

WHITEFLY CONTROL FOR POINSETTIAS

Early identification, exclusion and preventative management are the keys to preventing whitefly population explosions. Below are several ways you can get out in front of major pressure—but remember, some of these may not be the best option for your operation or stage in crop production right now.



URC or Liner Dips: Cutting and young plant suppliers do their utmost to ensure you receive pest-free material. However, hard-to-spot whitefly eggs and nymphs can slip through their detection "nets" and enter your greenhouse this way. Treatment of incoming URCs or young plants via a dip can help catch these hitchhikers early and prevent subsequent outbreaks. Biopesticides containing *Beauveria bassiana*, mineral oils and insecticidal soaps are all effective options in this process, but be aware that state and local restrictions on what can be used in this manner may exist. Check with your state's department of agriculture for any potential restrictions and additional guidelines on how to implement this process in your operation before doing so. Also, be sure to check out this **VIDEO** on cutting dips. And see Dr. JC Chong's notes from a May 2022 **ISSUE OF PESTTALKS E-NEWS** for more details, as well as do's and don'ts.

Biological Controls: I speak from personal experience when I say this: biologicals can really work well to keep whiteflies at bay. When deployed preventatively, parasitic wasps like *Encarsia* and *Eretmocerous* are powerful tools to keep whiteflies in check. Used in tandem

with other biologicals like *Ambylseius swirskii* mites, other predatory insects and biopesticides or "soft chemistries," you can implement a holistic strategy to keep whitefly populations at an almost undetectable level.

It takes dedication and a different mindset to make this approach work well and ultimately boils down to three key ideas:

- Start with a very clean greenhouse and clean inputs. Rinse, wash, and sanitize the production area, remove all "pet plants" and other potential pest reservoirs in and around your greenhouse (weeds, etc.), and implement cutting/liner dips before transplant.
- Work with a biological control agent (BCA) supplier to build a rotation of beneficials and low-toxicity pesticides that is compatible with your operation and that targets the species of whiteflies you encounter. Some predators and parasitoids feed preferentially on one species of whitefly versus the other, so get your whiteflies properly identified first.
- Deploy BCAs early and often to combat influxes of whiteflies and maintain a regular release schedule throughout the season to ensure the bios can keep the pressure on any stragglers. In more northerly climates, if you can keep whitefly populations low through October and into November when it's too cold for them to survive outdoors, this makes maintenance of low populations much easier.

Chemical Controls: If bio-IPM is not feasible for you now, or your early attempts at this approach don't work as well as you'd like, be ready to pivot to traditional chemical controls. And if you're not interested in a full-on biological IPM program right now, that's also fine. Just know that even when you choose to use traditional chemical insecticides to manage whiteflies, you cannot wait around for their numbers to build before you act.

Also, while many insecticides state that they control whiteflies, chemistry selection definitely matters. Historically, neonicotinoids have been used to manage whiteflies, but they are not always the best option. For info on which chemistries will have the most impact on your whitefly populations, check out this awesome **GROWERTALKS ARTICLE** from a few years ago on whitefly insecticide trials conducted by researchers at the University of Maryland and University of Delaware.

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