

# Managing Root Mealybugs in Container Nursery Production.

**Ornamental Protocol Number: 09-021**

**Objective:** Determine efficacy of soil drenches with various products against mealybugs feeding on the roots of ornamental plants.

**Experimental Design (Insect Infestation):** tbd

**Target Species:** Root feeding mealybugs such as *Rhizoecus hibisci* or *Dysmicoccus brevipes*

**Plot Size:** 3-4 plants.

**Replicates:** Minimum of 4 replications.

**Application Instructions:** Applications should be made using application equipment consistent with conventional commercial equipment.

**Plant Hosts:** Use a plant host suitable for target scale species, recording species and variety used.

**Use Site:** Field container.

**Evaluations:** *TBD*. Record plant height & width and any phytotoxicity (0 = no phytotoxicity; 10 = complete kill) at initial and final evaluations. If phytotoxicity is observed in treated plants, take pictures comparing treated and untreated plant material.

**Recordkeeping:** Keep detailed records of weather conditions throughout the test including temperature and precipitation, soil-type or soil-less media, application equipment, application volume per acre, irrigation, liner size, plant height & width, and plant growth stage at application and data collection dates.

## **Reports:**

Reports submitted on the standard IR-4 Ornamental Horticulture Research Report Form are preferred. However, reports in the AMT Tests format are acceptable as long as those reports are amended with detailed experimental design and materials and methods, along with raw data, recordkeeping information, and any pictures.

A report submitted electronically is preferred but not required. If the report is provided electronically, the basic report can be sent in MS Word or WordPerfect, the recordkeeping information as pdf or other electronic documents, and the raw data in MS Excel or other suitable program such as ARM.

**Please direct questions to:** Cristi Palmer, IR-4 HQ, Rutgers University, 500 College Road East, Suite 201W, Princeton, NJ 08540, Phone 732-932-9575 x4629, [palmer@aesop.rutgers.edu](mailto:palmer@aesop.rutgers.edu).

Revision Date: 10/5/09

Revised By: CLP

**Treatments:**

#	Priority	Product	Rate per 100 gal	Application Instructions	Contact Information to obtain materials and any needed adjuvants
1	B	Acelepryn	0.8 fl oz	Apply 1 pint per 2.25 sq ft (assumes about 2500 gal/acre)	Dupont, Chuck Silcox, 302-999-5953, <a href="mailto:charles.a.silcox@usa.dupont.com">charles.a.silcox@usa.dupont.com</a>
2	B	Arena	TBD	TBD	Valent, Joe Chamberlin, 770-985-0303, <a href="mailto:jcham@valent.com">jcham@valent.com</a>
3	B	Aria 50SG	120 g		FMC, Bobby Walls, 919-735-3862, <a href="mailto:bobby_walls@fmc.com">bobby_walls@fmc.com</a>
4	A	Kontos (spiromesifen)	3.4 oz per 100 gal	Foliar	OHP, Jeff Dobbs, 770-992-0121, <a href="mailto:jdobbs@OHP.com">jdobbs@OHP.com</a>
5	A	Kontos (spiromesifen)	3.4 oz per 100 gal	Drench	OHP, Jeff Dobbs, 770-992-0121, <a href="mailto:jdobbs@OHP.com">jdobbs@OHP.com</a>
6	A	Flagship 0.25G (thiamethoxam)	20 gm/1 gal container 40 gm/2gal container 60gm/3 gal container	Broadcast evenly around the surface of the growing media	Syngenta, Nancy Rechsigl, 941-708-9338, <a href="mailto:nancy.rechsigl@syngenta.com">nancy.rechsigl@syngenta.com</a>
7	A	Flagship 25WG (thiamethoxam)	8 oz/100 gal (16 oz/A)	Assumes 200 GPA. Apply and water-in within 48 hrs	Syngenta, Nancy Rechsigl, 941-708-9338, <a href="mailto:nancy.rechsigl@syngenta.com">nancy.rechsigl@syngenta.com</a>
8	A	Safari 20SG (Dinotefuron)	In-ground: 12 grams/ inch dbh for trees and 6 grams/ foot of height shrubs	Apply 1-2 quarts/ foot of height for shrubs or inch of trunk diameter for trees. Apply to soil at base of trunk within 1 foot of trunk	Valent, Joe Chamberlin, 770-985-0303, <a href="mailto:jcham@valent.com">jcham@valent.com</a>
9	A	Safari 2G (dinotefuron)	In-ground: 120 grams/ inch dbh for trees and 60 grams/ foot of height for shrubs	Broadcast dry by hand to the soil at base of trunk within 1 foot of trunk. Rake back mulch first if more than 1/2"	
10		Standard: Marathon	0.6 fl oz per 1,000 sq ft in 10 gal water		OHP, Jeff Dobbs, 770-992-0121, <a href="mailto:jdobbs@OHP.com">jdobbs@OHP.com</a>
11		Untreated	--	--	--