



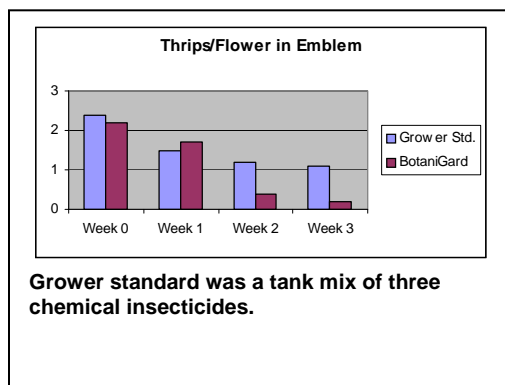
Western Flower Thrips Management

The BotaniGard® Greenhouse Insect Management Program is an effective way to control western flower thrips in greenhouse ornamental and vegetable production. This IPM-based program involves monitoring, early treatment, good spray coverage and good housekeeping practices.

Monitoring pest populations is critical in any reduced risk pest control strategy. Begin spraying BotaniGard as soon as thrips or other problem insects are noticed. The key is to get your insect control program started early before insect populations build. Early treatment will keep your insecticide program costs low and avoid the need for harsh chemical rescue treatments.

Suggested monitoring techniques include:

- Visual inspection of flowers for thrips and thrips “tracks” on petals.
- Use of blue or yellow sticky cards placed at plant height.



BotaniGard mycoinsecticide, used early, is the foundation you need for an effective IPM program to control thrips and other greenhouse pests.

Spraying should begin at the first sign of thrips. Populations can build quickly if not controlled early. If the population is building rapidly or there is a migration of insects into the greenhouse, you may need to combine a chemical insecticide

with your first BotaniGard application to gain control of the population dynamics.

Thorough spray coverage reduces product requirements and improves pest control. BotaniGard performs like a contact insecticide. The thrips need to be hit by the spray or come in contact with spores on the sprayed plant surface.

Threshold	App. Rate	App. Interval
<1 thrips/flower (10-20/sticky card per week)	1 qt/100 gal	5-7 days
>1 thrips/flower	1 qt./100 gal	3-5 days

Western flower thrips tend to concentrate in the blossoms of plants. Spray should be concentrated on the flower blossom and upper part of the plant.

If the plant doesn't have any blossoms, Western flower thrips can be anywhere, including the leaf axils, joints, etc. They no longer have a migratory path. Good spray coverage becomes even more critical. Some growers have success incorporating attractants such as sugar, to bring the thrips to the insecticide. A number of growers have reported success using attractants with BotaniGard. Caution with sugar products is advised since they may be harmful to plant material and spray equipment.

Greenhouse spray programs typically use a number of products for control of mites and powdery mildew. BotaniGard can be tank mixed with most miticides and can be tank mixed some fungicides including Clearys® 3336, Tenn-Cop®5E and Kocide®. The use of other fungicides may require an interval of several days between BotaniGard and fungicide sprays. BotaniGard can be used with sulfur volatilization programs. Refer to BotaniGard Fungicide Compatibility technical bulletin for specific compatibility information for these and other products.

BotaniGard is compatible with most beneficial insect programs. When sprayed according to label directions, BotaniGard will not reduce populations of *P. persimilis* mites, honeybees or most other beneficial insects.

NOTE: Use caution when making BotaniGard applications to open blooms, especially on varieties known to be sensitive. It is recommended that a small group of plants be tested for effects on open blooms before making applications to the whole crop. Always read and follow label directions.

To find out more about the BioWorks family of products, please contact us at 800-877-9443 or visit www.bioworksinc.com. © 2010 BioWorks, Inc.

RESPONSIBLE :: ECONOMICAL :: PROVEN