**Vegetable Insecticide Update**

Frank A. Hale, Ph.D.  
Professor  
Entomology & Plant Pathology

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**Calypso 4 F (thiacloprid)**

- Bayer CropScience is no longer making Calypso although any existing stocks can still be used.
- This is perplexing since thiacloprid is a cyano-substituted neonicotinoid and relatively non-toxic to bees.

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**Final cancellation order for sulfoxaflor**¹

- We had already added Transform WG and Closer SC to the 2016 Southeastern U.S. Vegetable Crop Handbook when we were informed of the cancellation order.
- Dow AgroSciences plans to “work diligently to support renewed U.S. EPA sulfoxaflor registrations.”²


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**Final cancellation order for sulfoxaflor**

- Dow AgroSciences stated that with “Four full years of widespread U.S. product use – with additional use in Canada, Australia and other nations – have demonstrated excellent sulfoxaflor performance worldwide with no noted adverse effects on pollinators.”¹
- Dow is pursuing re-registration of sulfoxaflor insecticides (personal communication).


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**Final cancellation order for sulfoxaflor**

- “As part of this recent action, EPA has issued an existing stocks provision allowing growers to use sulfoxaflor-containing products they have in hand consistent with directions on the pre-existing product label.”

**Closer SC (sulfoxaflor)**

- Existing stocks labeled for use on Brassica (Cole) leafy vegetables, cucurbit vegetables, leafy vegetables (except Brassica) and watercress
- For aphids, silverleaf whitefly, sweetpotato whitefly, and thrips (suppression only)

**Closer SC (sulfoxaflor)**

- Existing stocks labeled for use on Fruiting vegetables and okra
- And leaves of root and tuber vegetables

**Closer SC (sulfoxaflor)**

- Existing stocks labeled for use on listed insects on pome fruits, strawberry, stone fruit, small fruit vine climbing (except fuzzy kiwifruit) and low growing berry, and tree nuts

**Additions to the 2016 Southeastern U.S. Vegetable Crop Handbook**

- Sivanto 200 SL (flupyradifurone) 1.67 lb ai/gallon or 17.09% (Bayer CropScience LP)
- IRAC Mode of Action Group 4D (Nicotinic acetylcholine receptor competitive modulator) – butenolides chemical subgroup

**Sivanto 200 SL**

- Labeled for use on Brassica (cole) leafy vegetables – foliar application
- For leafhoppers, aphids, and whiteflies
- PHI – 1 day
- Minimum intervals between applications – 7 days

**Sivanto 200 SL**

- Cucurbit vegetables -- foliar for leafhoppers, aphids, squash bug and whiteflies and soil applied for aphids, leafhoppers, whiteflies, suppression of cucurbit yellow stunting disorder virus
- Fruiting vegetables – foliar for leafhoppers, aphids, Colorado potato beetle, psyllid, whiteflies and suppression of chilli thrips and tomato yellow leaf curl virus
**Sivanto 200 SL**
- Other crops on label include: Bushberry
- Leafy vegetables (except Brassica)
- Legume vegetables (succulent or dried)
- Low growing berry (lowbush blueberry, strawberry etc.)
- Pome fruit
- Root vegetables
- Small fruit vine (except fuzzy kiwifruit) – grape, gooseberry etc.
- Tuberous and corm vegetables
- Tree nut

**Sivanto Prime**
- Sivanto Prime will be replacing Sivanto 200 SL
- It is essentially the same product and the result of a new global marketing initiative by Bayer CropScience

**Sivanto Prime Honey Bee-Safe Profile**
- Low intrinsic toxicity to adult and immature stages of honey bees
- No adverse effects on foraging honey bees, their foraging activity, brood and colony development, hive vitality and honey bee health or on over-wintering colonies when used according to label instructions

**Additions to the 2016 Southeastern U.S. Vegetable Crop Handbook**
- Torac (tolfenpyrad) 1.29 lb ai/gallon or 15% (Nichino America, Inc.)
- IRAC Mode of Action Group 21A (Mitochondrial complex I electron transport inhibitors)

**Torac**
- Labeled for use on leafy vegetable (Crop group4) – except brassica vegetables
- Labeled for leafhoppers, aphids (excluding lettuce aphid), flea beetle, & thrips

http://www.sivanto.com/sivanto-documents.html
Brown Marmorated Stink Bug Damage to Mature Nectarines

Image courtesy of C. Holko, Maryland Dept. of Ag.

Brown Marmorated Stink Bug Damage on Apple

Images courtesy of C. Holko, Maryland Dept. of Ag.

BMSB Damaged Tomato

Image courtesy of Thomas Kuhar et al. at:
http://www.plantmanagementnetwork.org/pub/php/bief/2012/stinkbug/

Heavy BMSB Infestation on Tomatoes

Image courtesy of Thomas Kuhar et al. at:
http://www.plantmanagementnetwork.org/pub/php/bief/2012/stinkbug/
BMSB Damaged Bell Peppers

Images courtesy of Thomas Kuhar et al. at:
http://www.plantmanagementnetwork.org/pub/php/bief/2012/stinkbug/

BMSB Damaged Sweet Corn

Image courtesy of Thomas Kuhar et al. at:
http://www.plantmanagementnetwork.org/pub/php/bief/2012/stinkbug/

BMSB Damaged Green Beans

Image courtesy of Thomas Kuhar et al. at:
http://www.plantmanagementnetwork.org/pub/php/bief/2012/stinkbug/

BMSB Damaged Okra

Image courtesy of Thomas Kuhar et al. at:
http://www.plantmanagementnetwork.org/pub/php/bief/2012/stinkbug/

Stink Bug Control on Tomato

- pyrethroid (Mustang Max [zeta-cypermethrin], Hero [zeta-cypermethrin plus bifenthrin] etc.), MOA 3A
- dinotefuran, MOA 4A (Soil or foliar treatment) Venom 70 SG, Scorpion 35 SL
- thiamethoxam, MOA 4A, Actara 25 WDG

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