in vigor, willowy in habit, fairly productive, moderately susceptible to blight.

### **Surprise**

Brief mention, Hedrick (1), page 558. Also, A.P.S. Report, 41, 1916.

The Oregon Agricultural Experiment Station has no positive information as to the origin of Surprise. At some time after 1913, the variety was obtained from the University of Missouri, which, in turn, had obtained it from the nursery firm of Stark Brothers, at Louisiana, Missouri. At the time, however, the nursery firm reported it had no knowledge as to where the variety came from.

In fruit characteristics, Surprise appears to be pure Communis but there is a slight indication of oriental parentage in its foliage.

Fruit medium or smaller in size and resembles White Doyenne in form. Skin smooth, pale yellow in color, fairly free of blemish. Flesh white, rather fine, buttery, juicy. Mild, pleasing flavor, equal to White Doyenne in dessert quality when properly handled. Late midseason.

Tree moderately vigorous, with clean, healthy foliage, and good orchard habits. Highly resistant to blight but not thoroughly hardy under Oregon conditions.

### **Tedrow Beauty**

Fruit resembles that of White Doyenne except that stem is sometimes fleshy. Golden yellow in color with some "trout" spots, occasionally blushed. Fair in dessert quality but not outstanding. A little later than Bartlett in season.

Tree fairly vigorous, spreading in habit, reasonably productive, moderately susceptible to blight.

### **Thornley**

This pear was entered in the Station records under the name Thornley for the reason that it was found as a chance seedling on the property of J. Thornley of Medford, Oregon. The name has not been officially registered.

Fruit resembles that of P. Barry in shape and coloration but appears a little smaller in size. Flesh yellowish-green in color, very fine, juicy, melting, quite free of grit. Very sweet, rich, and spicy in flavor. Rates among the best in dessert quality. Probably too small in size and too unattractive in appearance to warrant recognition as a commercial variety.

Tree of medium vigor, spreading in habit, moderately susceptible to blight.

### **Tyson**

Listed by Ragan (2) as Tyson.

Full description and color plate, Hedrick (1), page 222. Full description, Leroy (4), page 710.

Originated as a chance seedling on the property of Jonathon Tyson, Jenkintown, Pennsylvania, about 1794.

Fruit small to medium in size, roundish-acute-pyriform, usually lipped at the neck. Skin fairly smooth, usually russeted, yellowish or gold in color. Flesh fine, melting, very juicy. Sweet, spicy, aromatic flavor, very high in dessert quality. Rates among the best of the early pears. Fruit often ripens with good quality while attached to the tree.

Tree vigorous, productive, well formed, one of the best in the pear kingdom, somewhat resistant to blight.

### **Uvedale St. Germain**

Various authors give no less than 40 synonyms for this variety. Hedrick (1) and Ragan (2) list it as Pound.

In 1862, A.P.S. added the variety to its catalog list as Uvedale St. Germain but changed the name to Pound in 1871. The Society dropped the variety altogether in 1909. The contention of some American authors that Uvedale St. Germain is identical with Belle Angi-

vine of the French is probably correct, although Leroy (4) believes that the two varieties are distinct. The name Pound is confusing for the reason that it has been erroneously applied to other varieties.

Full description and color plate, Hedrick (1), page 208.

Raised from seed by a Doctor Uvedale of Eltham, England, in 1690.

Fruit large to very large in size, obovate-acute-pyriform or cala-base in form. Skin thick, tough, golden yellow at maturity, conspicuous russet dots, sometimes blushed. Flesh coarse, gritty, firm, not juicy. Not overly sweet, subacid, and disagreeable in flavor. Rates low in dessert quality. Rather late in season.

Tree fairly vigorous, upright grower, reasonably productive, dense foliage, quite susceptible to blight.

### **Vermont Beauty**

Listed by Ragan (2) as Vermont Beauty. Not to be confused with Vermont which is a different variety. Some authors have believed that Vermont Beauty is identical with Forelle. As the variety has performed at the Southern Oregon Branch Experiment Station, however, it is an obviously distinct variety.

Full description and color plate, Hedrick (1), page 225.

Supposed to have originated as a chance seedling in the nursery of Benjamin Macomber, Grand Isle, Vermont, about 1885. Added to A.P.S. catalog list in 1889.

Fruit small to medium in size, ovate-acute-pyriform. Skin usually smooth, fairly free of blemish, greenish-yellow in color, usually heavily blushed with bright crimson, very attractive. Flesh granular at the center, but fine grained at the outer periphery, moderately juicy, firm but becoming somewhat buttery when fully ripe. Quite sweet, though inclined to be bitter in taste, lacking in flavor and texture characteristics. A little later than Seckel in season. Soon loses ability to ripen if held in cold storage.

Tree moderately vigorous, sturdy, upright-spreading, not very productive, fairly susceptible to blight.

### **Vicar of Winkfield**

Listed by Ragan (2) as Vicar and as De Curé by Leroy (3). Leroy gives 24 synonyms for this variety and Ragan gives 37. Its original name was De Curé or Le Curé. The name Vicar of Winkfield was applied when it was introduced into England in honor of the Reverend W. L. Rahm, then Vicar of Winkfield.

Full description and color plate, Hedrick (1), page 226. Full description, Leroy (3), page 610.

Found as a seedling by M. Leroy, Curé de Villiers-en-Brenne near Vendome, France in 1760. The variety was introduced into America during the early part of the nineteenth century, and was placed on the A.P.S. catalog list in 1852.

Fruit large in size, oblong-pyriform in shape. Skin fairly thick, somewhat tough, greenish-yellow in color, often blushed, attractive. Flesh firm, rarely buttery, granular, moderately juicy. Moderately sweet, often astringent, lacking in desirable flavor and texture characteristics. Rates low as a dessert pear but is quite satisfactory for certain culinary uses. Late keeper.

Tree vigorous, upright, stately, fairly productive, very susceptible to blight.

In the blight-free Willamette Valley of Oregon, old trees of this variety have attained heights of 80 feet or more.

### **Warner**

Listed by Ragan (2) as Warner.

Brief mention, Hedrick (1), page 575.

Originated with a Doctor Boor, Henry County, Indiana, 1832.

Fruit small in size, roundish-oblate in form. Skin generally yellow in color, waxy, fairly smooth. Flesh fairly fine, moderately juicy, not fully buttery. Pleasing flavor but lacking in desirable dessert quality. Early midseason.

Tree fairly vigorous, spreading in habit, abundant, dark green foliage, moderately susceptible to blight.

### **White Doyenne**

Leroy (4) gives 33 synonyms for this variety and Ragan (2) gives 60. Listed by Ragan (2) as White Doyenne and by Leroy (4) as Doyenne.

Full description and color plate, Hedrick (1), page 228. Full description, Leroy (4), page 429.

Origin of this ancient variety is uncertain. Agostino Gallo mentioned it as early as 1559. Although questioned by more recent authorities, the German author, Henri Munger, was of the opinion that White Doyenne was the variety referred to by Pliny as *Sementinum*. The variety is said to have been brought to America by the early French Huguenots.

Fruit medium in size, ovate-obtuse-pyriform in shape. Skin smooth, waxy, straw-colored, numerous inconspicuous green dots, attractive. Flesh somewhat granular, somewhat buttery at maturity, moderately juicy. Sweet, aromatic flavor but lacks somewhat in dessert quality. Midseason.

Tree fairly vigorous, willowy in habit, strong, productive, moderately susceptible to blight.

White Doyenne is a cosmopolitan variety appearing to thrive under a wide range of conditions. Lack of top dessert quality, however, has prevented it from becoming a leading commercial sort.

### **White Star**

Brief mention, Hedrick (1), page 580. Listed in Spring Hill Nursery catalog 10, 1921.

Fruit small to medium in size, resembles Flemish Beauty in form and coloration. Flesh hard or breaking, lacking in juiciness. Mild flavor but mediocre in dessert quality. Fruit ripens very slowly and holds up well.

Tree vigorous, spreading in habit with lusty, dark green foliage, moderately susceptible to blight.

### **Wilder Early**

Listed by Ragan (2) as Wilder Early.

Full description and color plate, Hedrick (1), page 230.

Originated as a chance seedling found by Charles A. Green, Chautauqua County, New York, about 1884. Added to A.P.S. catalog list, 1899.

Fruit medium in size, oblong-pyriform in shape. Skin pale green in color, faintly blushed on sunny side. Flesh stringy, buttery but not melting, moderately juicy. Aromatic, pleasing flavor but second rate in dessert quality. Holds up better than most early pears.

Tree vigorous, thrifty, somewhat apple-like in appearance, productive, moderately susceptible to blight.

### **Winter Bartlett**

Listed by Ragan (2) as Winter Bartlett.

Full description and color plate, Hedrick (1), page 281.

Originated at Eugene, Oregon, presumably as a seedling of Bartlett. Introduced by D. W. Coolidge in 1880. Added to A.P.S. catalog list in 1909.

Fruit resembles that of Bartlett in form, and coloration but is smaller in size. Flesh rather fine, white, firm, but becoming somewhat buttery when fully ripe, moderately juicy. Reasonably sweet but often develops a disagreeable flavor. Mediocre in dessert quality. Late in season.

Tree of fair vigor, willowy and spreading in habit, moderate in productivity, fairly susceptible to blight.

### Winter Nelis

Although generally listed by American and British authors as Winter Nelis, the name of this variety has been much confused in continental Europe. Leroy (3) describes it under Bonne de Malines, the name assigned by its originator. It was introduced into England under the name of La Bonne Melinois. At a later date, the name Bonne de Malines or La Bonne Melinois was cancelled and Nelis d' Hiver was substituted at the suggestion of Van Mons. From this name came the English equivalent, "Winter Nelis."

Full description and color plate, Hedrick (1), page 232. Full description, Leroy (3), page 484.

Raised from seed by Jean Charles Nelis, Mechlin, Belgium, early in the nineteenth century. Brought to the United States from England in 1823.

Fruit small to medium in size, roundish-obovate to obtuse-obovate-pyriform. Skin fairly thick, but tender, roughened with considerable russeting, dull green or yellowish in color, not attractive. Flesh fairly fine except for grit at the center, buttery, moderately juicy. Spicy, rich flavor, rates very high in dessert quality. Late keeper.

Tree fairly vigorous, willowy and spreading in habit, reasonably productive, moderately susceptible to blight.

Winter Nelis is rapidly losing ground as a commercial variety because of small size, unattractive appearance, and a tendency to decay in storage.

### Worden Seckel

Listed by Ragan (2) as Worden.

Full description and color plate, Hedrick (1), page 234.

A seedling of Seckel raised by Sylvester Worden of Minetto, Oswego County, New York, about 1881. Introduced about 1890. Added to A.P.S. catalog list in 1909.

Fruit small to medium in size but definitely larger than that of Seckel. Obovate-acute-pyriform in shape. Skin smooth, clear yellow in color, heavily blushed with brilliant crimson, very attractive. Flesh fairly fine, somewhat granular at center, tender but not fully buttery, moderately juicy. Very sweet, somewhat insipid in flavor, often astringent. Decidely inferior to Seckel in dessert quality. A little later than Seckel in season.

Tree fairly vigorous, upright-spreading in habit, productive, moderately susceptible to blight.

### **Zuckerbirne**

Listed by Ragan (2) as Zurich and by Hedrick (1) and Leroy (4) as Sucre de Zurich. Sometimes known as German Sugar.

Brief description, Hedrick (1), page 555. Full description, Leroy (4) page 684.

Origin obscure, probably Switzerland. Known in France as early as 1836.

Fruit small in size, roundish-turbinate in form. Skin light green in color, many small grayish dots. Flesh white, fine, buttery or melting, juicy. Sweet, slightly aromatic, but second rate in dessert quality.

Tree large, vigorous, stately, having lusty, dark green foliage. Somewhat resistant to blight.

### **Blight-Resistant Communis Seedlings**

In searching for blight-resistant Communis root and framework stocks, the Southern Oregon Branch Experiment Station made a concerted attempt to find such stocks from 1923 to 1931. One phase of this work involved over 10,000 French seedlings. These were inoculated periodically with the blight organisms over periods of 5 and 6 years. Most such seedlings died of blight during the tests, but at the end of the experiments, ten trees had survived. While none of these proved immune to blight, they did possess high resistance. Moreover, these resistant seedlings were capable of transmitting the characteristic to an extremely high percentage of their progeny, particularly when cross pollinated with other blight-resistant types.

What appeared to be the best of the resistant seedlings, selected in the above manner, have been preserved and are a part of this collection. These are designated as W1, W2, P18, P30, P61, P70, and P87. For additional information concerning this series, see Reimer (7) (Oregon Station Bulletin 485).

In addition to the above blight-resistant Communis seedlings, attention is called to OH20 and OH50. These are unguarded seedlings of Old Home developed and tested at the Station. Of these, OH20 appears promising as a blight-resistant trunk and framework stock.

## The Sand Pears

While it is believed that some Sand Pears may be of hybrid origin, varieties listed here appear to be pure forms of *Pyrus serotina* var. *culta*. Rehd. Varieties of the Sand Pear are cultivated for their fruit in some oriental countries but have not gained acceptance by occidental peoples. This is largely because of a hard and gritty texture and lack of desirable flavor as judged by western standards.

Blight resistance among these pears is quite variable. None have proven immune to the disease in tests at the Southern Oregon Branch Experiment Station, although one variety can be listed as being highly resistant.

### Hawaii

Brief description, Hedrick (1), page 413. Also Cornell Station bulletin 482, 1913.

Fruit medium in size for the type, apple-like in form. Skin light yellow in color with conspicuous russet dots. Flesh hard, gritty, not juicy. Poor in dessert quality.

Tree fairly vigorous, oriental in growth characteristics, somewhat susceptible to blight.

### Japan Golden Russet

Listed by Ragan (2) as Golden Russet. Also known as Japan Golden, Japan Russet, Cannery Japan or Taihe.

Brief description, Hedrick (1), page 428.

Fruit fairly large for the type, apple-like in form. Skin pale yellow in color, overspread with smooth russet and conspicuous sand spots. Flesh hard, gritty, moderately juicy. Aromatic but of poor dessert quality. Midseason.

Tree vigorous, hardy, very productive, moderately susceptible to blight.

### Mikado

Listed by Ragan (2) as Mikado. Common synonyms; Japanese, Micado.

Brief description, Hedrick (1), page 472.

First imported into Holland by Freiherr V. Siebolt during the early part of the nineteenth century. Introduced into France in 1873.

Fruit fairly large for the type, roundish in form. Skin granular, pale yellow in color, numerous gray dots. Flesh white, gritty, potato-like in texture. Perfumed, quince-like flavor. Poor in dessert quality. Early midseason.

Tree vigorous, typically oriental in character, moderately susceptible to blight.

### Nijisiki

Fruit medium in size, roundish or oblate in form, long stem. Golden yellow in color. Flesh white, fairly juicy, potato-like in texture. Very gritty and poor in dessert quality.

Tree vigorous, productive, definitely oriental in character, moderately susceptible to blight.

### Pineapple

Brief description, Proceedings of A.P.S., 1922. Also Oregon Station bulletin 214.

Fruit of no consequence.

Tree highly resistant to blight but somewhat susceptible to winter injury in Southern Oregon.

## The Sand Pear Hybrids

Varieties listed in this group are generally assumed to be hybrids between *P. serotina* or *P. serotina* var. *culta*, and *P. communis*. Often, however, this assumption is based on characteristics the varieties display, rather than on specific knowledge of their actual parentage.

Although these varieties as a group are inferior in fruit quality to the best of the pure *Communis* forms, they are of importance because they often thrive under conditions where other pears do not. They are known to withstand extremes of both heat and cold, and in some areas display considerable resistance to blight.

So far as blight resistance is concerned, the Sand Pear hybrids have proven quite variable in tests at the Southern Oregon Branch Experiment Station. Of the varieties subjected to blight resistance tests, none were found immune to the disease. A few proved highly or fairly resistant while the remainder rated no better than moderately resistant.

### Campas No. 1

Fruit somewhat larger than Kieffer in size and inclined to be more oblong in form. Closely resembles Kieffer in color and finish. No improvement over Kieffer in dessert quality. Earlier than Kieffer in season and fruit breaks down badly after a period in cold storage.

Tree very vigorous, highly productive, upright grower but bends down with weight of fruit, not fully evaluated as to blight resistance.

## **Campas No. 2**

Fruit medium in size, resembling Kieffer in form and general appearance. May be slightly superior to Kieffer in dessert quality but no great difference. Slow to ripen and appears to keep longer than Kieffer.

Tree vigorous, upright grower, very productive, inclined to break from weight of crop, not fully evaluated as to blight resistance.

## **Canner**

Fruit resembles that of Kieffer in size and form. Does not ripen properly as grown in the Rogue River Valley of Oregon. Blemishes badly during handling operations. Generally inferior to Kieffer.

Tree vigorous, spreading in habit, productive, foliage resembles that of *Communis* varieties. Not fully evaluated as to blight resistance.

## **Cincincis**

Listed by Ragan (2) as Cincincis. Sometimes written Cin Cin Cis.

Brief description, Hedrick (1), page 338.

Apparently a Sand Pear-*Communis* hybrid originating in France. Introduced into the United States about 1854.

Fruit small in size, roundish in form. Skin granular, greenish-yellow in color, numerous brown dots. Flesh juicy, breaking, quite gritty. Much inferior to Kieffer in flavor and texture.

Tree similar to that of Kieffer, not fully evaluated as to blight resistance.

## **Conkleton**

Listed by Ragan (2) as Conkleton.

Brief mention, Hedrick (1), page 348.

Originated in Texas as a seedling of Le Conte. First came to attention in 1902.

Fruit medium in size and resembles Le Conte in form. Skin granular, pale yellow in color, fairly free of blemish. Flesh granular, tender but not buttery, moderately juicy. Inferior to Kieffer in dessert quality. Usually breaks down after a few weeks in cold storage.

Tree much like that of Kieffer, somewhat susceptible to blight.

## **Dixie**

Brief mention, Hedrick (1), page 360.

Originated in Southern Georgia as a chance seedling. Supposed to be a cross between Le Conte and one of the Sand Pears. Introduced in 1914.

Fruit medium in size, roundish in form, sometimes slightly oblong. Skin light green in color, reasonably smooth. Flesh firm, juicy, considerable grit at the center. Somewhat sweet and spicy in flavor but not rated high in quality. Early in season.

Tree moderately vigorous, productive, fairly resistant to blight.

### **Douglas**

Full description, Hedrick (1), page 150.

Raised as a Kieffer seedling by O. H. Ayer, of Lawrence, Kansas. First propagated in 1907. Believed a cross of Kieffer and Duchesse d'Angoulême.

Fruit resembles Kieffer in form but inclined to be smaller in size. Skin greenish-yellow in color, reasonably free of blemish. Flesh fairly tender, quite juicy, not very gritty. Sprightly, pleasing flavor, although at times fairly acid. Superior to Kieffer in dessert quality. Midseason.

Tree fairly vigorous, productive, highly blight resistant.

### **Estella**

Mentioned in Proceedings of A.P.S. for 1926. Listed in 1926 catalog of Salem Nursery Company, Salem, Oregon. Also Reimer (5).

Reported to be a seedling of Kieffer, probably crossed with some Communis variety.

Fruit much like Kieffer in size and form. Skin somewhat rough, greenish-yellow in color with prominent "trout" spots, often blushed with dull red. Flesh tender, not too gritty, fairly juicy. Pleasing, sprightly flavor, superior to Kieffer in dessert quality. Somewhat earlier than Kieffer in season.

Tree vigorous, weeping in habit, dark green foliage, quite resistant to blight.

### **Eureka**

Brief description, Hedrick (1), page 379.

First fruited by a Mr. Dickinson of Eureka, Illinois in 1910. Introduced by A. M. Augustine of Normal, Illinois.

Said to be a cross of Seckel and Kieffer.

Fruit medium or smaller in size and resembles Seckel in form. Skin waxy, bright yellow in color, usually blushed, rather attractive. Flesh fairly firm, juicy, some grit at the center. Superior to many Sand Pear hybrids in dessert quality.

Tree displays characteristics of both parents. About the same as Kieffer in blight resistance.

### **Garber**

Listed by Ragan (2) as Garber.

Full description, Hedrick (1), page 171.

Raised by J. B. Garber, Columbia, Pennsylvania, prior to 1880. Added to A.P.S. catalog list, 1891.

Fruit closely resembles that of Kieffer in size and form, though a little more rounded. Skin pale yellow in color, often blushed with dull red on sunny side, numerous small dots. Flesh white, granular, somewhat tender, moderately juicy. Fairly pleasing in flavor although no better than Kieffer in dessert quality. Earlier than Kieffer in season.

Tree moderate in vigor and blight resistance, upright-spreading, good foliage, reasonably productive.

### **Good Christian**

Fruit resembles Kieffer in size and form but develops a deep yellow or orange color. Some surface blemish but rather attractive. Flesh fairly fine, some grit at the center, tender but not buttery, juicy. Mild, pleasing flavor with little of the oriental taste and aroma. Superior to Kieffer in both appearance and dessert quality as grown in Southern Oregon.

Tree moderately vigorous, productive, fairly resistant to blight.

### **Greisa No. 1**

Fruit resembles Seckel in size and form. Skin bright yellow in color with many small tan-colored dots, fairly attractive. Flesh quite gritty, but juicy and reasonably tender. Spicy, exotic flavor and aroma. Superior to some other Sand Pear hybrids in dessert quality.

Tree of medium vigor, very productive, moderately susceptible to blight.

### **Kieffer**

Listed by Ragan (2) as Kieffer.

Full description, Hedrick (1), page 180.

Grown from a seed of a Sand Pear by Peter Kieffer of Roxborough, Pennsylvania. Presumed to be a cross of Sand Pear and Bartlett. First fruited in 1863 and the first Sand Pear hybrid to assume importance. It is the standard by which other varieties of the group are judged.

Fruit medium or larger in size, ovate in form, usually pointed at both stem and calyx ends. Skin greenish-yellow in color, often blushed dull red, numerous large russet dots. Flesh gritty, fairly juicy, tender but not fully buttery. Fair in dessert quality, quite satisfactory for

culinary purposes. Improves in quality if harvested at the proper time and ripened at a constant temperature of 65° F.

Tree fairly vigorous, moderately productive, somewhat resistant to blight.

### **Le Conte**

Listed by Ragan (2) as Le Conte.

Full description and color plate, Hedrick (1), page 187.

Believed to be a Sand Pear-*Communis* hybrid but origin otherwise uncertain. Added to A.P.S. catalog list in 1883.

Fruit medium in size, roundish, tapering at both ends. Skin thick, tough, fairly smooth, pale yellow in color, numerous small dots. Flesh firm, gritty, moderately juicy. Inferior to Kieffer in flavor and texture characteristics. Breaks down at the core if left on tree too long.

Tree resembles that of Kieffer, moderately susceptible to blight.

### **Richard Peters**

Brief description, Brooks and Olmo (6), page 121.

Originated at Pennsylvania State University, State College, Pennsylvania. Introduced commercially in 1927. Said to be an open pollinated seedling of Kieffer.

Fruit medium in size, more or less pyriform in shape with slender neck. Skin greenish-yellow in color, some dots, occasionally blushed. Flesh juicy, medium fine, more or less buttery. Superior to most Sand Pear hybrids in dessert quality.

Fruit fairly large in size, roundish in form. Skin greenish-yellow fully evaluated as to blight resistance.

### **Smith**

Brief description, Hedrick (1), page 547. Also referred to in Cornell Station bulletin 332, 1913.

Apparently an oriental hybrid resembling Kieffer or Le Conte in size and form. Skin yellowish-green in color, some russetting. Flesh firm, dry in texture, insipid in taste, poor in dessert quality. Breaks down rapidly after harvest. Inferior to Kieffer as a variety.

Tree vigorous, spreading in habit, has lusty dark green foliage, not fully evaluated as to blight resistance.

### **Van Fleet Hybrid No. 1**

Fruit fairly large in size, roundish in form. Skin greenish-yellow in color, prominent russet dots. Definitely oriental in flesh and flavor characteristics, low in dessert quality.

Tree vigorous with *Communis* type foliage. Not fully evaluated as to blight resistance.

## The Ussuri Varieties

Ussuri Pears are presumed to be pure forms of *P. ussuriensis*, although there is a possibility (5) that some may be hybrid forms, involving other oriental species. As already indicated, 22 named varieties of these pears were collected in Northern China and brought to Oregon by F. C. Reimer in 1917 and 1919. At the time these were considered to represent the best of such pears then under cultivation. At later dates, several other varieties of the group were acquired and tested.

Twenty-three of the Ussuri varieties have survived and are a part of this collection. These are of interest for several reasons. They hybridize freely with other species, including *P. communis*, and while variable in blight susceptibility, some have proven so highly resistant they can be classed as practically immune to the disease, at least under Southern Oregon conditions. No other pear material tested at the Station merits this classification.

Of the varieties still in the collection, the following are grouped in the blight-immune class: Ba Li Hsiang, Chien Pa Li, Huang Hsiang Sui Li, Hung Guar Li and Ta Tau Huang. Hsiang Sui Li, while not immune to blight has proven highly resistant. This variety is of interest because it is one of the best flavored of the oriental pears. While the fruit is small, it approaches *Communis* varieties in texture and dessert quality. The variety Hung Guar Li is quite striking in tree and fruit characteristics and might be of some value as an ornamental or specimen tree in certain sections of the United States.

For additional information concerning the nature and performance of the Ussuri Pears, see Reimer (5) Oregon Station bulletin 214.

Ba Li Hsiang	Man Yuan Hsiang
Chieh Li	Mien Suan Li
Chien Pa Li	Nan Li
Chiu Tz	Nai Tze Hsiang
Guar Li	Ping Li (ovid type)
Hau Kai	Suan Li
Hsiang Sui Li	Ta Suan Li
Huang Hsiang Sui	Ta Mo Pan
Huang Hung	Tang Li
Hung Guar Li	Ta Tau Huang
Lo Suan Li	Tzu Ma Li
Ma Ti Huang	

## The Ussuri Hybrids

Eleven of these oriental pear varieties were found in Northern China by F. C. Reimer and brought to Oregon in 1919. Of this number, 7 have survived and are being preserved.

Regarding the Ussuri Hybrid varieties, Reimer (5) says, "While there is no record of their origin, their botanical characteristics indicate that they are hybrids between *P. ussuriensis* and some other species, probably *P. phaeocarpa*. This group includes the most popular varieties grown in Northern China."

These pears are generally susceptible to blight, although some have displayed a high degree of resistance. Like the pure forms of *P. ussuriensis*, they are early bloomers in the Rogue River Valley of Oregon.

Varieties of this group remaining in the collection are Hung Li, Mi Li, Pai Li, Pan Chien Sui, Ping Li, Ya Kuang Li and Tzu Ma Li. Of these, Pai Li is probably the most important. It has proven highly resistant to blight in Southern Oregon and its fruit is the best in dessert quality of all oriental pears tested at the station, including the well known *P. serotina* hybrids.

## Species and Primitive Types

The original pear collection at the Southern Oregon Branch Experiment Station contained 33 species and botanical varieties. This represented practically all known pear forms indigenous to Europe, Asia, and North Africa. While some ultimately succumbed to blight or died from other causes, 21 remain and are a part of the collection at the present time.

The remaining species in the collection are represented in various ways. The common French or European pear, *Pyrus communis* Lin., is represented by many named horticultural varieties and also by seedlings proven highly resistant to blight. Specimens of the Ussuri Pear, *Pyrus ussuriensis* Max., consist of 16 named horticultural varieties collected largely in Northern China, while specimens of the Sand Pear, *Pyrus serotina* var. *culta*. Rehd, consist of 4 well-known named varieties.

The Birch Leaf pear, *Pyrus betulaeifolia* Bunge, is represented in the collection by several seedlings selected and preserved because of a high degree of blight resistance. The species, *Pyrus variolosa* Wallich, is represented by a single clone obviously a hybrid form, not at all typical of the species. This clone has been preserved because it is highly resistant to blight and has performed well as a trunk or framework stock, at least in the Rogue River Valley of Oregon.

The well known species, *Pyrus calleryana* Decne., is represented in the collection by a number of type trees, whose seeds give rise to seedlings with high blight resistance. These seedlings have also proven to be desirable rootstocks for pears over a fairly wide range of conditions. A Korean species, *Pyrus fauriei* Schneid., is represented by a single clone. This species resembles *P. calleryana*, except in being decidedly dwarfish in form. Like *P. calleryana*, it is highly resistant to blight and appears worthy of trial as a possible dwarfing stock for pears.

Below are listed species and primitive types now in the collection. For more information concerning general performance, blight resistance, and evaluation of these forms, see Reimer (5) (Oregon Station Bulletin 214).

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|--------------------------------|--|
| <i>P. Amygdaliformis</i> Vill. | <i>P. michauxii</i> Bosc.              |
| <i>P. betulaefolia</i> Bunge.  | <i>P. nivalis</i> Jacq.                |
| <i>P. calleryana</i> Decne.    | <i>P. parviflora</i> Desf.             |
| <i>P. communis</i> Lin.        | <i>P. Persica</i> Pers.                |
| <i>P. elaeagnifolia</i> Pall.  | <i>P. Phaeocarpa</i> Rehd.             |
| <i>P. facicularis</i> Hort.    | <i>P. salicifolia</i> Pall.            |
| <i>P. fauriei</i> Schneid.     | <i>P. serotina</i> var. <i>culta</i> . |
| <i>P. glabra</i> Boiss.        | Rehd.                                  |
| <i>P. heterophylla</i> Regel   | <i>P. serrulata</i> Rehd.              |
| and Schmath.                   | <i>P. ussuriensis</i> Max.             |
| <i>P. hondoensis</i> Nakai     | <i>P. variolosa</i> Wallich.           |
| and Schmath.                   |  |
| <i>P. longipes</i> Coos.       |  |
| and Dur.                       |  |

## Literature Cited

- (1) Hedrick, U. P.  
1921. The Pears of New York  
J. B. Lyon Company, Albany, New York
- (2) Ragan, W. H.  
1908. Nomenclature of the Pear  
U.S. Department of Agriculture, B.P.I. Bul. No. 126
- (3) Leroy, André  
1867. Dictionaire Pomologie  
Vol. I., Paris, France
- (4) Leroy, André  
1869. Dictionaire Pomologie  
Vol. II., Paris, France
- (5) Reimer, F. C.  
1925. Blight Resistance in Pears and Characteristics  
of Pear Species and Stocks.  
Oregon Agricultural Experiment Station Bulletin 214
- (6) Brooks, R. M. and Olmo, H. P.  
1952. Register of New Fruit and Nut Varieties, 1920-  
1950  
University of California Press
- (7) Reimer, F. C.  
1950. Development of Blight Resistant Pear Stocks  
Oregon Agricultural Experiment Station Bulletin 485