Overview of Activity & Key Information

- Stomach poison and anti-feedent
  - Increases acetyl cholinesterase activity
  - Increases phenol oxidase activity
  - Decreases carbohydrate hydrolysis

- Spectrum
  - Aphids
  - Thrips
  - Spider mites
  - Whitefly
  - Lepidoptera

- High beneficial compatibility

- Formulation: SL (soluble liquid)
- Rate: 12-24 fl oz/100 gal
  - No phytotoxicity observed up to 40 fl oz/100 gal
- Application: Foliar spray, Dip
- Residual activity: 7-14 days
- REI: 0-hr
- PHI: 0-day
- Shelf life: 2 years
- OMRI
IR4 Assistance Needs

Continue testing phytotoxicity on major crops

- Mums, Begonia, Dracaena, Fuschia, Zonal Geranium, Hydrangea, Impatiens, NG Impatiens, Marigold, Pansy, Poinsettia, Petunia, Rose, Succulents, Verbena, Violet

Continue to generate additional data on insects & mites

- Whiteflies
- Thrips
- Mealybugs
- Spider mites
- Box Tree Moth
- Hibiscus Bud Weevil
Control of Melon Aphid

Curative - Apps 14 Nov. and 22 Nov. 2017

![Bar chart showing the control of Melon Aphid nymphs per leaf for untreated and treated conditions.]

- Untreated: 17.4 nymphs/leaf
- 13 fl oz SP 3014/100 gal: 13.8 nymphs/leaf
- 32 fl oz Hachi Hachi SC/100 gal: 4.8 nymphs/leaf

8 DA-App A: 37.7 nymphs/leaf
9 DA-App B: 19.6 nymphs/leaf

Nymphs/leaf
SP3014 IR-4 Summary

• No phytotoxicity up to 40 fl oz/100 gal applied 3 times on a 7-day interval
  • Mum, Begonia, Dracaena, Fuschia, Zonal Geranium, Hydrangea, Impatiens, NG Impatiens, Marigold, Pansy, Petunia, Rose, Verbena, Violet

• 2017 Red Headed Flea Beetle-Field Container-Sadof-Purdue
  • 13 and 26 fl oz/100 gal – Poor control applied on 10-17 day interval

• 2018 Western Flower Thrips-Greenhouse-Hotchkiss-Mich St
  • 13 and 26 fl oz/100 gal – Poor control applied on 7 day interval

• 2019 Western Flower Thrips-Greenhouse-Hotchkiss-Mich St
  • 13 and 26 fl oz/100 gal - 26 fl oz/100 gal better control than the standard Pylon on immatures and adults

• 2019 Western Flower Thrips-Greenhouse-Nackley-OR St.
  • 26 fl oz/100 gal – Low pressure – Excellent control of adults for 21 DAT

• 2020 Western Flower Thrips-Greenhouse-Gilrein-Cornell
  • 13 fl oz/100 gal – Good control of immatures and adults on a 7-day interval

• 2020 Western Flower Thrips-Greenhouse-Nanson- UC Davis
  • 13 fl oz/100 gal – Good to Excellent control of immatures on a 7-day interval. Moderate control of adults.

• 2020 Citrus Mealybug-Greenhouse-Chong-Clemson
  • 13 fl oz/100 gal – Excellent control of immatures for 21 DAT. Poor control of adults.

• 2020 Crape Myrtle Bark Scale-Field Container-Held-Auburn
  • 13 fl oz/100 gal – No control

• 2020 Japanese Beetle Adults-Shadehouse-Addesso-TN St. and Potter-UK
  • 26 fl oz/100gal – Poor control