

# Whitefly Control in Poinsettias

*Allen C. Botacchi*

*Cooperative Extension Educator, Commercial Horticulture*

**A**s growers come down the "Home-Stretch" to finish the poinsettia crop, they must prevent and eliminate all whiteflies before bract coloration. This is more important now with the recent introduction of the sweet potato whitefly (SPWF) into northern greenhouses. Many of you, unfortunately, know how difficult it is to eliminate the SPWF.

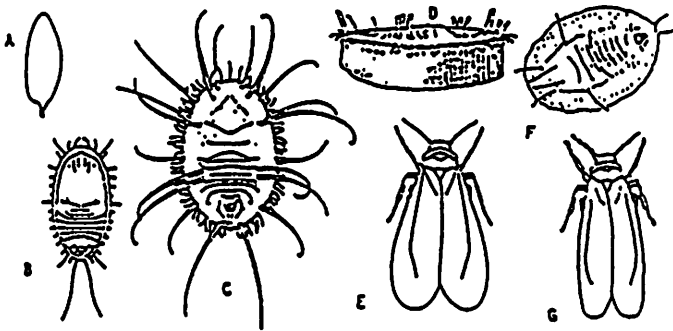
Growers must be constantly on "guard" to: 1. prevent the introduction of the WF into their range, 2. identify immediately any WF present, and 3. eliminate (kill) the pest quickly, before it can become established on the crop.

Prevention starts before the first cutting arrives. One must have a weed-free greenhouse inside and a 10- to 20-foot mowed buffer area outside as well. Weeds harbor whitefly and serve as breeding grounds for them.

Another means of preventing the introduction of whitefly is to carefully and closely examine cuttings and all plant material introduced into your greenhouse. If no adult WF are present, you may need to use a 10X to 20X hand lens to spot the nymphal stages.

Screening the greenhouse may also reduce the introduction of WF.

Identification by the detection of the nymphal stages, by scouting the range for adult, and by monitoring the crop with yellow sticky traps must be an on-going procedure. Placement of the traps should vary. Vertical traps, placed just above the crop, should catch the green-



**GREENHOUSE WHITEFLY:** A—egg; B—crawler; C—third nymph showing fringe of tiny setae; D—side view of third nymph showing perpendicular sides; E—adult.

**SWEET POTATO WHITEFLY:** F—third nymph showing lack of peripheral setae; G—adult showing more slender appearance.

house whitefly. Horizontal yellow traps, placed within the crop canopy, on the ground, or on the greenhouse bench, should catch the sweet potato whitefly. Space the traps at 1000 sq. ft. intervals. Inspect traps daily and identify the type of whitefly.

Finally, prohibit yellow clothing and equipment from being used and moved from one greenhouse to another. Whiteflies are attracted to the color yellow and thus could be moved from house to house.

Elimination or control of the whitefly must be an unrelenting battle. Once whitefly infestation is detected; start a five-day application schedule for at least 30 days, change insecticide classes and/or type of application periodically.

Insecticides registered to control whiteflies on poinsettia include:

Pesticide	Class
Talstar	Pyrethroid
Tempo	Pyrethroid
Resmethrin	Pyrethroid
Mavrik	Pyrethroid
Sumithrin	Pyrethroid
Orthene (PT 1300)	Organophosphate
Vapona	Organophosphate
Plantfume 103	Organophosphate
Dibrom	Organophosphate
Dycarb	Carbamate
Endosulfan	Chlorinated Hydrocarbon
Insecticidal Soap	Potassium Salt of fatty acid
Ultrafine oils (Sun oil)	Petroleum Product

It may be necessary to space plants further apart to enable better insecticide coverage on the lower leaf surfaces. That's where the whiteflies are!

### References

Freeman, R. 1989. *Get the best of poinsettia whiteflies before they get you.* PPGA News. Vol. XX, No. 9: 4.

Gill, S. and W. Healy. 1990. *Improving control of whitefly on poinsettias.* Greenhouse Manager. 9(5): 80-81, 84, 86, 88-89.

Lindquist, R. K. 1989. *Whiteflies: avoiding late-season problems with poinsettia.* Ohio Florists' Assoc. Bul. No. 717: 1-3.

Miller, R. 1990. *NY poinsettia growers slash pesticide use and achieve better whitefly control.* Grower Talks. Vol. 53, No. 9: 56, 58, 60.

Price, J. F., D. J. Schuster, and J. B. Kring. 1989. *Ways to avoid whitefly.* Greenhouse Grower. Vol. 7, No. 13: 28, 31, 32.