Poinsettia 2015: time to dot the i's and cross the t's

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Are you ready for poinsettia season? Over the coming weeks, poinsettia cuttings will arrive in great numbers. Experience from past years has taught us that sometimes, they hide stowaways. Small numbers of Bemisia whitefly eggs and nymphs are almost undetectable on the cuttings, but from small beginnings, pest populations can rapidly grow. By the time the mist is turned off and most growers start to release bios, the whitefly will have had a head start and the bios may have a hard time catching up.

This is one of the problems that Vineland Research and Innovation Centre's (Vineland) "Clean Start" research program is solving.

In 2013, Vineland's research team tested dipping poinsettia cuttings in several biopesticides and reduced risk materials just prior to sticking the cuttings under mist. (Find report here). Dips in oil (SuffOil-X) or a combination of insecticidal soap and BotaniGard reduced Bemisia whitefly numbers by at least 70 per cent. One important finding was not to use the recommended spray rates for the products. These caused severe phytotoxicity symptoms in the cuttings, indicating that reduced dipping rates should be developed for each plant species. Both dip treatments were compatible with the parasitic wasps, *Encarsia formosa* and *Eretmocerus mundus*.

Last year, greenhouse trials showed that cutting dips significantly improved the success of poinsettia biocontrol programs. Dipping cuttings in a combination of soap and BotaniGard reduced Bemisia whitefly numbers to levels where they were effectively managed using biological control. On undipped cuttings, whitefly levels increased out of control, even with weekly releases of parasitoids.

In the coming two years, we will validate this approach in commercial greenhouses, determine the risk of disease transfer through the dipping process and quantify the economic viability of the strategy.

Want to know more about whiteflies on poinsettia, how to look for them and how to manage them using biocontrol? Here are videos worth watching:

- Monitoring poinsettias
- Biocontrol of whitefly in poinsettia
- Grower experiences

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