



Poinsettia Whitefly Control Options for New England and mid-Atlantic States 2006- Revised 11/06

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The Q biotype whitefly has been identified in 21 states as of August 2006 including most of the states in the New England and mid-Atlantic region. At this time is not known how prevalent they will be in this year's poinsettia crop. Since the B and Q biotype will likely both be present the recommendations below are made with the goal of using products that are believed to be active against both. Efficacy trials continue, sometimes yielding different results. Therefore, recommendations should be considered "fluid". Scouting to evaluate the success of treatments is essential. Stay informed about the latest control options through your crop advisor and by consulting this web site periodically: www.mrec.ifas.ufl.edu/LSO/bemisia/bemisia.htm

The B and Q biotype can only be distinguished by molecular analysis. You can have these tests performed by contacting (call or e-mail before sending samples):

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Read and follow all pesticide label directions!! –All of the pesticide information contained in this bulletin is believed to be correct, not responsible for typographical errors. Pesticide labels change often. Products other than those listed may be legal and effective as well. Not all pesticides are labeled in all states.

Pesticide Resistance Management needs to be a top priority regardless of which biotype of whitefly is being treated. Rotating by mode of action and including control measures other than traditional pesticides, (horticultural oils, beneficial organisms, mycoinsecticides, etc.), can be used to reduce resistance pressure. Scouting provides important information to maximize the effectiveness of control efforts. Scouting can detect a population early as well as provide an evaluation of the success of control methods.

Unless otherwise noted all foliar sprays mentioned in this bulletin will benefit from the addition of **CapSil** at 4-8 oz per 100 gallons (1/4 to 1/2 tsp per gallon). Do not apply **CapSil** more than once a week to the same plants.

Treatment Options Grouped by Crop Development Age (Choose 1):

<i>Planting to 2 weeks after pinch- begin when first whiteflies are detected.</i>	<i>Approximately 2 weeks after pinch</i>	<i>Early October to first blush of color</i>	<i>After bracts are present (if needed).</i>
Judo ² foliar spray- up to 3 week residual	Safari ¹ drench- up to 6 week residual	Judo ² foliar spray- up to 3 week residual	Judo ² foliar spray- up to 3 week residual
Sanmite*- contact kill	TriStar ¹ *- 2 foliar sprays 14 days apart	Sanmite*- contact kill	Azatin*/Ornazin* foliar sprays
Botanigard ES* tank mix with Azatin*/Ornazin* or horticultural oil-contact control	Flagship ¹ - 2 foliar sprays 14 days apart	Botanigard ES* tank mix with Azatin*/Ornazin* or horticultural oil-contact control	Sanmite* foliar spray
	Marathon ¹ *granular or drench		Foliar sprays of: Flagship ¹ , Marathon II ¹ *, Safari ¹ or TriStar ¹ *.

¹ All of these products have a similar mode of action and should not be rotated with each other. Avoid using products from this group for late season treatments if they were used earlier in the crop for resistance management reasons. Although trial results vary, Safari and TriStar on average achieved higher levels of control of the Q biotype whitefly than the other products that share this mode of action.

² Judo label allows up to 4 applications per season, I suggest no more than 2 applications per poinsettia crop for resistance management purposes.

* These products are labeled for use in NY State.

Product Details:

Azatin XL- 16 oz per 100 gallons (1 teaspoon per gallon). Insect growth regulator. Repeat at 7-day intervals. Begin applications before whitefly populations are high. Safe on bracts. Same active ingredient as Ornazin.

Botanigard ES -

2 teas per gallon or 1 qt per 100 gallons as a foliar spray. Naturally occurring fungus, not a quick kill. Use a minimum of three times in a row at 3-5 day intervals.

Flagship (foliar spray) - 4 oz per 100 gallons (½ tsp per 3 gallons). Provides 2+ weeks of control. Translaminar movement. Safe on bracts.

Judo (foliar spray)- 2-4 oz per 100 gallons (1/8-1/4 tsp per gallon). 21+ days of control. Most effective against egg and immature stages. Unique mode of action and translaminar movement. Also controls mites for 28+ days.

Marathon 1% G as a top dress or **Marathon WSP** as a soil treatment (see label for drench volumes). Make application 3-4 weeks after potting into final container. Use the maximum label rate for best results. Restricted Use Pesticide in NY.

Marathon II (foliar spray). Begin applications before pest populations are high. 1.7 oz per 100 gallons (1/2 teaspoon per 5 gallons). Reapply at 7-day intervals. Translaminar movement. Safe on bracts. Restricted Use Pesticide in NY.

Ornazin EC –16-20 oz per 100 gallons, (1 to 1 1/4 teaspoons per gallon). Insect growth regulator. Repeat at 7-day intervals. Begin applications before whitefly populations are high. Label says to trial on open bracts before large-scale applications. Same active ingredient as Azatin.

Safari (soil drench)- Drench soil at 12 oz per 100 gallons. Drench volume of 4 oz per 6” pot. This provides approximately 6 weeks of control for whiteflies and the larval stages of fungus gnats and shoreflies.

Safari (foliar spray)- Foliar sprays 8 oz per 100 gallons (1 tsp per gallon). Translaminar movement, 2+ weeks control. Safe on bracts.

Sanmite Contact control of adult whiteflies at 6 water-soluble packets per 100 gallons, (1 and 1/8 teaspoons per gallon). It is very important that CapSil be used as a surfactant to minimize visible residue. Safe on bracts.

Synergy Super Fine Oil = 1.25TBLS per gallon or 1 gallon per 100 gallons as a foliar spray. Full coverage is essential, acts as a suffocant. Apply when rapid drying will occur and when air temperatures are below 85 degrees to avoid phytotoxicity.

TriStar (foliar spray) - 1 water soluble packet per 25 gallons. Label prohibits opening packets to measure smaller quantities. 2 + weeks of control, includes some ovicidal (egg) activity. Note: TriStar is now also available in a loose fill formulation, **TriStar 30 SG**. Use this formulation at a rate of 5.3 oz per 100 gallons or 1.33 tsp per 3 gallons. Translaminar movement. Safe on bracts.

Ultra-Fine Oil - 1.25TBLS per gallon or 1 gallon per 100 gallons as a foliar spray. Full coverage is essential, acts as a suffocant. Apply when rapid drying will occur and when air temperatures are below 85 degrees to avoid phytotoxicity.