## INTEGRATED CROP MANAGEMENT

### Pest Controlled Assessment

**Maintenance**

- **Fungus Gnat**
  - **Citrus**
    - Insect growth regulator
    - Initial insecticide treatment allows crop to start clean.
    - If fungus gnat populations are low, it is possible to only use *Steinernema feltiae* and skip the Citrus application.
  - **Flagship**
    - Use as drench for final clean-up application.

- **Spider Mites**
  - **Avid**
    - Initial insecticide treatment allows crop to start clean.
  - **Steinernema feltiae**
    - Use as drench for final clean-up application.

- **Leafminers**
  - **Endeavor**
    - Make 1-2 applications at beginning of crop.
    - Re-apply if needed as a rescue treatment.
  - **Amblyseius californicus**
    - Sprays on multiple aphid species.

- **Whiteflies**
  - **Encarsia formosa**
    - Spray or drench for final clean-up application.
  - **Bioline**
    - Spray or drench for final clean-up application.

- **Aphids**
  - **Aphidoletes aphidimyza**
    - Combinations of *Eretmocerus eremicus* and *Amblyseius californicus*.
  - **Flagship**
    - Use as drench for final clean-up application.

- **Thrips**
  - **Exhibitline sf**
    - *Steinernema feltiae* (insect pathogenic nematode)
      - Drench early to prevent pupae from emerging.
      - Apply every 7-21 days.

### Clean-Up

- **Flagship**: Insecticide
- **Exhibitline sf**: *Steinernema feltiae* (insect pathogenic nematode)
- **Avid**: Miteicide/insecticide
- **Amblyseius californicus**: Biological control agent
- **Aphidoletes aphidimyza**: Biological control agent
- **Encarsia formosa**: Biological control agent
- **Bioline**: Biological control agent

### With Bioline™ Biological Control Agents

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### Applications

- **Citation**
  - Drench early to prevent pupae from emerging.
  - Re-apply if needed as a rescue treatment.
  - Make 1-2 applications at beginning of crop.
- **Amblyseius californicus**
  - Sprays on multiple aphid species.
- **Amblyseius californicus**
  - Sprays on multiple aphid species.
- **Exhibitline sf**
  - *Steinernema feltiae* (insect pathogenic nematode)
  - Drench 5 days before shipping.
- **Flagship**
  - Use as drench for final clean-up application.
INTEGRATED CROP MANAGEMENT with Bioline™ Biological Control Agents

A PRACTICAL APPROACH TO INTEGRATED CROP MANAGEMENT

Syngenta combines leading plant protection expertise with a full line of biological control agents (BCAs) for a practical approach to integrated crop management (ICM). With a broad portfolio of BCAs and compatible chemical controls, innovative packaging and a team of certified agents across the country, Bioline makes ICM more achievable and realistic for growers.

Including Bioline in your ICM program offers the following benefits:

- Improves labor efficiency.
- Requires less personal protective equipment.
- Reduces the potential for developing pest resistance.
- Gives growers the option of implementing preventive and curative programs as needed.

To help growers better understand and create ICM programs, Syngenta has certified agents who are trained at developing customized ICM solutions. Agents help growers:

- Identify problems.
- Analyze growing systems.
- Uncover the history behind issues and attempted solutions.
- Prescribe customized ICM programs specific to individual needs.
- Order products for quick delivery and timely implementation.

INNOVATIVE DELIVERY SYSTEMS FOR INCREASED EFFICIENCY

Syngenta Bioline BCAs have unique packaging and delivery systems to release beneficial insects in the most appropriate way based on BCA needs, grower needs, crop and conditions. Releasing BCAs properly increases emergence rates and establishment for excellent pest control.

BLISTER PACKS

- Available for Aphidoline a and Ereteline e to control whiteflies and aphids.
- Protect un-hatched cocoons from desiccation and predation.
- Increase the percentage of emergence and establishment of beneficial insects.
- Improve efficiency and ease-of-use.

CONTROLLED RELEASE SYSTEM (CRS) SACHETS

- Available for Amblyline cu, Anderline aa and Swirskiline.
- Easy to distribute, which allows for more release points and better protection.
- Makes preventive control possible with continuous emergence of mites over time.
- Developed by Syngenta Bioline, CRS sachets also come in mini sachets, which are ideal for hanging baskets.
- Also available as the patented, waterproof-designed Gemini sachet.

BUGLINE™

- Unique, patented delivery system available for controlled release of Amblyline cu, Anderline aa and Swirskiline.
- Quick application helps growers reduce labor and provides optimal distribution of mites within the crop.
- Provides preventive control of damaging pests with continuous emergence, not damaged by overhead watering.
- Available in strips of 80, 100, 140 and 160 meters (87, 109, 153 and 175 yards, respectively).