

VegNet Update

JESSICA GREEN, HORTICULTURE, OSU

Broccoli / Cauliflower

Snap
Beans

Sweet Corn



Regional pest
monitoring and
reporting network for
damaging crop pests

Early Warning System



VegNet:

- Advance Alert System

- Email Newsletter

Regional trap counts vs. history

Weekly reports

Occasional pesticide trials

- **Blog**

Crop Pest Info / Spotlights

Topic Features

<http://beav.es/ZwK>

VEGNET 2017								
Week of May 22 nd , 2017 Willamette Valley, OR								
Insects per day*	AURO	MCKE	STLU	MTAG	BRKS	ALBN	CVRO1	MNRO
BCW	n/a	0.00	n/a	n/a	n/a	0.33	0.25	1.17
CEW	n/a	n/a	n/a	0.00	n/a	n/a	n/a	0.00
PHX	n/a	n/a	n/a	0.00	n/a	n/a	n/a	0.00
12S	0.20	0.00	n/a	0.33	0.00	1.00	0.50	0.50
SCB	0.00	0.00	n/a	0.00	0.00	0.00	0.25	0.17
CL	n/a	30.80	n/a	90.00	113.00	120.67	40.00	0.00
AL	n/a	0.20	n/a	1.00	0.00	1.00	1.00	0.00
DBM	n/a	n/a	n/a	0.00	0.50	0.00	7.50	0.00
CWB*	0.00	0.00	n/a	0.00	0.00	0.00	1.00	0.00
Willamette Valley 7day Ave Week of MAY 22								
Insects per day*	15Yr Ave	2016	2017	Note				
BCW	0.70	1.05	0.35	Normal risk				
CEW	0.02	0.02	0.00	Normal risk				
PHX	0.23	0.00	0.00	Normal risk				
12S	0.13	0.31	0.36	Above Normal				
SCB	n/a	n/a	0.06	Unknown				
CL	9.85	15.64	56.35	Alert				
AL	2.04	1.18	0.53	Normal risk				
DBM	1.76	1.15	1.60	Normal risk				
CWB*	0.29	0.00	0.13	Normal risk				
VegNet Key								
BCW = Black Cutworm Moths				CEW = Corn Earworm Moths				
PHX = False Corn Earworm Moths				12S = 12 Spot Beetles				
DBM = Diamondback Moths				SCB = Striped Cucumber Beetles				
CL = Cabbage Looper Moths				AL = Alfalfa Looper Moths				
n/a = not available				CWB = Cabbage Butterflies/2 min				
* Values reported are pests per day, except CWB, which is a temporal snapshot								

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Brassica Pests



Cabbage Looper

- *(Trichoplusia ni)*
- Outbreak year
- Possibilities:
 - fall-seeded brassicas
 - reduced efficacy of NPV

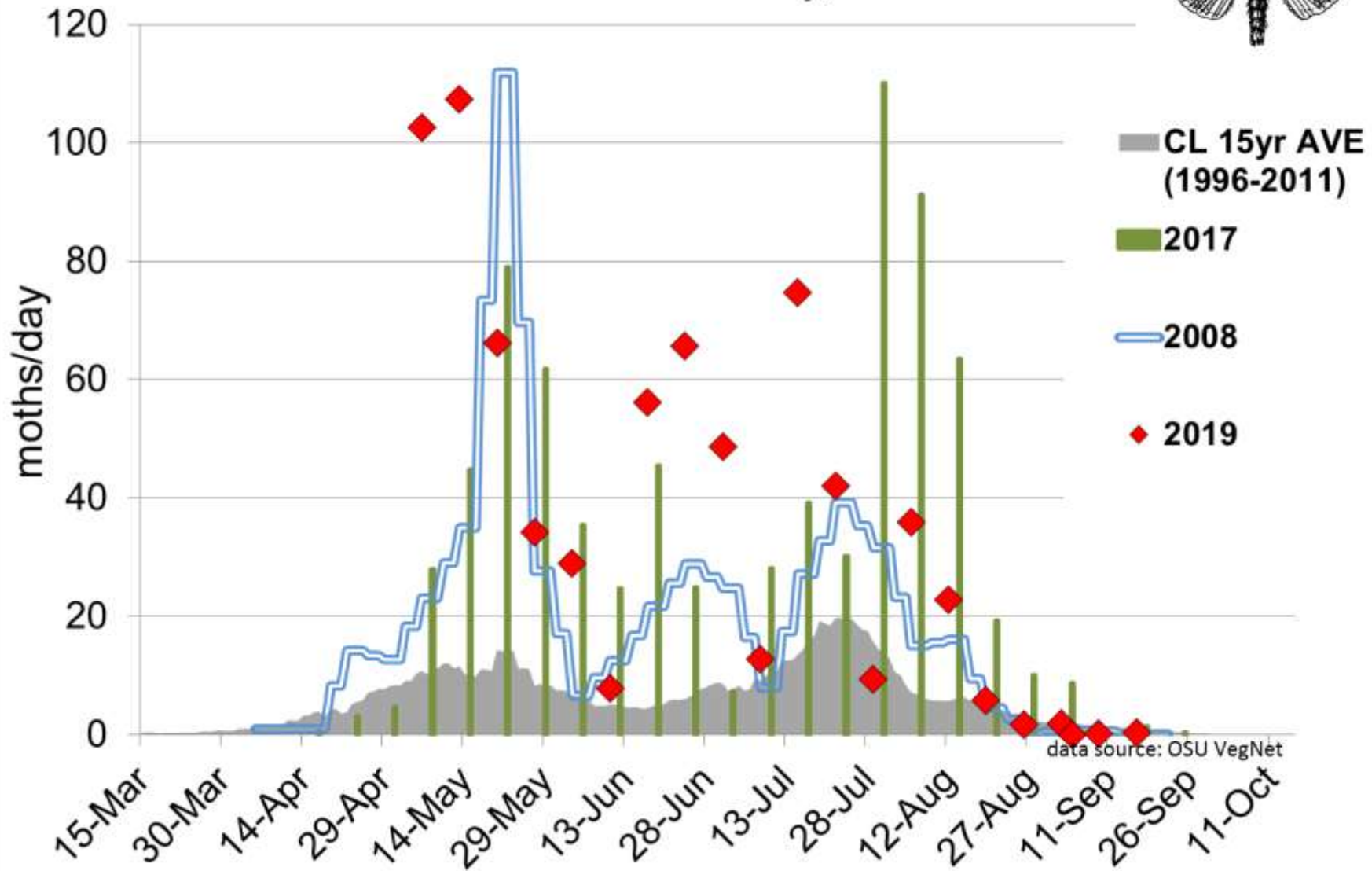


May 15th, 2019



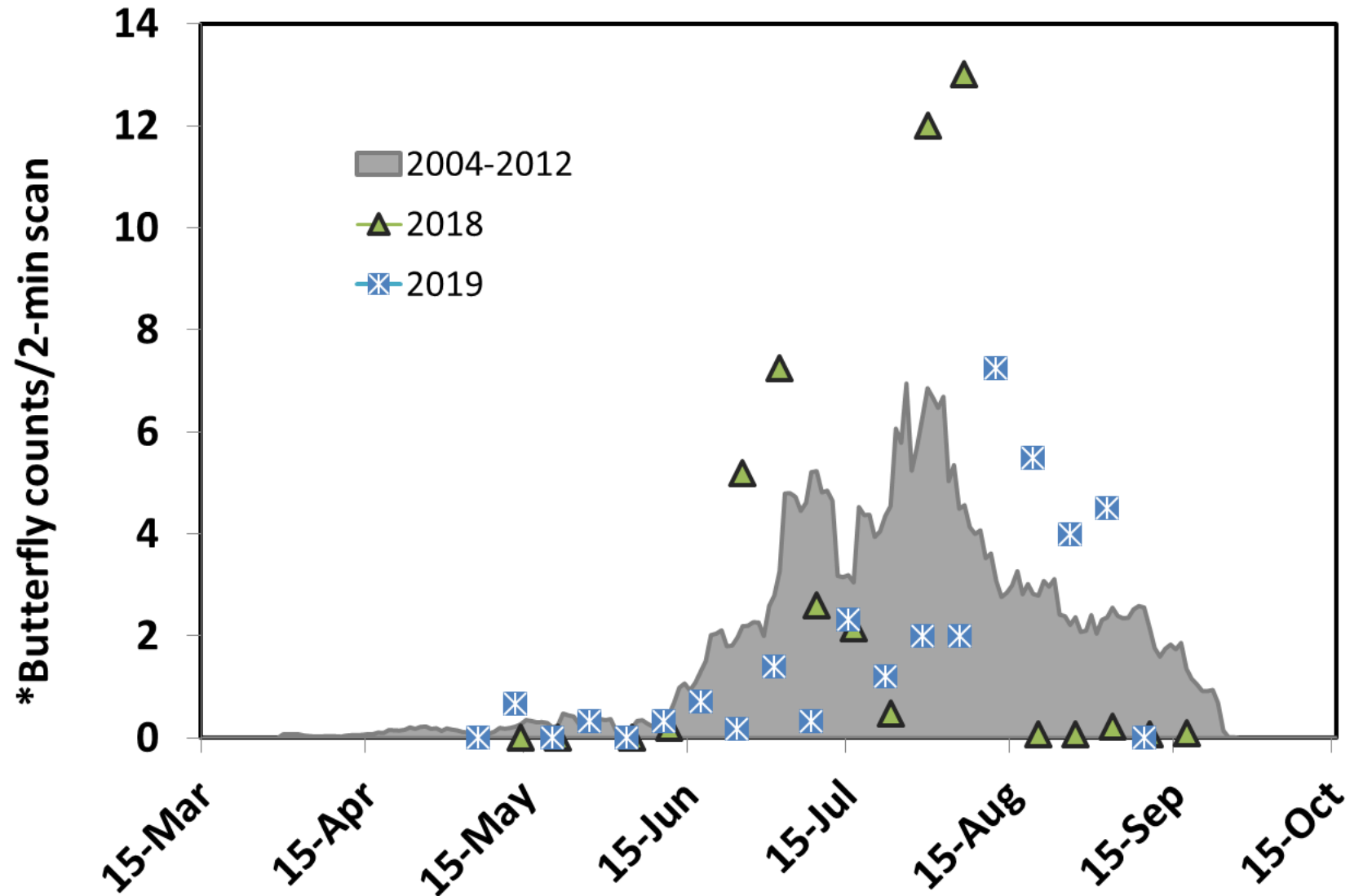
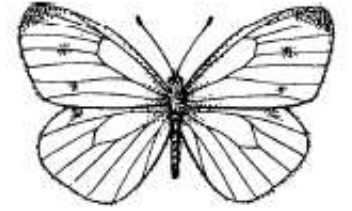
Cabbage Looper

Cabbage Looper Willamette Valley, OR



Cabbage White Butterfly*

Willamette Valley, Oregon



The future of VegNet?



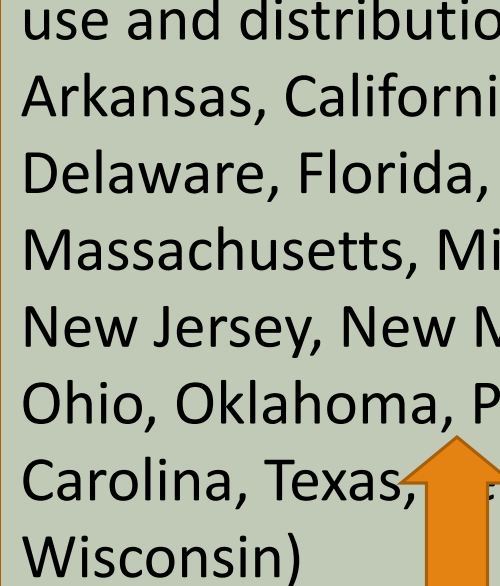
Label Changes and Amendments

Clopyralid (Stinger)

Stinger (Corteva)

Spur (Albaugh) label
includes OR

Stinger 24C now
includes daikon



Brassica (Cole) Leafy Vegetables (Crop Group 5)1 (For use and distribution only in the states of Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Maine, Maryland, Massachusetts, Michigan, Missouri, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Texas, Vermont, Virginia, West Virginia, and Wisconsin)

Command 3 ME (clomazone)

-
- Snap Bean
 - Brassica head and stem vegetable (**Broccoli, Cabbage**)
 - Cucurbit Vegetables (**PHI reduced to 30 days for cukes, s. squash**)
 - **Herbs: Cilantro (leaf) & Dill (dillweed)**
 - Peas (Succulent)
 - Peppers
 - Rhubarb
 - Edamame

Pendimethalin (Prowl H2O, Augapen)

AquaPen (Drexel): Transplanted brassica crops.

BRASSICA HEAD AND STEM VEGETABLES

This product may only be applied to the following Brassica head and stem vegetables:

Broccoli	Cauliflower	Chinese cabbage (Napa)
Brussels sprouts	Cavalo broccolo	Chinese mustard cabbage
Cabbage	Chinese broccoli	Kohlrabi

Prowl H2O and Aquapen: Post transplant

Reflex (fomesafen)

Reflex on cucurbits: Syngenta *does* plan on renewing the Reflex SLN (OR-140003) for the next 5 years.

Dual Magnum (coming very soon)

Pumpkin

Cilantro

Indemnified label available through Syngenta Indemnified Labels website

Similar to label for radish OR-040010, OR-060012

Nutsedge suppression

Syngenta indemnified labels

Visit the website and register as a user.

(<https://www.syngenta-us.com/labels/indemnified-label-search>)

Click on Sign-in button; enter your user name and password.

Enter state (e.g., OR) and product (Dual Magnum) on the drop-down menus and click Submit button.

The next screen shows the available Dual Magnum 24c labels. Select the crop (beets, in this case). Click Submit button.

The 'Waiver of Liability and Indemnification Agreement' will appear on the screen. Read it carefully, then click "I accept" or "I decline."

Current Research *and Predicted Outcomes*

STARANE, ZEUS/SPARTAN, REFLEX

Starane

for control of nightshade
and other broadleaves in
radish grown for seed
(year 3)



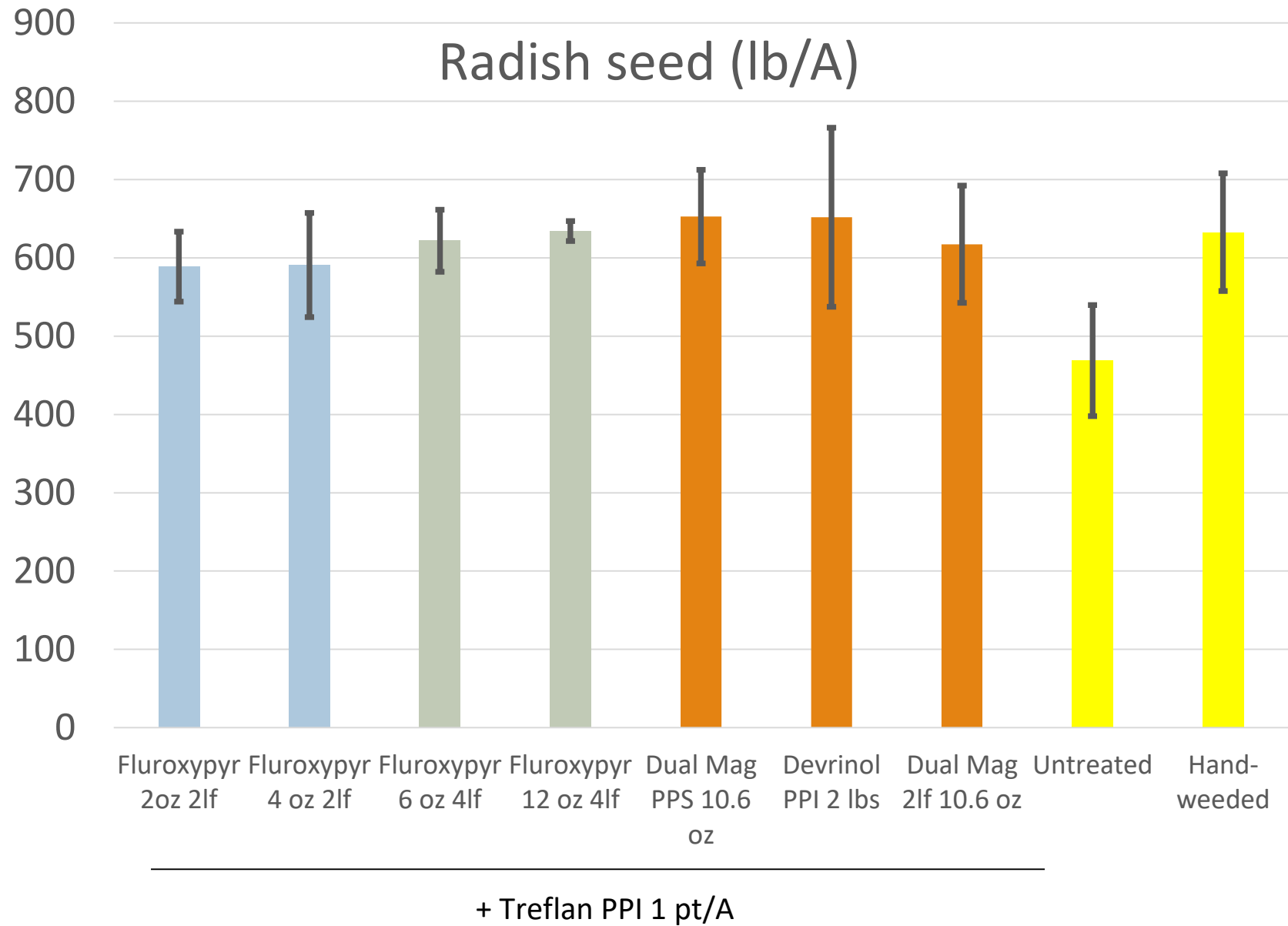
Radish tolerance to Starane 2019

(fluroxypyr)

Herbicide		Timing	Rate		Date
			#/A	lb ai/A	
1	Starane 1x	2 lf	2 oz	0.044	14-May
2	Starane 2x	2 lf	4 oz	0.088	14-May
3	Starane 1x	4 lf	6 oz	0.131	20-May
4	Starane 2x	4 lf	12 oz	0.263	20-May
5	Dual Magnum	PPS	10.66 oz	0.650	1-May
6	Devrinol	PPS	2 lbs	1.000	1-May
7	Dual Magnum	2 lf	10.66 oz	0.650	1-May
8	Nontreated	-	-	-	
9	Nontreated	Hand-weeded			
10	Sonalan	PPS	2 pts	0.75	1-May

Herbicide		Timing	Product rate	6-Jun	
				Phyto	Stunting
			#/acre	0-10	%
1	Fluroxypyr	2 lf	2 oz	0.0	19
2	Fluroxypyr	2 lf	4 oz	0.5	25
3	Fluroxypyr	4 lf	6 oz	0.8	33
4	Fluroxypyr	4 lf	12 oz	1.3	23
5	Dual Magnum	PPS	10.7 oz	0	8
6	Devrinol	PPS	2 lbs	0	11
7	Dual Magnum	2 lf	10.7 oz	0	24
10	Sonalan	PPS	2 pts	0.0	14

Consistent with 3
on-farm and 1
station trial





Starane
6 oz/A 4 leaf



Treflan PPI
Dual Magnum PES



6 oz/A
4 leaf



Starane 2019 Summary

- ❑ No effect on seed weights or seed germination
- ❑ Letters of support sent to Corteva
- ❑ Corteva working on label, keeping fingers crossed for this season

Zeus/Spartan (sulfentrazone)

BRASSICA CROPS

Expand uses for sulfentrazone

- ❖ Broccoli
- ❖ Chinese cabbage
- ❖ Radish?

CABBAGE Processing Only (Transplanted Only) (24.0)

Table 10

Spartan 4F Use Rate Table (Cabbage) Fall or Spring Early Preplant, Preemergence, and Preplant Incorporated Applications			
Broadcast Rate	Fluid Ounces Spartan 4F per acre		
	Soil Texture		
% Organic Matter	Coarse	Medium	Fine
<1.5%	2.25 – 3.0	3.0 – 4.5	3.0 – 6.0
1.5-3.0 %	3.0 – 6.0	6.0 – 9.0	6.0 – 9.0
>3.0 %	6.0 – 9.0	6.0 – 12.0	6.0 – 12.0

Refer to the previous information on soil types under the COARSE, MEDIUM, and FINE categories.

Use higher rates for soils of pH less than 7.0 and lower rates for pH greater than 7.0 within the rate range.

Early Preplant (Spring Application) (24.1)

Spartan 4F may be applied in the spring from 60 days prior to planting up to planting time. Spartan 4F should be applied to the harvested crop stubble or soil surface without incorporation. Moisture in the form of rain or snow will move and activate the product into the soil. Do not mechanically incorporate in the fall or spring after application. Do not destroy the herbicide barrier and weed escapes can occur. Do not apply to frozen soils to prevent Spartan 4F runoff from rain or snow occur following application. Spartan 4F may be tank mixed with burndown herbicides to control emerged weeds in the fall or spring with residual soil herbicides that are labeled for fall use. Use the full, recommended rates of burndown herbicides or split applications with Spartan 4F, or split applications as needed. Observe all precautions, instructions, and rotational cropping guidelines of each product's label when tank mixing, including all references to potential carryover and crop injury warnings or restrictions.

Preplant Incorporated (PPI) (24.2)

Spartan 4F may be applied as a preplant incorporated treatment in the spring prior to transplanting of cabbage. Do not incorporate to depths greater than 2 inches. Spartan 4F can be tank mixed with other burndown or soil-applied herbicides labeled for use in cabbage. Use the full, recommended rates of burndown herbicides or split applications as needed. Observe all precautions, instructions and rotational cropping guidelines of each product's label when tank mixing including all references to potential carryover and crop injury warnings or restrictions.

Transplant Cabbage (24.3)

Spartan 4F may be applied pre-emergence as a broadcast or banded treatment to transplanted cabbage only. Applications should be made

Spartan
FMC label

Willowood SULFENTRAZONE 4SC

GROUP

14

HERBICIDE

Agricultural Uses:

Asparagus, Berries (Crop Group 13(07)), Brassica (Head & Stem), Brassica (Leafy Greens), Cabbage (Transplanted Only), Citrus (Crop Group 10), Corn (Field, Seed, Pop), Beans & Peas (Dry Shelled), Flax, Fruiting Vegetables (except cucurbits), Okra, Grapes, Horseradish, Lima Beans (succulent), Melons, Mint, Peanuts, Potatoes, Rhubarb, Soybean, Peas (Succulent), Sugarcane, Sunflower, Tobacco, Tomato, Tree Nuts, Turnips, Wheat (Spring), Vegetable Soybean (Edamame)

ACTIVE INGREDIENT

Uses of interest

Pre-Transplant for Broccoli, Cabbage, Cauliflower, and other head, stem, and leafy green crops of the Brassicacea family

Apply Zeus XC herbicide at the rate of 4.0-9.0 fluid ounces (0.125 – 0.1875 lb. active ingredient per acre) as a broadcast spray before transplanting brassica crops with 4 true leaves.

Post Emergence for suppression of yellow nutsedge on broccoli, cabbage, and cauliflower only

Apply Zeus XC herbicide at the rate of 4.0-9.0 fluid ounces (0.125 – 0.1875 lb. active ingredient per acre) as a broadcast spray when listed brassica seedlings are 4 true leaves. Irrigate with ½ inch water to activate the herbicide within 48 hours after application.

Charcoal Seeded Brassicas Grown for Seed

Vegetable Screening

2018



Vegetable Screening 2018

12 Brassicaceous crops

1	-	Bicyclopyrone	0.9oz	0.01	PRE
2	Command	Clomazone	0.4pt	0.15	PRE
3	Dual Magnum	S-metolachlor	8oz	0.49	PRE
4	Outlook	Dimethenamid-P	0.5pt	0.38	PRE
5	Zidua	Pyroxasulfone	0.75oz	0.04	PRE
6	Sonalan	Ethalfluralin,	1.5pts	0.56	PRE
7	Shieldex	Tolpyralate	0.50oz	0.01	PRE
8	Spartan	Sulfentrazone	3oz	0.09	PRE
9	Spartan	+ Acharcoal	3oz	0.09	PRE
10	Lorox	Linuron	8oz	0.25	PRE
11	Lorox	+ Acharcoal	8oz	0.25	PRE
12	Outlook	Dimethenamid-P	0.5pt	0.38	PRE Coty
13	Prowl	Pendimethanlin	2pt	0.95	PRE-delayed
14	Caparol	Prometryn	1pt	0.50	PRE-delayed
15	Lorox	+ Acharcoal	8oz	0.25	PRE-delayed
16	Starane	Fluroxypyr	4oz	0.09	POST 2 f
17	Goal Tender	Oxyflourfen	2oz	0.06	POST 4 lf
18	Pyridate (Tough)	Pyridate	15.04oz	0.47	POST 2 lf
19	BUTYRAC® 175	2,4-DB	0.8pt	0.18	POST 2 lf
20	Stinger	clopyralid	4oz	0.06	POST 4 lf
21	Select	Clethodim	16oz	0.35	POST 4 lf
22	Quinstar	Quinclorac	12oz	0.36	POST 4 lf
23	Asulox	Asulam	1.5pts	0.63	POST 4 lf
24	Check				

Charcoal seeding?



Sulfentrazone PPS 3 oz/A

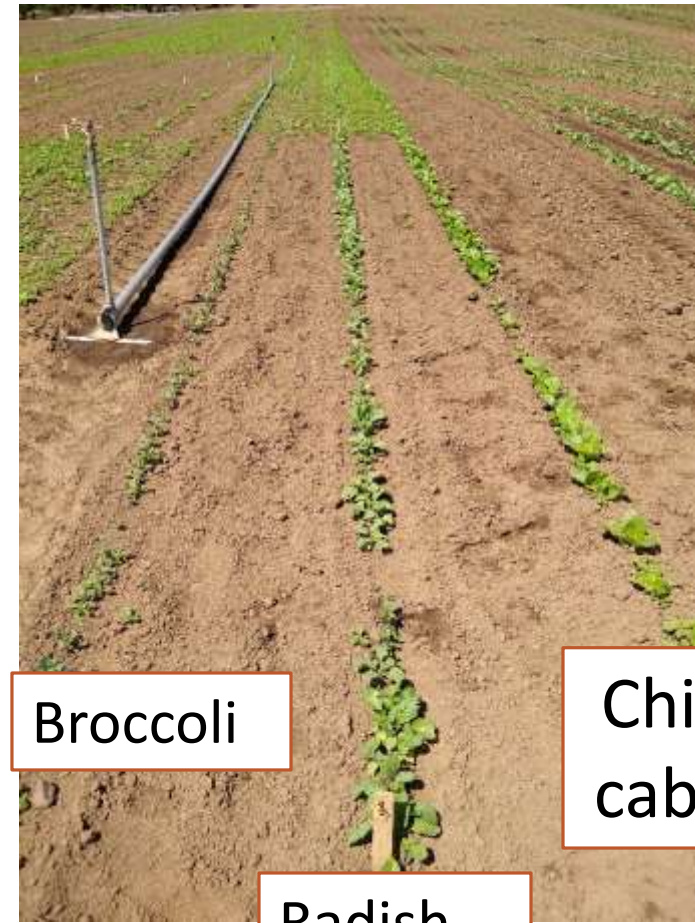


Carbon seeded
Sulfentrazone PPS 3 oz/A



Non-treated

2019: Charcoal seeding



Broccoli

Chinese
cabbage

Radish

Negotiated Uses of Interest

Pre-Transplant for Broccoli, Cabbage, Cauliflower, and other head, stem, and leafy green crops of the Brassicacea family

Post Emergence for suppression of yellow nutsedge on broccoli, cabbage, and cauliflower only.

Charcoal Seeded Brassicas Grown for Seed

Pretransplant

Broccoli, Cabbage, Cauliflower, and other head, stem, and leafy green crops of the Brassicacea family

- Apply Zeus XC herbicide at the rate of 4.0-9.0 fluid ounces
- Broadcast spray before transplanting brassica crops with
- ≥ 4 true leaves.

Post Emergence/Post Transplant

Post Emergence for suppression of yellow nutsedge on broccoli, cabbage, and cauliflower only

- Apply Zeus XC herbicide at the rate of 4.0-9.0 fluid ounces broadcast
- 4 true leaves.
- Irrigate within 48 hours after application.

Nutsedge control



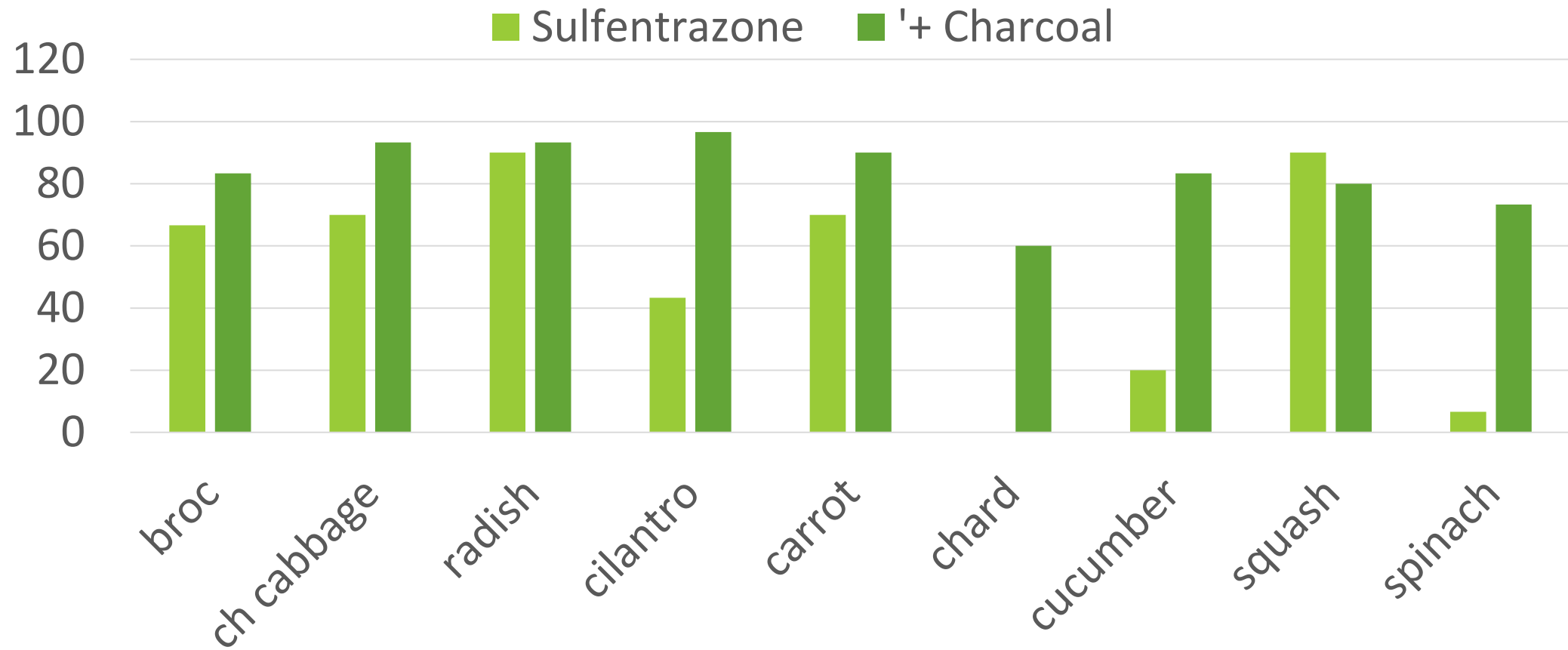
Charcoal Seeded Brassicas Grown for Seed

Similar to grass seed directions

- 300 lbs charcoal/effective acre
- 1 to 2 inch band over the seed row
- 3 oz/A sulfentrazone PPS

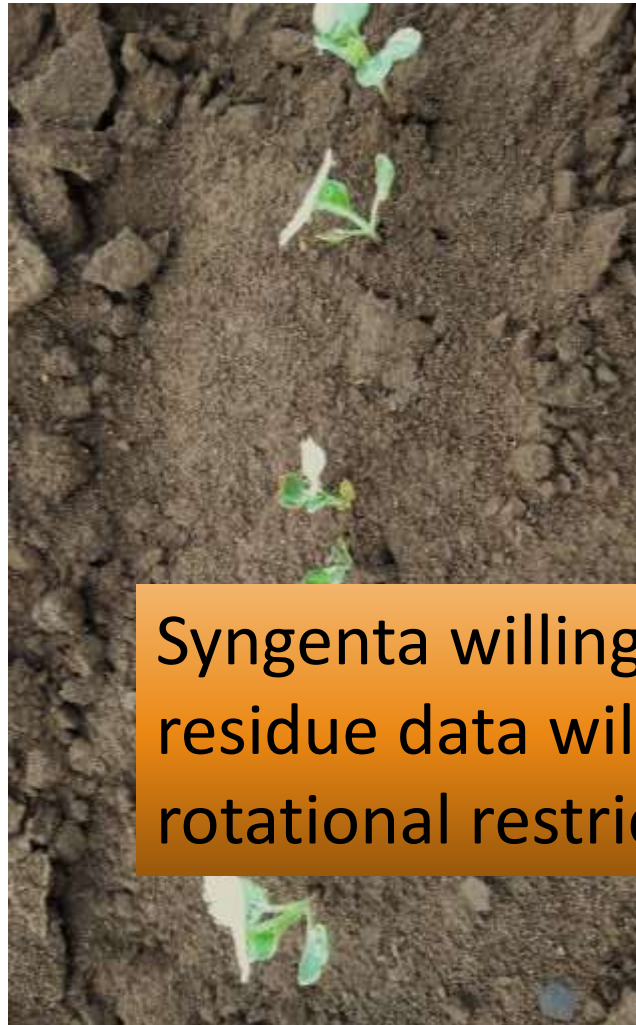
Crop response to charcoal seeding

2018 Exp II



Reflex carryover

Reflex 2 pt/A after 5 months



Syngenta willing to revise plant back;
residue data will allow a 10 month
rotational restriction

Reflex carryover

Herbicide		Product rate	Timing	Notes
1	Reflex	16oz	PRE	15-May-18
2	Reflex	32oz	PRE	15-May-18

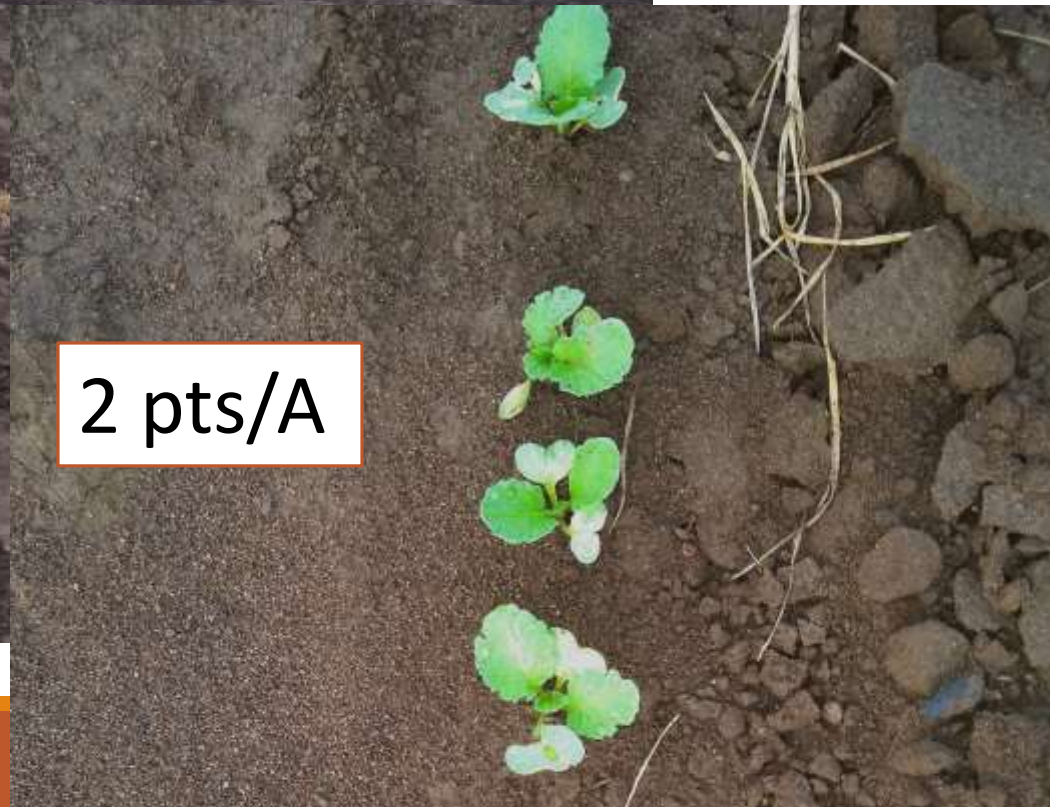
Replants

Chinese Cabbage, Broccoli, Radish

2.5, 5 and 10 months after 15-May application

Minimized soil disturbance

October (5 months)



2 pts/A





4- June

3rd party registrations

OUTLOOK ON RADISH

Outlook

Dimethenamid-P

Transplanted
radish for seed

2016



Why 3rd Party Registration

Strategy to gain access to important weed control tool when registrant will not approve labeling.

YOU become the registrant

YOU assume liability associated with use and misuse.

Other examples

Oregon Meadowfoam

Lilly bulb producers (OR)

Florida Fruit and Veg Association

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Florida Fruit & Vegetable Association

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A voice for Florida agriculture

The Florida Fruit & Vegetable Association serves as a strong voice for Florida farmers who grow nutritious fruits and vegetables to feed our country. We listen and respond to growers' needs, working to shape agricultural public policy. FFVA is the go-to resource for Florida agriculture, no matter the issue.

[Learn about our services >>>](#)



Become a member of the Florida Fruit & Vegetable Association

[Learn More](#)



About Third Party Registrations, Inc.

Third Party Registrations, Inc. (TPR) is a Florida Fruit & Vegetable Association subsidiary service company. TPR was established and incorporated in 1987. It is led by a Board of Directors with headquarters in Maitland at 800 Trafalgar Court, Suite 200. The company's mission is to obtain registrations and provide regulatory support for crop protection chemicals to meet the needs of FFVA producer members. The labeling process is established through the Special Local Need Provisions of the Federal Insecticide Fungicide and Rodenticide Act (FIFRA) and Florida Statutes, FS Chapter 487. The TPR registration system provides protection to the primary registrant, the research community and the product distribution system for non-performance, crop damage and following crop damage through liability waiver contracts between TPR and FFVA members. TPR also provides support to registrants and associated entities in Florida through consulting services for the state specific registration process.

Supporting Florida growers since 1987 with new crop protection tools

■ ***Do you have weeds or pests that you can't manage?***

If you have issues with crop protection tools because you have use restrictions or because they are not as effective as you'd like and not as profitable, we can help.

■ ***Are there available chemicals to address current crop issues?***

TPR stands ready to help you in obtaining the safe crop protection chemicals you need for competitive production under Florida's unique growing conditions.

■ ***What experience is available to provide assistance in this process?***

The TPR team has highly competent expertise in pesticide regulation,

■ ***How are identified chemicals established for use by the growers?***

TPR negotiates agreements and development strategies between pesticide manufacturers and growers to address regulatory agencies' concerns to allow use registrations. For specific products there are additional agreements that provide protection and limitation of damage waivers to the Registrant in return for allowing the use to be labeled.

■ ***Is there liability to the grower for use of these chemicals?***

TPR assumes crop damage, non-performance and following crop damage liability from the manufacturer in return for the right to register the product ourselves.



FFVA Current labels

Dual Magnum

- Cabbage and crops in the Head and Stem Brassica crop subgroup
- Celery.
- Pepper
- Eggplant:
- Root and Tuberous and Corm Vegetables

Caparol: Dill grown for fresh market.

Cobra: weed control between rows of fruiting vegetables, okra

Pursuit (BASF): Pre and POST suppression of weeds in lettuce and escarole/endive, high organic matter soils >40%)

Chateau: between rows, okra and cucurbit vegetable crops grown using raised-beds.

How

1. Permission from BASF to pursue (currently reviewing)
2. Exemption from registration fee (EPA)
3. Write label (submitted)
4. Letters of support
5. ODA approves



?, comments, suggestions