Impact of various PGRs on branching of woody ornamentals. DRAFT 2

Ornamental Protocol Number: 08-014
Objective: Determine whether certain PGR materials enhance the branching pattern of certain ornamentals

Experimental Design:

Plot Size: Must be adequate to reflect actual use conditions.

Replicates: Minimum of 10 replications of same cultivar; attempting to select replicates of similar initial branching

Application Instructions: Applications should be made using equipment consistent with conventional commercial application equipment. Foliar spray only. Plant stage: make application on established plants in either 1 or 3 gallon pots. Rooted cuttings preferred. Transplant, and then treat when roots reach bottom of pot or at a set point in time. Applications should be made during active growth, at least one week after bud break. See treatment list for when to prune plants. Note timings in final report.

Target Plant Species: Azalea/rhododendron, rose. Holly and Indian hawthorn are alternatives, but contact regional coordinator if interested in these plants.

Use Site: Greenhouse/Field Container/Field In-ground

Evaluations: Height, diameter, number of shoots, phytotoxicity (with 0 being no phytotoxicity and 10 being plant death), and, depending on age & plant type, flowering length. Initial assessments should be made prior initial treatment. Assessments should be made approximately 4 to 6 weeks after last application and then at 3 and 6 months, depending on plant material and plant growth. A count of flowers and/or flower bud formation at 3 or 6 months after last application should also be made.

If different application methods or evaluations are made, please clearly specify differences in final report and explain how they enhanced results.

Recordkeeping: Keep detailed records of weather conditions including temperature and precipitation, soil-type or soil-less media, application equipment, application volume per acre, irrigation, pot/liner size, plant height & width, and plant growth stage at application and data collection dates. Please include photos of examples of untreated plants and any treated plants exhibiting responses to treatments, taking photographs of any clear enhancement or detraction from visual quality at the end of the experiment.

Treatments:

Product	**Priority**	**Rate(s)**	**Special Instructions**	**Contact Information to obtain materials and any needed adjuvants**
Cyclanalid 2.8SC + penetrating surfactant	A	100 ppm	Foliar applications. Do not prune plants.	Bayer Environmental Sciences, Don Myers, don.myers@bayercropscience.com
Fascination (6BA + GA4+7), Valent OR Fresco (6BA + GA4+7), Fine	A	TBD	Do not prune plants.	Valent, Joe Chamberlin, 770-985-0303, jcham@valent.com Fine Americas, Kevin Forney, 661-588-7137, kevinf@fine-americas.com
Exilis Plus (6BA), Fine + non-ionic or silicone-based surfactant OR MaxCel (6BA), Valent	B	500 ppm 1000 ppm	Foliar applications. Do not prune plants.	Fine Americas, Kevin Forney, 661-588-7137, kevinf@fine-americas.com Valent, Joe Chamberlin, 770-985-0303, jcham@valent.com
Atrimmec (dikegulac sodium)	B	TBD	Do not prune plants.	PBI Gordon, Gary Custis, , gcustis@pbigordon.com
Untreated		--	--	

Optional Pruning Regime				
Cyclanalid 2.8SC	A	TBD	Prune plants 2 weeks after second treatment (but not if buds have already started to break)	See above.
Fascination (6BA + GA4+7), Valent OR Fresco (6BA + GA4+7), Fine	A	TBD	Prune plants 2 weeks after second treatment (but not if buds have already started to break)	See above.
Exilis Plus (6BA), Fine OR MaxCel (6BA), Valent	B	500 ppm 1000 ppm	Prune plants 2 weeks after second treatment (but not if buds have already started to break)	See above.
Atrimmec (dikegulac sodium)	B	TBD	Prune plants 2 weeks after second treatment (but not if buds have already started to break)	See above.

Reports:

Reports submitted on the standard IR-4 Ornamental Horticulture Research Report Form are preferred. However, reports in other formats 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, 681 US Hwy 1 S, North Brunswick, NJ 08902-3390, Phone 732-932-9575 x629, palmer@aesop.rutgers.edu **OR** Ely Vea, 308 Aston Forest Lane, Crownsville, MD 21032, Phone & FAX#: 410-923-4880, E-mail: evvea@comcast.net.

Draft Date: 2/20/08
Revised By: CLP