



Ornamental Horticulture Program 2007 Workshop

October 10 – 11, 2007
Cherry Hill, NJ

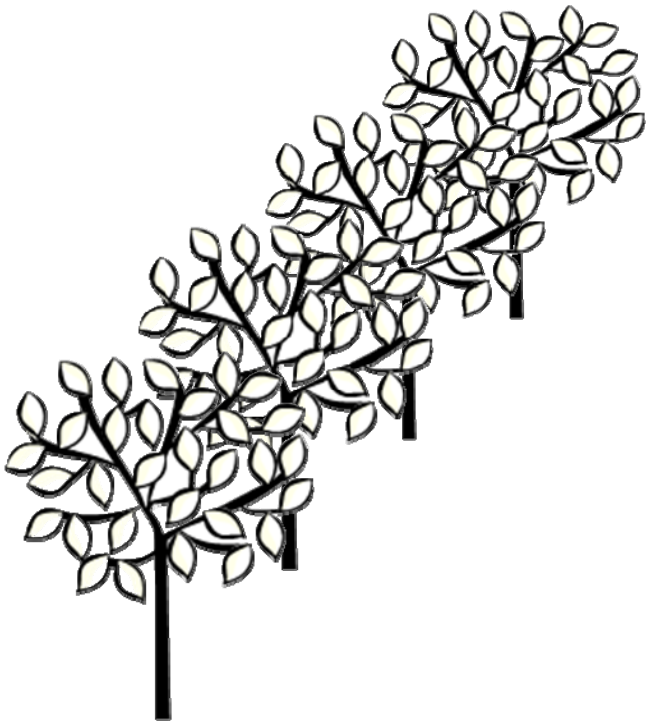


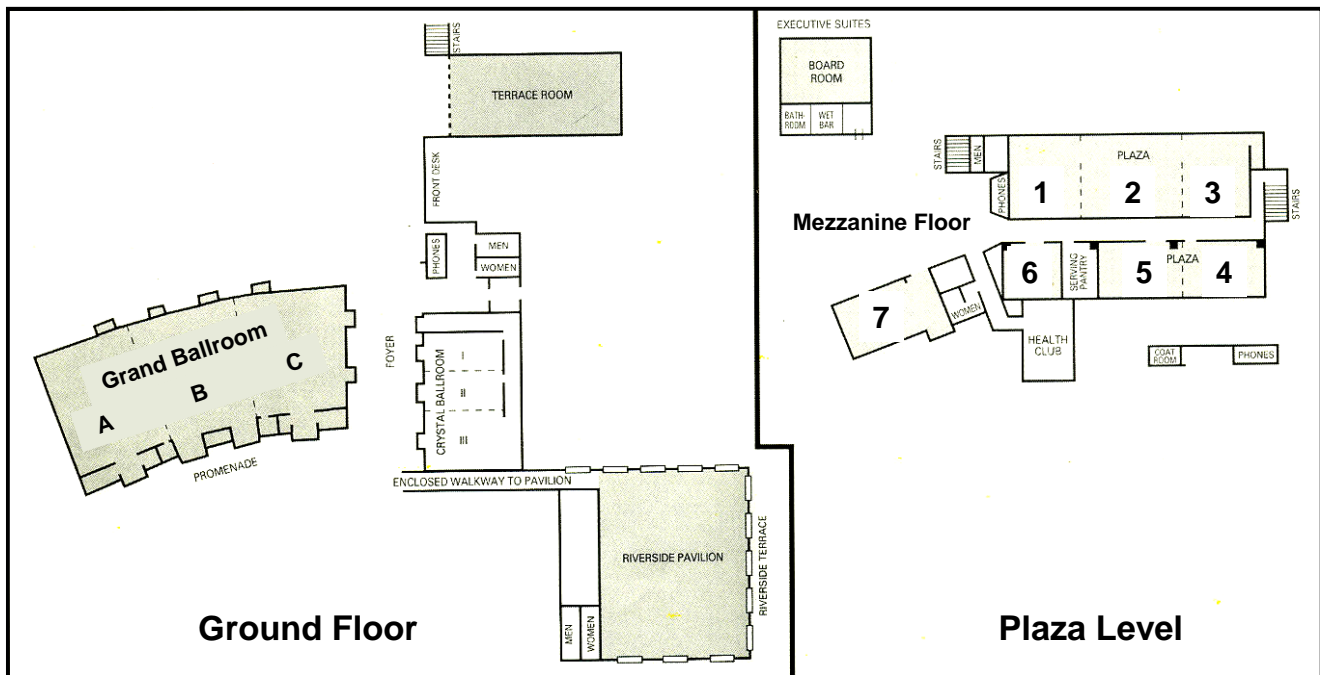
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2007 Ornamental Horticulture Program Workshop Agenda

Opening Session	Wednesday	8:00 am	Welcome and Opening Comments Orn Hort Program Status 2007 Pathology Research (Hausbeck) 2007 Entomology Research (Gilrein) 2007 Weed Science Research (Altland) Grower/Extension Survey Manufacturer Updates
		12:00 pm	LUNCH (60 Minutes)
Regional Breakouts	Wednesday	1:00 pm 2:45 pm 4:30 pm 6:00 pm	Pathology (Reg. Coordinators) Entomology (Reg. Coordinators) Weed Science (Reg. Coordinators) Adjourn for the day (Top 5 Priorities due by 6:15 pm for each discipline)
Pathology High Priority Projects	Thursday	8:00 am	Review of Regional Discussions (Reg. Coordinators) Establish High Priority Projects Discuss Treatment List & Establish Priority Levels Discuss Protocols (if time permits) Summary of Future Activities & Timelines
Entomology High Priority Projects	Thursday	10:00 am	Review of Regional Discussions (Reg. Coordinators) Establish High Priority Projects Discuss Treatment List & Establish Priority Levels Discuss Protocols (if time permits) Summary of Future Activities & Timelines
		12:00 pm	LUNCH (60 minutes)
Weed Science High Priority Projects	Thursday	1:00 pm	Review of Regional Discussions (Reg. Coordinators) Establish High Priority Projects Discuss Treatment List & Establish Priority Levels Discuss Protocols (if time permits) Summary of Future Activities & Timelines

Crown Plaza Hotel Philadelphia – Cherry Hill



How to get to the Crowne Plaza from the Philadelphia Airport

Taxi – about \$ 35 each way

Taxis can be found at Zone 5.

All Taxi rates are based per trip not per person. Most taxis can accommodate up to 3 passengers. In some cases certain vehicle types can accommodate 4 passengers. Fares to destinations other than downtown Philadelphia are based on the meter upon entry. Upon entering the taxi the fare is \$2.30 and \$2.10 per mile or portion thereof. You will also be charged an additional \$1.50 Airport fee.

Should you need to pay by credit card please advise the dispatcher upon your arrival to the Taxi area as all companies do not accept credit cards or vouchers as a form of payment.

Rapid Rover – \$20 one way

To make Rapid Rover reservations, call (856) 428-1500. Rapid Rover and other non-hotel shuttle vans can be picked up at Zone 7.

Rental Cars

If you have rental car reservations, you should take the appropriate rental car company shuttle departing from Zone 2 outside the baggage claim area. If you plan to rent a car once arriving in Philadelphia, courtesy phones for each rental car company are available in each of the baggage claim areas.

Transportation Zones at the Philadelphia Airport

There are 8 zones for transportation. Zones 1 – 4 are located immediately outside each baggage claim area, except Terminal F. Zones 5 – 8 are located across a center island towards the parking garages.

Other Hotel Information

Complimentary wireless access in the sleeping rooms and in the lobby, but not in the meeting rooms

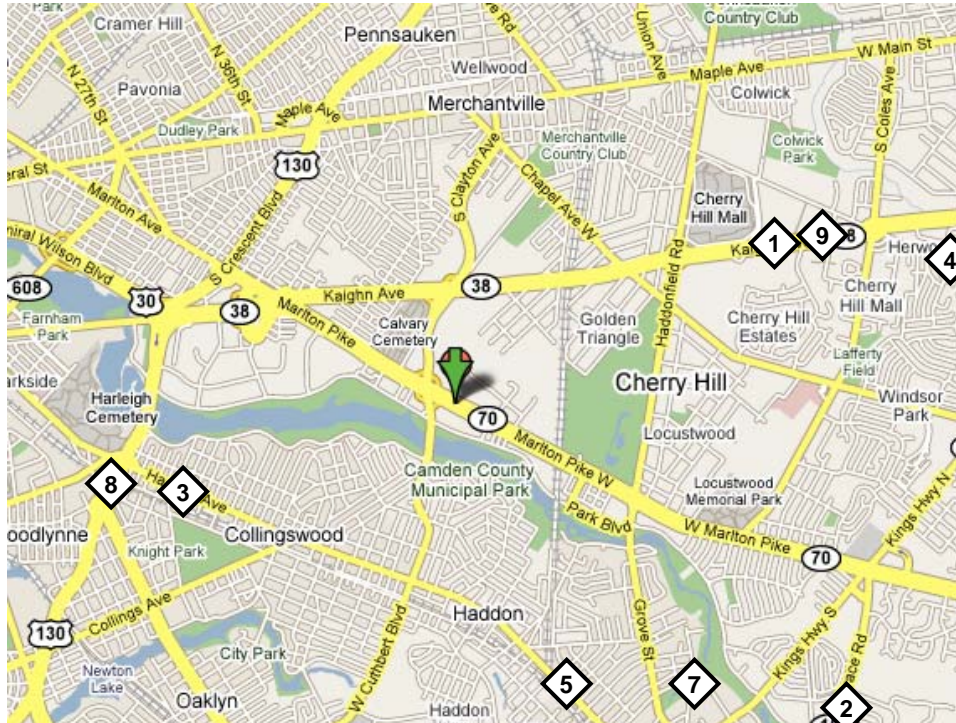
Complimentary self-parking

Fitness center with stationary bikes, stair masters, universal nautilus equipment and free weights

Places of interest a short taxi ride away

New Jersey Adventure Aquarium, Philadelphia Museum of Art, Philadelphia Zoo, Tweeter Center at the Waterfront, Liberty Bell, Independence Hall, Constitution Center, and Franklin Institute of Science

Cherry Hill Restaurant Map

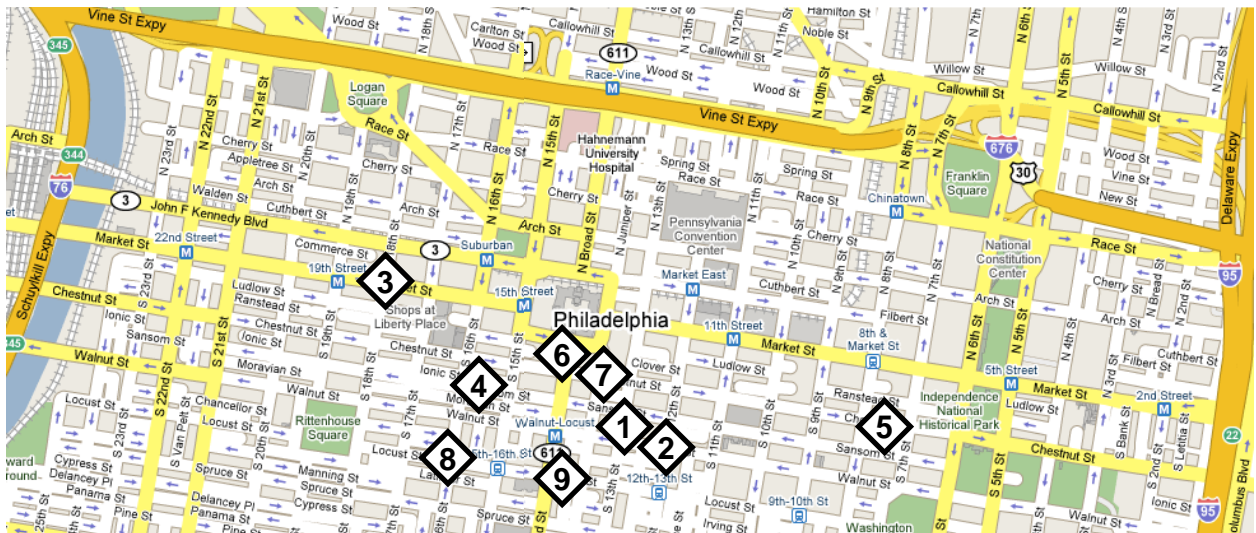


- | | |
|--|--|
| 1. Bahama Breeze
2000 Route 38 Ste 1170, Cherry Hill, NJ
(856) 317-8317 | 300 S Lenola Rd, Maple Shade, NJ
(856) 608-8812 |
| 2. Coastline
1240 Brace Rd, Cherry Hill, NJ
(856) 795-1773 | 7. Bruno's Restaurant & Pizza
509 Hopkins Rd, Haddonfield, NJ
(856) 428-9505 |
| 3. Giumarello's
329 Haddon Ave, Westmont, NJ
(856) 858-9400 | 8. Sagami
37 W Crescent Blvd, Collingswood, NJ
(856) 854-9773 |
| 4. Outback Steakhouse
230 Lake Dr E, Cherry Hill, NJ
(856) 482-1350 | 9. Buca Di Beppo
2301 Route 38, Cherry Hill, NJ
(856) 779-3288 |
| 5. PJ Whelihan's Pub and Restaurant
700 N Haddon Ave, Haddonfield, NJ
(856) 427-7888 | 10. Steak and Ale
1800 Frontage Rd, Cherry Hill, NJ
(856) 429-3322 |
| 6. Yokohama Japanese Restaurant | 11. Asian Delights
21 Woodbury Dr, Cherry Hill, NJ
(856) 751-8599 |

Note: The three restaurants listed as 6, 10, 11 are to the west of the above map.

Disclaimer: *Listing of any restaurant does not imply endorsement, good food, or great ambience. Nor does this listing imply other restaurants in the area are unsuitable establishments for imbibing or noshing.*

Philadelphia Restaurant Map



Note: These are all good restaurants varying in type of food and in price. See my notes under each for a brief description.

1. Portofino Restaurant
1227 Walnut St, Philadelphia, PA
(215) 923-8208
(Excellent northern Italian food)

2. Aoi Japanese Restaurant
1210 Walnut St, Philadelphia, PA
(215) 985-1838
(Wonderful and authentic Japanese food – at least according to Japanese guests)

3. Elephant & Castle Pub & Restaurant
1800 Market St, Philadelphia, PA
(215) 751-9977
(Standard pub fare, but reasonably priced)

4. The Sansom Street Oyster House
1516 Sansom St, Philadelphia, PA
(215) 567-7683
(Famous Philadelphia seafood restaurant and good food)

5. Morimoto
723 Chestnut St, Philadelphia, PA
(215) 413-9070
(Excellent Americanized Japanese selection, but make reservations well before you arrive in Cherry Hill)

6. McCormick & Schmick's Seafood
1 S Broad St, Philadelphia, PA
(215) 568-6888
(Good seafood and a wide fish selection)

7. Capital Grille - Philadelphia
1338 Chestnut St, Philadelphia, PA
(215) 545-9588
(Very good steaks and extensive wine list)

8. Los Catrines & Tequila's Restaurant & Bar
1602 Locust St, Philadelphia, PA
(215) 546-0181
(Absolutely wonderful authentic Mexican food – not Tex Mex)

9. Upstares at Varalli
1345 Locust St, Philadelphia, PA
(215) 546-4200
(Best lobster ravioli I've ever had!)

Acknowledgements

Thank you to everyone who has contributed greatly to the success of the IR-4 Ornamental Horticulture Program during the past year.

IR-4 Staff

Jerry Baron	Cheryl Ferrazoli	Charlie Meister	Karen Sims
Michael Braverman	Bob Holm	Satoru Miyazaki	Rebecca Sisco
Ute Burke	Diane Infante	Sherrilynn Novack	Dave Thompson
Keith Dorschner	Edith Lurvey	Paul Schwartz	Ely Vea

Advisory Team Members

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Ann Chase	Mary Hausbeck	Dave Nielsen	Bobby Walls
Gary Chastagner	Brett Highland	Ron Oetting	
Margery Daughtrey	Doug Houseworth	Lance Osborne	
Terry Davis	Rick Iverson	Mike Parrella	

Researchers

John Ahrens	Kristie Fenn	Scott Ludwig	Mike Reding
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Gary Chastagner	Nik Grunwald	Dave Norman	Paul Weston
Yan Chen	Mengmeng Gu	Ron Oetting	Ted Whitwell
Raymond Cloyd	John Harvey	Aaron Palmeteer	Rob Wick
Scott Costa	Mary Hausbeck	Mike Parrella	David Williams
Richard Cowles	Charles Hesselein	Brent Pemberton	
Mark Czarnota	Gary Kever	Annamarie Pennucci	
Terry Davis	James Klett	Dan Potter	
Jeffrey Derr	Heiner Lieth	M.S. Reddy	

Thank You to Our Supporters



Section 1

IR-4 Ornamental Horticulture Program 2007 Status

New Mission Statement

The mission of the IR-4 Ornamental Horticulture Program is to provide high quality pest management solutions to producers and managers of horticultural crops in greenhouses, nurseries, sod and Christmas tree farms, interiorscapes, and outdoor landscapes.

IR-4 will achieve this mission by working effectively with end users, researchers, registrants and regulatory agencies to facilitate the timely registration of new active ingredients in ornamental horticulture crops, and to add new crop and pest species to the labels of currently registered products.

IR-4 will coordinate with researchers, registrants, trade associations and trade journals to communicate results from IR-4 sponsored trials to producers and managers of horticultural crops.

Activities Schedule

To help all stakeholders to know the expectations of the program, an annual activities timeline was prepared after polling researchers and manufacturers on when they need various pieces of information critical to their success.

See the next page for this schedule.

2007 Research Protocols

Twenty-six research protocols were prepared to address the 2007 high priority projects, minor continuations of previous years' high priority projects and specific regional research needs. The following list contains the titles of those protocols:

- | | |
|----------------------------------|---|
| 07-001 – Phytophthora soil borne | 07-015 – Herbaceous Storage |
| 07-002 – Phytophthora foliar | 07-016 – Woody Branching |
| 07-003 – Pythium | 07-017 – Coleus Downy Mildew Seed Treatment |
| 07-004 – Thrips | 07-018 – Ornamental Kale – Seed Treatment |
| 07-005 – White Grubs | 07-019 – Q Whitefly –Treatment Impact on Resistance |
| 07-006 – Borers | 07-020 – QRD400 Crop Safety |
| 07-007 – Beetles | 07-022 – Xanthemonas Efficacy |
| 07-008 – Lygus | 07-023 – BYI-8330 Crop Safety |
| 07-009 – 2007 Herbicide Protocol | 07-024 – Scale Efficacy |
| 07-010 – Pre-Sedge Efficacy | 07-025 – TopFlor for Loropetalum and Azalea |
| 07-011 – Broadleaved Weeds | 07-026 – Chlorfenapyr Crop Safety |
| 07-012 – Fern Herbicide Safety | 07-027 – Dimension 2EW & Showcase Crop Safety |
| 07-014 – Post-Sedge Efficacy | |

General Calendar of IR-4 Ornamental Horticulture Program Activities - 2007 to 2009

		Jan	Feb	Mar	Apr	May	June	Jul	Sept	Oct	Nov	Dec	
2007	IR-4	Finalize Protocols	Placing Research (B / C level trials)	Summarize Data & Prepare Final Summary Reports							NRPM	Placing Research (A level trials)	
	Researchers	2007 Research Activities							2007 Workshop			Final Reports Due - Dec 31	
	Manufacturers							Preliminary Data Due - Sept 15		Review Preliminary Research & Determine MFG 2008 Research & Registration Activities			
						Review IR-4 Summaries and Submit Relevant Regulatory Packages							
2008	IR-4	Finalize Protocols	Placing Research (B / C level trials)	Summarize Data & Prepare Final Summary Reports				Kanuga (Ent & Path)			NRPM	Placing Research (A level trials)	
	Researchers	2008 Research Activities							2008 Workshop			Final Reports Due - Dec 31	
	Manufacturers							Preliminary Data Due - Sept 15		Review Preliminary Research & Determine MFG 2009 Research & Registration Activities			
						Review IR-4 Summaries and Submit Relevant Regulatory Packages							
2009	IR-4	Finalize Protocols	Placing Research (B / C level trials)	Summarize Data & Prepare Final Summary Reports							NRPM	Placing Research (A level trials)	
	Researchers	NEWSS (WS)	2009 Research Activities							2009 Workshop			Final Reports Due - Dec 31
	Manufacturers							Preliminary Data Due - Sept 15	Review Preliminary Research & Determine MFG 2010 Research & Registration Activities				
						Review IR-4 Summaries and Submit Relevant Regulatory Packages							

2007 Research Summaries

Eight research summaries have been prepared to date. Five of these were based on the 2006 High Priority Projects: Broadstar and Sureguard (flumioxazin) Crop Safety, Dismiss (sulfentrazone) Crop Safety, Sedgehammer (halosulfuron) Crop Safety, V-10161 Crop Safety, and Phytophthora Efficacy. The remaining 3 were to support 1) a new Canadian registration for uses of flumioxazin on ornamental crops, 2) expansion of Endorse (polyoxin d) and CA registration data package, 3) a preliminary Q-Biotype Efficacy Summary to support a NY registration data package for Safari 20SG.

These eight research summaries were based on research information from 1401 IR-4 trials, plus data generously contributed to the packages from other non-IR-4 sponsored experiments.

Section 2



2007 IR-4 Ornamental Horticulture Survey

Thank you for your participation in this survey!

The IR-4 Project's Ornamental Horticulture Program helps to provide safe and effective pest management solutions for greenhouse, nursery, landscape, Christmas tree and forestry producers. We work with growers, researchers, registrants and regulatory agencies to facilitate new product registrations and to add new diseases, insects, and weeds as well as new crops to already registered products for the ornamental horticulture industry. Every year, we prioritize the following year's research program at our Annual Ornamental Horticulture Workshop. We invite you to help us focus our research by answering a few questions about the diseases, insects, and weeds which most impact your business.

1. Please check one affiliation:

- | | |
|---|--|
| <input type="checkbox"/> Grower (Greenhouse and/or Nursery) | <input type="checkbox"/> Cooperative Extension |
| <input type="checkbox"/> Landscape Care Professional | <input type="checkbox"/> Federal or State Government |
| <input type="checkbox"/> University or USDA Researcher | <input type="checkbox"/> Allied Industry Member |

2. Please check all types of operations, pest management strategies, and type of plant materials relevant to your business:

- | | | |
|--|---|---|
| <input type="checkbox"/> Greenhouse | <input type="checkbox"/> IPM | <input type="checkbox"/> Bedding Plants |
| <input type="checkbox"/> Nursery | <input type="checkbox"/> Organic | <input type="checkbox"/> Cut Flowers |
| <input type="checkbox"/> Landscape | <input type="checkbox"/> Traditional Chemical Control | <input type="checkbox"/> Christmas Trees |
| <input type="checkbox"/> Interiorscape | | <input type="checkbox"/> Foliage Plants |
| <input type="checkbox"/> Christmas Tree Farm | | <input type="checkbox"/> Ornamental Grasses |
| <input type="checkbox"/> Sod Farm | | <input type="checkbox"/> Palms |
| | | <input type="checkbox"/> Shrubs |
| | | <input type="checkbox"/> Seasonal Potted Plants |
| | | <input type="checkbox"/> Trees |
| | | <input type="checkbox"/> Turf |

For the following questions, consider your product arsenal and provide answers based on where you have limited product choices.

3. What are your top three disease issues?

5. What are your top three weed issues?

4. What are your top three insect issues?

6. In your opinion, which three crops need more crop safety data?

continued on back

7. Please check one of the following:

- I need crop safety data more than efficacy data
- I need efficacy data more than crop safety data
- I need crop safety data and efficacy data equally

8. For each Discipline rank each research direction from 1 (lowest importance) to 5 (highest importance) based on how much this information is needed in your daily operations.

	(Lowest) 1	2	3	4	5 (Highest)
Disease Control					
a) Need new products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Need to expand current labels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Need more efficacy research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Need more phytotoxicity research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Insect/Mite Control					
e) Need new products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) Need to expand current labels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g) Need more efficacy research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h) Need more phytotoxicity research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Weed Control					
i) Need new products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j) Need to expand current labels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k) Need more efficacy research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l) Need more phytotoxicity research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PGR					
m) Need new products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
n) Need to expand current labels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
o) Need more efficacy research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
p) Need more phytotoxicity research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. Please enter your state: _____

10. What is today's date? _____

11. (Optional) Please fill out your name and address below:

Name: _____

Affiliation: _____

Address: _____

City _____ State ____ Zip _____

Phone Number _____

Email Address: _____

Please return survey
by mail or fax to:
IR-4 Ornamental Horticulture
Manager, Cristi Palmer
500 College Road East,
Suite 201W
Princeton NJ 08540
tel: 732.932.9575 x 4629
fax: 609.514.2612

**Thank
You!**

2007 Ornamental Horticulture Survey

The intent of the Ornamental Horticulture Survey is to poll growers, landscape care operators, researchers, extension personnel and others affiliated with this industry on needs and issues related to disease, insect, and weed management. The responses from the survey feed directly into how IR-4 allocates its research budget for ornamental horticulture projects. The 2007 survey is the third time the industry has been polled by IR-4, and participation from growers and members of the ornamental horticulture community has increased each time.

Table 1. Comparison of Survey Participants in the 2005, 2006, and 2007 Surveys.

Year	Growers	Lawn Care Operators	Researchers	Extension	Government	Allied Industry	Total Responses
2005	99	--	--	37	--	--	126
2006	225	19	33	37	--	9	325
2007	342	49	28	29	11	27	486

In addition to choosing one general affiliation, survey participants are asked to select their operation type(s), identify the plant materials with which they work, and provide their approach(es) to disease, insect and weed management.

General Results

As in previous surveys, participants were asked to provide their top three disease, insect, and weed issues. For 2007, the question was written “For the following questions, consider your product arsenal and provide answers based on where you have limited product choices.” This was an attempt to filter out those chronic problems which have a constant impact on crops or maintained plants but where multiple control options are available.

2007 Top Diseases

Each of the diseases or pathogens listed by participants was given a weighted ranking based on the order written. Each was also assigned to a disease group such as *Botrytis*, Crown & Root Rot, Leaf Spots & Anthracnose and *Phytophthora*. The top diseases listed by survey participants are shown in Table 2.

Table 2. Top Five Disease Groups Identified in the 2007 Survey

Disease Group	Weighted Ranking
Powdery Mildew	318
Leaf Spots & Anthracnose	318
<i>Phytophthora</i>	259
Crown & Root Rot	237
<i>Botrytis</i>	235

2007 Top Insects

Similar to the disease groups, each of the insects or mites listed by participants was given a weighted ranking based on the order written. Each was also assigned to an insect group such as Aphids, Borers & Beetles, Scale & Mealybugs, and Thrips. The top insect groups listed by survey participants are shown in Table 3. Mites & Spider Mites, Aphids, Thrips, and Scale & Mealybugs are the top five insect groups.

Table 3. Top Seven Insect Groups Identified in the 2007 Survey

Insect Group	Weighted Ranking
Mites & Spider Mites	436
Aphids	335
Thrips	326
Scale & Mealybugs	322
Whiteflies	216
Borers & Beetles	191
White Grubs & Root Weevils	170

2007 Top Weeds

Each of the weeds listed by participants was given a weighted ranking based on the order written. Each was also assigned to a weed grouping. The top weed groups listed by survey participants are shown in Table 4. Broadleaf weeds was the largest category followed by grasses, sedge & nutsedge, liverworts, moss & algae, and horsetails. Because the broadleaf weed category contains a wide variety of plants including perennials, summer annuals and winter annuals, Table 5 shows the top ten weeds across the nation. Bittercress, spurge, and oxalis were the most prominent.

Table 4. Top Five Weed Groups Identified in the 2007 Survey

Weed Group	Weighted Ranking
Broadleaf	586
Grass	137
Sedge & Nutsedge	95
Liverworts & Moss & Algae	57
Horsetails	19

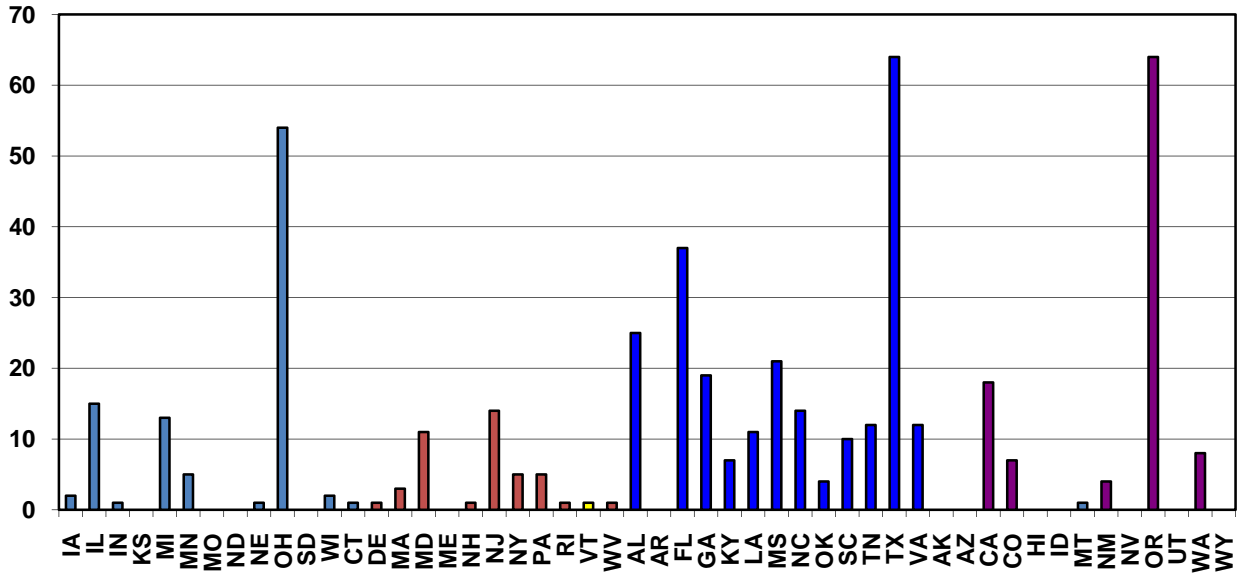
Table 5. Top Ten Weeds Identified in the 2007 Survey

Weed	Weighted Ranking
Bittercress	175
Spurge	156
Oxalis	153
Nutsedge	150
Liverwort	84
Crabgrass	60
Grasses	53
Groundsel	47
Thistle	42
Chickweed	38

Geography of participants.

Different environmental conditions lead to different disease pressures, insect infestations, and weed presence. With the variety of environments across the US, it would not be unreasonable to expect different answers from the different regions as to which problems lack adequate control measures. Thirty-seven states were represented in the 2007 survey (Figure 1). Three states contributed more than 30% of the responses: Ohio, Oregon and Texas. The high numbers of surveys from these states were the direct result of concerted efforts of the researchers and extension personnel in those states.

Figure 1. Number of Surveys from Each State in 2007.



Disease groups needing more tools were fairly similar across the regions (Table 6) according to growers and landscape care operators. *Botrytis*, Powdery Mildew and *Phytophthora* appeared in all four regions. Leaf Spots & Anthracnose appeared in top 5 list of three of the regions, as did Crown & Root Rot. Bacterial Diseases and *Pythium* each appeared in one region.

Table 6. Top Five Disease Groups Separated by Geography.

Region	Disease/Pathogen (Weighted Ranking)			
	North Central	Northeast	Southern	Western
1	Powdery Mildew (72)	Powdery Mildew (43)	Leaf Spots & Anthracnose (144)	Phytophthora (77)
2	Botrytis (53)	Leaf Spots & Anthracnose (28)	Powdery Mildew (98)	Powdery Mildew (71)
3	Pythium (32)	Botrytis (20)	Phytophthora (79)	Leaf Spots & Anthracnose (65)
4	Crown & Root Rot (31)	Crown & Root Rot (19)	Crown & Root Rot (74)	Botrytis (52)
5	Phytophthora (30)	Phytophthora (15)	Botrytis (74)	Bacterial Diseases (43)

The top three insect groups for the North Central, the Northeast, and the Western regions were virtually the same: Aphids, Mites & Spider Mites, and Thrips (Table 7). The Southern region also had

these three insect groups within the top five, but the one listed the most by growers and landscape care operators was Scale & Mealybugs. The two coleopteran groups (Borers & Beetles and White Grubs & Root Weevils) were important to the Northeast and Western regions, while Whiteflies fell within the top five for the North Central and Southern regions.

Table 7. Top Five Insect Groups Separated by Geography.

Region	Insect/Mite (Weighted Ranking)			
	North Central	Northeast	Southern	Western
1	Mites & Spider Mites (78)	Aphids (47)	Scale & Mealybugs (168)	Mites & Spider Mites (100)
2	Thrips (62)	Mites & Spider Mites (39)	Mites & Spider Mites (155)	Aphids (75)
3	Aphids (50)	Thrips (26)	Aphids (134)	Thrips (63)
4	Fungus Gnats (41)	White Grubs & Root Weevils (20)	Thrips (106)	White Grubs & Root Weevils (51)
5	Whiteflies (38)	Borers & Beetles (13)	Whiteflies (101)	Borers & Beetles (33)

The weed lists for each region are similar but there are a few distinctions among the regions (Table 8). Oxalis and bittercress appear in the lists for each region. In the North Central region, thistles appear prominently, while spurge and nutsedge are significant problems for the Southern region. Liverworts remain an issue for the northwest.

Table 8. Top Ten Weeds Separated by Geography.

Region	Weed (Weighted Ranking)			
	North Central	Northeast	Southern	Western
1	Oxalis (27)	Oxalis (20)	Spurge (103)	Liverwort (34)
2	Thistle (19)	Bittercress (16)	Bittercress (84)	Bittercress (33)
3	Canada Thistle (17)	Crabgrass (12)	Nutsedge (67)	Oxalis (25)
4	Yellow nutsedge (14)	Grasses (8)	Oxalis (48)	Groundsel (23)
5	Liverwort (13)	Marestail (7)	Crabgrass (36)	Fireweed (19)
6	Bittercress (12)	Groundsel (7)	Grasses (25)	Horsetail (15)
7	Nutsedge (11)	Chickweed (6)	Nutgrass (25)	Nutsedge (14)
8	Dandelion (10)	Clover (6)	Dallisgrass (23)	Thistle (14)
9	Groundsel (10)	Thistle (5)	Chickweed (21)	Yellow nutsedge (13)
10	Common Groundsel (9)	Spurge (4)	Eclipta (19)	Pearlwort (12)

Perspective on Managing Diseases, Insects and Weeds

The perspective on managing pests impacts the type of tools available to control diseases, insects, and weeds. If the tools available are limited, such as by an operation integrating biological control methods with more traditional chemical tools, the survey participants may have different perspectives on which pests need more tools. Approximately, 43% of the participants chose more one management type: 17% selected all three management types; 26% chose 2 of the three; 21% chose one; and 35% declined to choose a management type.

More participants identified themselves using IPM or traditional methods over organic methods to manage pests (Table 9).

There was very little difference among top disease choices among the three management perspectives. *Botrytis*, Crown & Root Rot, Leaf Spots & Anthracnose, *Phytophthora* and Powdery Mildew were the top disease groups (Table 10).

Table 9. Comparison of Pest Management Types in the 2006 and 2007 Surveys.

Management Type	2006	2007
IPM	91	281
Organic	22	108
Traditional	105	300

Table 10. Comparison of Disease Group Differences by Pest Management Types.

	Traditional	IPM	Organic
1	Powdery Mildew (199)	Powdery Mildew (176)	Powdery Mildew (49)
2	Leaf Spots & Anthracnose (151)	Phytophthora (145)	Crown & Root Rot (49)
3	Phytophthora (148)	Leaf Spots & Anthracnose (130)	Botrytis (40)
4	Botrytis (137)	Crown & Root Rot (120)	Leaf Spots & Anthracnose (38)
5	Crown & Root Rot (120)	Botrytis (119)	Phytophthora (35)

For insect groups, the top four chosen (Aphids, Mites & Spider Mites, Scale & Mealybugs, and Thrips) were the same for IPM, Organic, and Traditional pest management perspectives (Table 11). Those who with traditional or IPM perspectives selected whiteflies and those with organic perspective selected White Grubs & Root Weevils.

Table 11. Comparison of Insect Group Differences by Pest Management Types.

	Traditional	IPM	Organic
1	Mites & Spider Mites (237)	Mites & Spider Mites (225)	Aphids (70)
2	Aphids (202)	Aphids (189)	Mites & Spider Mites (61)
3	Thrips (167)	Thrips (141)	Thrips (53)
4	Scale & Mealybugs (150)	Scale & Mealybugs (138)	Scale & Mealybugs (51)
5	Whiteflies (109)	Whiteflies (99)	White Grubs & Root Weevils (31)

For weeds, the top 10 weeds do have some differences for IPM, Organic, and Traditional participants, but in general the lists are very similar (Table 12).

The general conclusion is that management perspective has little impact on participant impression for those disease, insect, and weed problems lacking enough viable management tools.

Table 12. Comparison of Weed Differences by Pest Management Types.

	Traditional	IPM	Organic
1	Bittercress (96)	Bittercress (84)	Nutsedge (24)
2	Oxalis (76)	Nutsedge (70)	Bittercress (16)
3	Nutsedge (66)	Oxalis (60)	Liverwort (15)
4	Spurge (66)	Spurge (53)	Thistle (12)
5	Liverwort (40)	Liverwort (42)	Crabgrass (12)
6	Crabgrass (39)	Grasses (32)	Oxalis (12)
7	Thistle (28)	Crabgrass (29)	Canada Thistle (12)
8	Grasses (27)	Thistle (25)	Sedge (9)
9	Groundsel (23)	Canada Thistle (23)	Nutgrass (9)
10	Nutgrass (22)	Purslane (22)	Grasses (8)

Type of Operation

Over 60% of the 486 participants selected more than one operation type. The majority of survey participants selected greenhouse and nursery as their operation types (Table 13). The selection of multiple operation types could lead to complicated interpretation of the diseases, insects, and weeds provided.

Powdery Mildew is the top disease listed for Greenhouses, Interiorscapes, Nurseries and Landscapes (Table 14). Although the order varies among the operation type, *Botrytis*, Leaf Spots & Anthracnose and *Phytophthora*, appear in the top five. Crown & Root Rot is in the list for greenhouses, nurseries, and landscapes, with virus diseases listed for interiorscapes.

Table 13. Comparison of Operation Types in the 2006 and 2007 Surveys.

Operation Type	2006	2007
Greenhouse	167	353
Nursery	148	332
Landscape	47	168
Interiorscape	6	46
Christmas Tree Farm	11	29
Sod Farm ^z	--	21

^z In 2006, the sod farm operation type was not listed on the survey.

Table 14. Comparison of Disease Group Differences by Operation Types.

	Greenhouse	Interiorscape	Nursery	Landscape
1	Powdery Mildew (199)	Powdery Mildew (15)	Powdery Mildew (176)	Powdery Mildew (49)
2	Leaf Spots & Anthracnose (151)	<i>Botrytis</i> (12)	<i>Phytophthora</i> (145)	Crown & Root Rot (49)
3	<i>Phytophthora</i> (148)	<i>Phytophthora</i> (10)	Leaf Spots & Anthracnose (130)	<i>Botrytis</i> (40)
4	<i>Botrytis</i> (137)	Crown & Root Rot (10)	Crown & Root Rot (120)	Leaf Spots & Anthracnose (38)
5	Crown & Root Rot (120)	Virus (6)	<i>Botrytis</i> (119)	<i>Phytophthora</i> (35)

Mites & Spider Mites, Thrips, and Scale & Mealybugs appear in the top five lists for each operation type (Table 15). Aphids and White Grubs & Root Weevils appear in three each, while whiteflies is important to greenhouses and interiorscapes.

Table 15. Comparison of Insect Group Differences by Operation Types.

	Greenhouse	Interiorscape	Nursery	Landscape
1	Mites & Spider Mites (281)	Scale & Mealybugs (29)	Mites & Spider Mites (269)	Mites & Spider Mites (103)
2	Thrips (252)	Mites & Spider Mites (19)	Aphids (199)	Aphids (73)
3	Aphids (233)	Thrips (12)	Scale & Mealybugs (171)	Scale & Mealybugs (72)
4	Whiteflies (169)	Whiteflies (10)	White Grubs & Root Weevils (127)	Thrips (52)
5	Scale & Mealybugs (136)	White Grubs & Root Weevils (6)	Thrips (116)	White Grubs & Root Weevils (40)

Very few people who work with interiorscapes provided responses for specific weeds where they have limited product choices, so interiorscapes are not included in Table 16. For those who work with greenhouses and nurseries, bittercress, spurge, oxalis, liverwort, nutsedge, and grasses were listed in the top ten weeds. For landscapes, nutsedges/nutgrass, grasses, and bittercress were the top problematic weeds.

Table 16. Comparison of Weeds by Operation Types.

	Greenhouse	Nursery	Landscape
1	Bittercress (121)	Bittercress (120)	Nutsedge (43)
2	Oxalis (104)	Spurge (112)	Nutgrass (21)
3	Spurge (93)	Oxalis (79)	Bittercress (21)
4	Liverwort (57)	Nutsedge (69)	Dallisgrass (20)
5	Grasses (46)	Liverwort (48)	Crabgrass (19)
6	Nutsedge (43)	Crabgrass (36)	Chickweed (16)
7	Thistle (31)	Grasses (36)	Thistle (16)
8	Chickweed (31)	Groundsel (33)	Sedge (13)
9	Groundsel (27)	Thistle (31)	Spurge (13)
10	Crabgrass (26)	Yellow Nutsedge (29)	Groundsel (12)

Plant Materials

In addition to requesting participants provide information on their operation type and disease, insect, and weed management type, participants were asked to select the general crops or plants they grown and/or maintain. In 2007, the list of crops or plants from which to choose expanded to include additional categories (Table 17).

Approximately 84% of the participants selected multiple crops or plants. 75% of participants which selected an herbaceous crop selected multiple herbaceous crops. 70% of participants who selected an herbaceous crop also chose a minimum of one woody crop. 73% of participants who selected a woody crop selected multiple woody crops. 76% of participants who selected a woody crop also chose a minimum of one herbaceous crop. In other words, there is quite a bit of cross-over in plant selections and in what participants chose as important diseases, insects and weeds without enough usable tools.

Table 17. Comparison of Crops Grown or Plants Maintained in the 2006 and 2007 Surveys.

Crops	2006	2007
Bedding Plants	79	264
Cut Flowers	19	64
Christmas Trees	--	39
Foliage Plants	--	187
Ornamental Grasses	--	266
Palms	--	110
Potted Plants	101	243
Shrubs	115	304
Trees ^z		280
Turf	--	96

^z In 2006, shrubs and trees were grouped together and the other plant types were not included.

For non-ornamental grass herbaceous crops, the top two diseases were consistent among crops: powdery mildew and *Botrytis* (Table 18). For woody ornamental crops, the top three diseases (leaf

spots& anthracnose, *Phytophthora* and powdery mildew) vary in order among the crops but are consistently present for Christmas trees, palms, shrubs and trees (Table 18).

Table 18. Top Five Disease Groups Identified by Growers and LCPs Separated by Crop

Disease Group (Weighted Ranking)					
Crop	Bedding Plants	Cut Flowers	Foliage Plants	Ornamental Grasses	Potted Plants
Survey Count	191	25	137	206	181
1	Powdery Mildew (149)	Powdery Mildew (28)	Powdery Mildew (123)	Powdery Mildew (149)	Powdery Mildew (140)
2	Botrytis (137)	Botrytis (17)	<i>Botrytis</i> (70)	Leaf Spots & Anthracnose (132)	<i>Botrytis</i> (116)
3	Crown & Root Rot (81)	Crown & Root Rot (10)	Leaf Spots & Anthracnose (64)	Phytophthora (108)	Crown & Root Rot (90)
4	<i>Pythium</i> (69)	<i>Phytophthora</i> (9)	<i>Phytophthora</i> (62)	<i>Botrytis</i> (106)	<i>Pythium</i> (82)
5	Leaf Spots & Anthracnose (69)	<i>Pythium</i> (7)	Crown & Root Rot (61)	Crown & Root Rot (97)	Leaf Spots & Anthracnose (81)

Disease Group (Weighted Ranking)					
Crop	Christmas Trees	Palms	Shrubs	Trees	Turf
Survey Count	13	75	232	209	54
1	Leaf Spots & Anthracnose (21)	Leaf Spots & Anthracnose (60)	Powdery Mildew (168)	Leaf Spots & Anthracnose (185)	Turf Diseases (41)
2	<i>Phytophthora</i> (9)	<i>Phytophthora</i> (54)	Leaf Spots & Anthracnose (166)	Powdery Mildew (154)	Powdery Mildew (38)
3	Powdery Mildew (6)	Powdery Mildew (40)	<i>Phytophthora</i> (161)	<i>Phytophthora</i> (131)	Leaf Spots & Anthracnose (37)
4	<i>Botrytis</i> (6)	Downy Mildew (26)	Crown & Root Rot (94)	Crown & Root Rot (81)	<i>Phytophthora</i> (26)
5	Turf Diseases (3)	Crown & Root Rot (26)	<i>Botrytis</i> (84)	Bacterial Diseases (60)	Crown & Root Rot (15)

The top five insect groups for herbaceous crops were very consistent: mites & spider mites, scale & mealybugs, thrips, and whiteflies all appeared in the top five (Table 19). For cut flowers, the insect selected for the remaining plants, aphids, was replaced with fungus gnats. For woody ornamentals, two insect groups appeared for Christmas trees, palms, shrubs, and trees: mites & spider mites and scale & mealybugs (Table 19).

Table 19. Top Five Insect Groups Identified by Growers and LCPs Separated by Crop

Insect Group (Weighted Ranking)					
Crop	Bedding Plants	Cut Flowers	Foliage Plants	Ornamental Grasses	Potted Plants
Survey Count	191	25	137	206	181
1	Thrips (177)	Thrips (32)	Mites & Spider Mites (149)	Mites & Spider Mites (214)	Mites & Spider Mites (187)
2	Mites & Spider Mites (170)	Mites & Spider Mites (22)	Aphids (122)	Aphids (182)	Thrips (163)
3	Aphids (170)	Scale & Mealybugs (14)	Thrips (97)	Thrips (143)	Aphids (135)
4	Whiteflies (130)	Whiteflies (12)	Scale & Mealybugs (97)	Scale & Mealybugs (124)	Scale & Mealybugs (106)
5	Scale & Mealybugs (99)	Fungus Gnats (12)	Whiteflies (73)	Whiteflies (115)	Whiteflies (99)

Insect Group (Weighted Ranking)					
Crop	Christmas Trees	Palms	Shrubs	Trees	Turf
Survey Count	13	75	232	209	54
1	Mites & Spider Mites (13)	Scale & Mealybugs (114)	Mites & Spider Mites (267)	Mites & Spider Mites (207)	Aphids (49)
2	Thrips (12)	Mites & Spider Mites (69)	Aphids (184)	Aphids (157)	Mites & Spider Mites (48)
3	Lepidopterans (9)	Aphids (61)	Scale & Mealybugs (154)	Scale & Mealybugs (154)	Scale & Mealybugs (46)
4	Whiteflies (8)	Whiteflies (46)	White Grubs & Root Weevils (129)	Borers & Beetles (104)	White Grubs & Root Weevils (21)
5	Scale & Mealybugs (7)	Thrips (27)	Whiteflies (107)	White Grubs & Root Weevils (93)	Thrips (19)

Note: Because growers grow a number of crops, the insect groups listed may not infest the crop under which they are listed in this table. For example, scale and mealybugs are not typically major pests of turf, but growers and LCPs identified turf and various other crops ; the other crops are those impacted by scale and mealybugs.

Bittercress, oxalis, nutsedge, and spurge were prominent for herbaceous plants. Liverwort was also listed in the top 5 for bedding plants, potted plants, and ornamental grasses. Spurge, bittercress, and nutsedge were the top three weeds for palms, trees & shrubs.

Table 20. Top Five Weeds Identified by Growers and LCPs Separated by Crop

Weed (Weighted Ranking)					
Crop	Bedding Plants	Cut Flowers	Foliage Plants	Ornamental Grasses	Potted Plants
Survey Count	191	25	137	206	181
1	Bittercress (67)	Oxalis (19)	Oxalis (58)	Bittercress (95)	Oxalis (70)
2	Oxalis (64)	Canada Thistle (7)	Bittercress (41)	Spurge (77)	Bittercress (56)
3	Nutsedge (43)	Malva (6)	Nutsedge (35)	Oxalis (71)	Nutsedge (51)
4	Spurge (35)	Nutsedge (5)	Spurge (27)	Nutsedge (52)	Spurge (40)
5	Liverwort (33)	Broadleaves (3)	Nutgrass (20)	Liverwort (44)	Liverwort (30)

Weed (Weighted Ranking)					
Crop	Christmas Trees	Palms	Shrubs	Trees	Turf
Survey Count	13	75	232	209	54
1	Oxalis (6)	Spurge (49)	Bittercress (111)	Spurge (86)	Nutsedge (35)
2	Broadleaves (6)	Nutsedge (34)	Spurge (100)	Nutsedge (77)	Dallisgrass (20)
3	Crabgrass (4)	Bittercress (30)	Nutsedge (82)	Bittercress (71)	Nutgrass (18)
4	Dandelion (4)	Eclipta (16)	Oxalis (69)	Oxalis (41)	Crabgrass (18)
5	Canada Thistle (3)	Oxalis (14)	Liverwort (46)	Crabgrass (32)	Sedge (11)

Conclusions

When the diseases, insects, and weeds, survey participants selected as their top three problematic issues for each discipline were weighted and examined based on participant information, the most impactful was the crop(s) grown or plant materials maintained. This was not surprising because the problems occurring on a petunia grown in a plug tray are distinctly different than problems impacting a Rhododendron, for example.

Tables for each discipline separating the plant materials by geographic region can be found in the respective tabs. This parsing will be used by Ornamental Horticulture Workshop participants as a basis for discussing the high priority projects for 2008 and 2009 IR-4 research.

Section 3

**Guidelines to Establish 2007 Research Priorities
IR-4 Ornamental Horticulture Program**

Efficacy Studies			
	A	B	C
Target/Pest	High priority pest based on grower input - OR - New or emerging pest which is not yet of concern to growers	Pest causes significant economic impact, but may or may not have been addressed in the grower survey	Pest is of concern
Crop	Crop is known to be impacted by subject pest.	Crop is known to be impacted by subject pest.	Crop is known to be impacted by subject pest.
Product	Product does not have pest labeled - AND - Product has a newer mode of action or reduced potential for developing resistance - OR - No other modes of actions are available for pest	Product does not have pest labeled	Pest is not labeled but several other modes of action are registered - OR - Pest may be labeled but registrant needs more data

Phytotoxicity Studies			
	A	B	C
Target/Pest	Product is/will be used for pest known to impact subject crop	Product is/will be used for pest known to impact subject crop	Product is/will be used for pest known to impact subject crop
Crop	Crop has no labeled products for target pest in question - OR - Crop or crop cultivar is known to be sensitive to other products	There are some alternative products available	There are several alternative products available
Product	Crop is not listed on the product label, specifically or generally	Crop is listed on the product label as part of a general category or genera	Crop is listed on the product label by species, but registrant needs additional data

IR-4 Ornamental Horticulture Program
Pathogen/Pest Species Selection Worksheet

1). In your Regional Breakout Discussions, review the annual survey results for your region and new Ornamental Project Requests. Then discuss what are the most prevalent pathogen or pest issues based on your experiences. These issues should be those pathogens or pests without adequate available control measures.

2). Fill out the top five pathogens or pests to growers in your region. These should be general such as aphids or phytophthora. If you know of a specific species causing problems, please write it on the line below.

Pathogen / Pest 1: _____ (5 points)

Pathogen / Pest 2: _____ (4 points)

Pathogen / Pest 3: _____ (3 points)

Pathogen / Pest 4: _____ (2 points)

Pathogen / Pest 5: _____ (1 point)

IR-4 Ornamental Horticulture Program Researched Crops Since 2002

<i>Latin Name</i>	Common Name	Number of Studies
<i>Euphorbia pulcherrima</i>	Poinsettia	77
<i>Rhododendron sp.</i>	Azalea, & Rhododendron	72
<i>Pseudotsuga menziesii</i>	Fir, Douglas	51
<i>Rosa sp.</i>	Rose	46
<i>Gerbera sp.</i>	Transvaal Daisy	45
<i>Vinca sp.</i>	Periwinkle	35
<i>Pelargonium sp.</i>	Geranium	34
<i>Ilex sp.</i>	Holly	33
<i>Malus sp.</i>	Apple & Crabapple (Non-Bearing)	33
<i>Viburnum sp.</i>	Arrowwood	29
<i>Petunia sp.</i>	Petunia	28
<i>Gladiolus sp.</i>	Corn Flag, Sword Lily	27
<i>Ficus benjamina / nitida</i>	Weeping Fig, Benjamin Tree	26
<i>Camellia sp.</i>	Camellia	25
<i>Impatiens New Guinea hybrids</i>	New Guinea Impatiens	25
<i>Hydrangea sp.</i>	Hydrangea	24
<i>Hemerocallis sp.</i>	Daylily	22
<i>Juniperus sp.</i>	Juniper	22
<i>Salvia sylvestris</i>	Sage, Ramona	22
<i>Antirrhinum majus</i>	Snapdragon	21
<i>Geranium magniflorum</i>	Geranium	21
<i>Tagetes sp.</i>	Marigold	21
<i>Thuja sp.</i>	Arborvitae	21
<i>Abies grandis</i>	Fir, Grand; Giant Fir	20
<i>Buxus sp.</i>	Boxwood	20
<i>Verbena sp.</i>	Vervain	20
<i>Echinacea sp.</i>	Purple Coneflower	19
<i>Coleus sp.</i>	Coleus, Flamenettle	18
<i>Oenothera sp.</i>	Evening Primrose, Sundrops	18
<i>Purshia mexica</i>	Mexican cliff rose	18
<i>Rhododendron sp.</i>	Rhododendron	18
<i>Tsuga heterophylla</i>	Hemlock, Western	18
<i>Buddleia davidii</i>	Butterfly Bush	17
<i>Hedera helix L. ssp. Helix</i>	English Ivy	17
<i>Abies sp.</i>	Fir	16
<i>Impatiens sp.</i>	Balsam	16
<i>Phlox subulata</i>	Creeping Phlox, Moss Pink	16
<i>Rhododendron sp.</i>	Azalea	16
<i>Spiraea sp.</i>	Bridal-Wreath	16
<i>Taxus media</i>	Yew	16
<i>Veronica sp.</i>	Speedwell, Brooklime	16

<i>Begonia sp.</i>	Begonia	15
<i>Cotoneaster sp.</i>	Cotoneaster	15
<i>Gleditsia sp.</i>	Honey Locust	15
<i>Liriope muscari</i>	Lilyturf, Big Blue;Giant	15
<i>Liriope sp.</i>	Lilyturf, Creeping	15
<i>Salvia daghestanica</i>	Sage	15
<i>Zinnia sp.</i>	Zinnia	15
<i>Abies fraseri</i>	Fir, Fraser	14
<i>Berberis sp.</i>	Barberry	14
<i>Dryopteris erythrosora</i>	Fern, Autumn	14
<i>Euonymus alatus</i>	Winged Burning Bush	14
<i>Lagerstroemia indica</i>	Crape Myrtle	14
<i>Lantana sp.</i>	Shrub Verbena	14
<i>Polystichium polyblepharum</i>	Fern, Tassel	14
<i>Portulaca sp.</i>	Moss Rose	14
<i>Taxus sp.</i>	Yew	14
<i>Albizia julibrissin</i>	Mimosa Silk Tree	13
<i>Dendranthema sp.</i>	Chrysanthemum	13
<i>Hosta sp.</i>	Hosta	13
<i>Salvia splendens</i>	Sage, Scarlet	13
<i>Tsuga sp.</i>	Hemlock	13
<i>Viola sp.</i>	Pansy	13
<i>Acer rubrum</i>	Maple, Red	12
<i>Coreopsis sp.</i>	Tickseed	12
<i>Geranium sp.</i>	Geranium	12
<i>Paspalum vaginatum</i>	Seashore Paspalum	12
<i>Sedum sp.</i>	Stonecrop	12
<i>Astilbe sp.</i>	False Spirea	11
<i>Calamagrostis acutiflora</i>	Feather Reed Grass	11
<i>Fallugia paradoxa</i>	Apache Plume	11
<i>Fragaria sp.</i>	Strawberry (Non-Bearing)	11
<i>Hosta fortunei</i>	Lily, Plantain	11
<i>Juniperus virginiana</i>	Cedar, Red	11
<i>Panicum virgatum</i>	Switch-Grass	11
<i>Pennisetum setaceum</i>	Fountain Grass	11
<i>Rudbeckia sp.</i>	Coneflower	11
<i>Arachniodes simplicor</i>	Fern, Variegated Leatherleaf	10
<i>Carex sp.</i>	Sedge	10
<i>Cyrtomium falcatum</i>	Fern, Holly	10
<i>Dianthus sp.</i>	Pinks	10
<i>Dryopteris ludoviciana</i>	Fern, Southern Shield	10
<i>Hibiscus sp.</i>	Mallow, Rose Mallow	10
<i>Hibiscus syriacus</i>	Rose-Of-Sharon, Althaea	10
<i>Monarda didyma</i>	Bee Balm	10
<i>Penstemon sp.</i>	Beard-Tongue	10
<i>Shepherdia argentea</i>	Buffalo Berry	10
<i>Spathiphyllum sp.</i>	Spathe Flower, Spathiphyllum	10

<i>Ternstroemia sp.</i>	Ternstroemia	10
<i>Artemisia lactiflora</i>	Mugwort, White	9
<i>Athyrium nipponicum</i>	Fern, Lady	9
<i>Cercis canadensis</i>	Red Bud, Eastern	9
<i>Chasmanthium latifolium</i>	Northern Sea Oats, Wild Oats	9
<i>Gaillardia sp.</i>	Blanket Flower	9
<i>Helleborus niger</i>	Hellebore, Christmas rose, Lenten Rose	9
<i>Heuchera sanguinea</i>	Coral Bells, Alumroot	9
<i>Iberis sp.</i>	Candytuft	9
<i>Iris sp.</i>	Flag	9
<i>Leucanthemum maximum</i>	Shasta Daisy	9
<i>Myrica pensylvanica</i>	Bayberry	9
<i>Phlox sp.</i>	Phlox	9
<i>Prunus sargentii</i>	Cherry, Sargent	9
<i>Quercus sp.</i>	Oak	9
<i>Scutellaria racemosa</i>	Skullcap	9
<i>Tulipa sp.</i>	Tulip	9
<i>Achillea millefolium</i>	Yarrow	8
<i>Aster ericoides</i>	Aster	8
<i>Aubrieta sp.</i>	Rock Cress	8
<i>Cladrastis sp.</i>	Yellowwood	8
<i>Cuphea hyssopifolia</i>	Mexican Heather, False Heather, Elfin Herb	8
<i>Gaura lindheimeri</i>	Gaura	8
<i>Gypsophila elegans</i>	Baby's-Breath	8
<i>Illicium sp.</i>	Anise Tree	8
<i>Ophiopogon sp.</i>	Mondo Grass, Lilyturf, Ker-Gawl	8
<i>Phormium sp.</i>	New Zealand Flax	8
<i>Rudbeckia fulgida speciosa</i>	Coneflower, Orange	8
<i>Ruellia carolinensis</i>	Mexican Petunia	8
<i>Scabiosa sp.</i>	Pincushion Flower	8
<i>Schizachyrium scoparium</i>	Little Blue Stem	8
<i>Solidago sp.</i>	Goldenrod	8
<i>Syringa vulgaris</i>	Lilac, Common	8
<i>Abelia sp.</i>	Abelia	7
<i>Acer sp.</i>	Maple	7
<i>Alnus sp.</i>	Alder	7
<i>Andropogon gerardii</i>	Big Blue Stem	7
<i>Aquilegia sp.</i>	Columbine	7
<i>Aurinia saxatilis</i>	Basket-Of-Gold	7
<i>Cortaderia</i>	Pampas Grass	7
<i>Euonymus radicans</i>	Purpleleaf Wintercreeper	7
<i>Euonymus sp.</i>	Euonymus	7
<i>Halesia carolina var. carolina</i>	Silverbell Carolina	7
<i>Hydrangea macrophylla</i>	Hydrangea, French	7
<i>Impatiens walleriana</i>	New Guinea Impatiens	7
<i>Ligustrum sp.</i>	Privet	7

<i>Magnolia grandiflora</i>	Magnolia, Southern	7
<i>Magnolia sp.</i>	Magnolia	7
<i>Miscanthus sp.</i>	Silver Grass	7
<i>Nepeta cataria</i>	Catnip	7
<i>Origanum libanoticum</i>	Hopflower Oregano	7
<i>Phalaris arundinacea</i>	Ribbon-Grass, Gardeners-Garters	7
<i>Pieris sp.</i>	Andromeda	7
<i>Polemonium sp.</i>	Jacob's Ladder	7
<i>Salix sp.</i>	Willow	7
<i>Salvia officinalis</i>	Sage, common	7
<i>Taxodium distichum</i>	Bald Cypress	7
<i>Thuja plicata</i>	Cedar, Western Red	7
<i>Tilia cordata</i>	Linden, Shamrock	7
<i>Trachycarpus fortunei</i>	Palm, Windmill	7
<i>Acer saccharinum</i>	Maple, Silver	6
<i>Ageratum sp.</i>	Ageratum	6
<i>Aglaonema sp.</i>	Aglaonema	6
<i>Alchemilla sp.</i>	Lady's-Mantle	6
<i>Amsonia sp.</i>	Bluestar	6
<i>Athyrium filix-femina</i>	Fern, Lady	6
<i>Baptisia australis</i>	Blue False Indigo	6
<i>Brassica sp.</i>	Ornamental Cabbage, Ornamental Kale	6
<i>Cornus florida</i>	Dogwood, Flowering	6
<i>Cyrtomium fortunei</i>	Fern, Japanese Holly	6
<i>Delphinium sp.</i>	Larkspur	6
<i>Dianthus deltoides</i>	Maiden Pink	6
<i>Dryopteris x australis</i>	Fern, Dixie Wood	6
<i>Festuca ovina glauca</i>	Blue Fescue	6
<i>Gazania sp.</i>	Treasure Flower	6
<i>Helianthus sp.</i>	Sunflower	6
<i>Heuchera sp.</i>	Alumroot	6
<i>Ipomoea batatas</i>	Sweet Potato Vine	6
<i>Lavandula angustifolia</i>	English Lavender	6
<i>Leucothoe sp.</i>	Fetterbush, Drooping Leucothoe	6
<i>Lilium sp.</i>	Lily	6
<i>Loropetalum sp.</i>	Loropetalum	6
<i>Matteuccia struthiopteris</i>	Fern, Ostrich	6
<i>Onoclea sensibilis</i>	Fern, Sensitive	6
<i>Osmunda cinnamomea</i>	Fern, Cinnamon	6
<i>Osmunda regalis</i>	Fern, Royal	6
<i>Pentas sp.</i>	Pentas	6
<i>Perovskia sp.</i>	Sage, Russian;Blue Spire	6
<i>Phlox paniculata</i>	Phlox, Perennial	6
<i>Picea abies</i>	Spruce, Norway	6
<i>Picea sp.</i>	Spruce	6
<i>Polystichum acrostichoides</i>	Fern, Christmas	6
<i>Prunus sp.</i>	Cherry (Non-Bearing)	6

<i>Syringa sp.</i>	Lilac	6
<i>Thymus praecox</i>	Thyme, Creeping	6
<i>Antennaria parvifolia</i>	Pussy-Toes, Small-leaf	5
<i>Asclepias sp.</i>	Butterfly Flower	5
<i>Aucuba sp.</i>	Aucuba	5
<i>Betula papyrifera</i>	Birch, Paper	5
<i>Betula pendula</i>	European White Birch	5
<i>Calamagrostis arundinacea</i>	Reed Grass	5
<i>Campanula sp.</i>	Bellflower	5
<i>Cerastium tomentosum</i>	Snow-In-Summer	5
<i>Chelone sp.</i>	Turtlehead, Snakehead	5
<i>Clethra alnifolia</i>	Summersweet	5
<i>Cornus kousa</i>	Dogwood, Kousa	5
<i>Epipremnum aureum</i>	Pothos	5
<i>Erigeron sp.</i>	Fleabane	5
<i>Eupatorium maculatum</i>	Joepyee weed, Spotted	5
<i>Eupatorium purpureum</i>	Joepyee weed, Sweetscented	5
<i>Fraxinus sp.</i>	Ash	5
<i>Gardenia augusta 'Radicans'</i>	Cape Jasmine, Radicans	5
<i>Helianthus salicifolius</i>	Sunflower, Willowleaf	5
<i>Heliopsis helianthoides</i>	False Sunflower, Smooth Oxeye	5
<i>Ilex cornuta</i>	Holly, Chinese	5
<i>Ilex vomitoria 'nana'</i>	Holly, Dwarf Yaupon	5
<i>Jasminum sp.</i>	Jasmine, Jessamine	5
<i>Limonium sp.</i>	Statice	5
<i>Linum perenne L. ssp. Perenne</i>	Blue flax	5
<i>Photinia sp.</i>	Photinia	5
<i>Pinus nigra</i>	Pine, Austrian	5
<i>Pinus strobus</i>	Pine, White	5
<i>Populus sp.</i>	Aspen, Poplar	5
<i>Potentilla sp.</i>	Cinquefoil	5
<i>Quercus rubra</i>	Oak, Northern Red	5
<i>Sempervivum tectorum</i>	Hen and chicks	5
<i>Solidago sempervirens</i>	Goldenrod, Seaside	5
<i>Tiarella cordifolia</i>	Foamflower, Heartleaf	5
<i>Trachelospermum asiaticum</i>	Jasmine, Asian	5
<i>Vernonia noveboracensis</i>	Ironweed, New York	5
<i>Viburnum dentatum</i>	Viburnum, arrowwood	5
<i>Viburnum trilobum</i>	Craneberry-bush	5
<i>Adiantum pedatum</i>	Fern, American Maidenhair	4
<i>Agastache sp.</i>	Hyssop species	4
<i>Andropogon virginicus</i>	Broom Sedge	4
<i>Angelonia angustifolia</i>	Angelonia	4
<i>Antennaria dioica</i>	Pussy-Toes, Stoloniferous	4
<i>Armeria maritima</i>	Thrift, Sea Pink	4
<i>Betula sp.</i>	Birch	4
<i>Canna sp.</i>	Canna	4

<i>Chamaecyparis obtusa</i>	False cypress	4
<i>Chrysogonum sp.</i>	Golden Star	4
<i>Clematis sp.</i>	Clematis	4
<i>Dahlia sp.</i>	Dahlia	4
<i>Delosperma nubigenum</i>	Hardy Ice Plant, Yellow Ice Plant	4
<i>Delosperma sp.</i>	Delosperma sp.	4
<i>Dichantherium clandestinum</i>	Deertongue	4
<i>Digitalis sp.</i>	Foxglove	4
<i>Gomphrena sp.</i>	Globe Amaranth	4
<i>Gymnocladus dioica</i>	Kentucky Coffee Tree	4
<i>Hierochloe odorata</i>	Indian Grass	4
<i>Hypericum sp.</i>	St.-Johns-Wort	4
<i>Kniphofia sp.</i>	Poker Plant, Red-Hot-Poker	4
<i>Lavandula sp.</i>	Lavender	4
<i>Liatris sp.</i>	Blazing-Star, Gayfeather	4
<i>Lilium longiflorum</i>	Lily, Easter	4
<i>Lupinus sp.</i>	Lupine	4
<i>Nandina domestica</i>	Heavenly Bamboo	4
<i>Nepeta x faasseni</i>	Catmint	4
<i>Picea glauca</i>	Spruce, White; Cat	4
<i>Picea pungens</i>	Spruce, Colorado	4
<i>Pinus mugo ssp. Mugo</i>	Pine, Mugo & Mugho	4
<i>Pinus sp.</i>	Pine	4
<i>Platanus sp.</i>	Plane Tree, Sycamore	4
<i>Platycodon grandiflorus</i>	Balloon Flower	4
<i>Quercus palustris</i>	Oak, Pin	4
<i>Raphiolepis indica</i>	Indian Hawthorn	4
<i>Rudbeckia bicolor</i>	Black-Eyed Susan	4
<i>Saintpaulia sp.</i>	African Violet	4
<i>Silene vulgaris ssp. Maritima</i>	Campion, Sea	4
<i>Solidago rugosa</i>	Goldenrod, Wrinkleleaf	4
<i>Sorghastrum sp.</i>	Indian Grass, Wood Grass	4
<i>Stokesia sp.</i>	Stokes Aster	4
<i>Tradescantia sp.</i>	Spiderwort	4
<i>Tradescantia x andersoniana</i>	Spiderwort	4
<i>Trifolium repens</i>	Clover, White	4
<i>Typha minima</i>	Cattails	4
<i>Alcea rosea</i>	Hollyhock	3
<i>Allamanda sp.</i>	Golden Trumpet	3
<i>Alpinia zerumbet</i>	Shellplant	3
<i>Amorpha canescens</i>	Leadplant	3
<i>Anthurium andraeanum</i>	Flamingo-lily	3
<i>Asarum canadense</i>	Canadian Ginger	3
<i>Asclepias tuberosa</i>	Butterfly	3
<i>Bergenia cordifolia</i>	Heart-leaved Bergenia	3
<i>Calendula sp.</i>	Field Marigold	3
<i>Calibrachoa sp.</i>	Calibrachoa	3

<i>Castanea mollissima</i>	Chinese Chestnut	3
<i>Cedrus deodara</i>	Cedar	3
<i>Centaurea sp.</i>	Batchelor's Button	3
<i>Centranthus ruber</i>	Jupiter's Beard	3
<i>Chamaebatiaria sp.</i>	Fernbush	3
<i>Chrysalidocarpus lutescens</i>	Palm, Areca	3
<i>Cimicifuga racemosa</i>	Bugbane & Cohosh, Black	3
<i>Dryopteris marginalis</i>	Fern, Marginal Wood	3
<i>Dryopteris sp.</i>	Fern, Autumn & Wood	3
<i>Echinops sp.</i>	Globe Thistle	3
<i>Epimedium sp.</i>	Barrenwort	3
<i>Eupatorium perfoliatum</i>	Boneset	3
<i>Eupatorium sp.</i>	Thoroughwort	3
<i>Fraxinus pennsylvanica</i>	Ash, Green	3
<i>Gardenia sp.</i>	Jasmine, Cape, Common Gardenia	3
<i>Gazania linearis</i>	Gazania	3
<i>Geum sp.</i>	Avens	3
<i>Ginkgo biloba</i>	Maidenhair Tree	3
<i>Gypsophila paniculata</i>	Baby's Breath	3
<i>Helenium autumnale</i>	Common sneezeweed	3
<i>Helenium sp.</i>	Helen's Flower, Sneezeweed	3
<i>Helianthemum sp.</i>	Sun Rose, Rock Rose	3
<i>Helianthus maximiliani</i>	Sunflower, Maximilian	3
<i>Hydrangea quercifolia</i>	Hydrangea, Oakleaf	3
<i>Iris xiphium</i>	Bulbous Iris	3
<i>Itea virginica</i>	Virginia Sweetspire	3
<i>Kalmia sp.</i>	Laurel	3
<i>Liatris spicata</i>	Gayfeather	3
<i>Ligularia stenocephala</i>	Golden Rockets	3
<i>Liquidambar sp.</i>	Sweetgum	3
<i>Liriodendron tulipifera</i>	Tulip Tree	3
<i>Lobelia cardinalis</i>	Cardinal Flower, Indian Pink	3
<i>Lonicera sp.</i>	Honeysuckle	3
<i>Mertensia virginica</i>	Virginia bluebells	3
<i>Metasequoia sp.</i>	Dawn Redwood	3
<i>Muhlenbergia capillaris</i>	Muhly, hairyawn	3
<i>Opuntia humifusa</i>	Devil's-tongue prickly pear	3
<i>Paeonia sp.</i>	Peony	3
<i>Pentas lanceolata</i>	Egyptian-Star-Cluster	3
<i>Phlox sp.</i>	Carolinia Phlox	3
<i>Pinus sylvestris</i>	Pine, Scotch	3
<i>Polypodium sp.</i>	Fern	3
<i>Primula malacoides</i>	Primrose, Fairy	3
<i>Salvia leucantha</i>	Sage, Mexican	3
<i>Santolina chamaecyparissus</i>	Lavender cotton	3
<i>Sedum spurium</i>	Stonecrop	3
<i>Sempervivum arachnoideum</i>	Hen and chicks	3

<i>Sempervivum sp.</i>	Houseleek	3
<i>Trachelospermum jasminoides</i>	Jasmine, Star;Confederate	3
<i>Verbascum sp.</i>	Mullein	3
<i>Veronica spicata</i>	Speedwell, Spiked	3
<i>Viburnum suspensum</i>	Viburnum	3
<i>Weigela sp.</i>	Weigela	3
<i>Zauschneria californica</i>	California Fuschia	3
<i>Acer platanoides</i>	Maple, Norway	2
<i>Achillea tomentosa</i>	Yarrow, Woolly	2
<i>Agapanthus sp.</i>	Lily-Of-The-Nile	2
<i>Althaea sp.</i>	Marsh Mallow	2
<i>Alyssum sp.</i>	Madwort	2
<i>Andromeda polifolia</i>	Bog Rosemary	2
<i>Arctostaphylos sp.</i>	Bearberry	2
<i>Argyranthemum sp.</i>	Boston Daisy	2
<i>Artemisia sp.</i>	Mugwort, Wormwood	2
<i>Aster novi-belgii</i>	Aster, New York	2
<i>Athyrium goeringianum</i>	Fern, Japanese Painted	2
<i>Betula nigra</i>	Birch, River	2
<i>Boltonia sp.</i>	Aster, Bolton	2
<i>Calluna sp.</i>	Heather	2
<i>Caryopteris sp.</i>	Bluebeard	2
<i>Catananche sp.</i>	Cupid's-Dart	2
<i>Catharanthus roseus</i>	Rose Periwinkle	2
<i>Celosia sp.</i>	Cockscomb, Wool Flower	2
<i>Chionanthus retusus</i>	White Fringetree	2
<i>Coreopsis lanceolata</i>	Lance Coreopsis	2
<i>Coreopsis verticillata</i>	Moonbeam, Tickseed	2
<i>Cosmos sp.</i>	Cosmos	2
<i>Cotinus coggygia</i>	Smoke Tree, European	2
<i>Cucumis pepo</i>	Ornamental Gourd	2
<i>Cupressus sp.</i>	Cypress	2
<i>Deutzia sp.</i>	Pride-of-Rochester	2
<i>Dianthus barbatus</i>	Sweet William	2
<i>Dianthus caryophyllus</i>	Carnation	2
<i>Dicentra sp.</i>	Bleeding Heart	2
<i>Dieffenbachia sp.</i>	Dumb Cane	2
<i>Doronicum sp.</i>	Leopards-Bane	2
<i>Dracaena marginata</i>	Draceana Marginata	2
<i>Epilobium fleischeri</i>	Alpine Willowherb	2
<i>Forsythia sp.</i>	Golden Bells	2
<i>Gaultheria sp.</i>	Creeping Wintergreen	2
<i>Helichrysum bracteatum</i>	Strawflower	2
<i>Hydrangea anomala petiolaris</i>	Hydrangea, Climbing	2
<i>Iris germanica</i>	German Iris	2
<i>Lamium sp.</i>	Dead Nettle	2
<i>Lisianthus sp.</i>	Lisanthus	2

<i>Magnolia x Soulangeana</i>	Magnolia, Saucer	2
<i>Mahonia aquifolium</i>	Oregon Grape	2
<i>Malva sp.</i>	Mallow	2
<i>Microbiota sp.</i>	Russian Arborvitae	2
<i>Narcissus sp.</i>	Daffodil	2
<i>Nicotiana sp.</i>	Flowering Tobacco	2
<i>Othonna capensis</i>	Little-Pickles	2
<i>Oxydendrum arboreum</i>	Sourwood, Sorrel Tree	2
<i>Papaver orientale</i>	Oriental Poppy	2
<i>Physostegia sp.</i>	False Dragon Head, Lion's Heart	2
<i>Picea mariana</i>	Spruce, Black	2
<i>Picea omorika</i>	Spruce, Serbian	2
<i>Pieris japonica</i>	Japanese Andromeda	2
<i>Pinus taeda</i>	Pine, Loblolly	2
<i>Pittosporum sp.</i>	Pittosporum	2
<i>Pulmonaria sp.</i>	Lungwort	2
<i>Pyracantha sp.</i>	Firethorn	2
<i>Raphiolepis sp.</i>	Raphiolepis	2
<i>Rhamnus sp.</i>	Buckthorn	2
<i>Robinia pseudoacacia</i>	Black Locust	2
<i>Scabiosa columbaria</i>	Butterfly Blue, Scabious	2
<i>Schefflera sp.</i>	Umbrella Tree	2
<i>Sciadopitys verticillata</i>	Pine, Jap. Umbrella	2
<i>Solidago speciosa</i>	Goldenrod, Showy	2
<i>Syngonium podophyllum</i>	Nephtytis, African Evergreen	2
<i>Teucrium sp.</i>	Wall Germander	2
<i>Tilia sp.</i>	Linden, Basswood	2
<i>Tradescantia ohimensis</i>	Spiderwort	2
<i>Ulmus sp.</i>	Elm	2
<i>Veronica liwanensis</i>	Turkish veronica	2
<i>Wisteria sp.</i>	Wisteria	2
<i>Abies balsamea</i>	Fir, Balsam	1
<i>Abies lasiocarpa</i>	Fir, Alpine	1
<i>Abies procera</i>	Fir, Noble	1
<i>Acer ginnala</i>	Maple, Amur	1
<i>Acer palmatum</i>	Maple, Japanese	1
<i>Adiantum sp.</i>	Fern, Maidenhair	1
<i>Amaranthus sp.</i>	Amaranth	1
<i>Amelanchier sp.</i>	Serviceberry	1
<i>Antennaria sp.</i>	Pussy-Toes, Everlasting	1
<i>Arabis caucasica</i>	Rockcress	1
<i>Arbutus sp.</i>	Manzanita Strawberry Tree	1
<i>Artemisia ludoviciana</i>	Western sage	1
<i>Aruncus sp.</i>	Goatsbeard	1
<i>Aster dumosus x Aster novibelgii</i>	Aster, Michaelmas	1
<i>Aster sp.</i>	Aster	1

<i>Bellis perennis</i>	English Daisy	1
<i>Berberis thunbergii</i>	Japanese Barberry	1
<i>Brachycome sp.</i>	River Daisy	1
<i>Buddleia alternifolia</i>	Butterfly Bush, Silver	1
<i>Calamintha sp.</i>	Calamint	1
<i>Callicarpa sp.</i>	Beautyberry	1
<i>Campanula carpatica</i>	Blue clips	1
<i>Carex conica marginata</i>	Marginata	1
<i>Carya sp.</i>	Hickory	1
<i>Ceanothus gloriosus</i>	Lilac, Wild	1
<i>Centaurea gymnocarpa</i>	Dusty-Miller	1
<i>Cephalotaxus sp.</i>	Japanese Plum Yew	1
<i>Ceratiola ericoides</i>	Sand Heath, Rosemary	1
<i>Cercis reniformis</i>	Red Bud, Western	1
<i>Chaenomeles sp.</i>	Flowering Quince	1
<i>Chamaedorea elegans</i>	Palm, Palor; Neanthe Bella	1
<i>Chlorophytum comosum</i>	Spider Plant	1
<i>Chrysanthemum parthenium</i>	Feverfew	1
<i>Cleyera japonica</i>	Cleyera	1
<i>Cornus alba</i>	Dogwood, Red-barked	1
<i>Cornus sp.</i>	Dogwood	1
<i>Corylopsis sp.</i>	Winter Hazel	1
<i>Cotoneaster apiculatus</i>	Cotoneaster, cranberry	1
<i>Cryptomeria japonica</i>	Japanese Cedar	1
<i>Cupressocyparis leylandii</i>	Cypress, Leyland	1
<i>Cyclamen sp.</i>	Persian Violet	1
<i>Cynodon dactylon</i>	Bermudagrass	1
<i>Cytisus sp.</i>	Broom	1
<i>Daphne odora</i>	Daphne, Pink	1
<i>Daphne sp.</i>	Daphne	1
<i>Dendranthema x morifolium</i>	Hardy Mum	1
<i>Elaeagnus angustifolia</i>	Russian Olive	1
<i>Enkianthus sp.</i>	Enkianthus	1
<i>Erianthus sp.</i>	Plume Grass; Ravenna	1
<i>Erica sp.</i>	Heath	1
<i>Euonymus japonicus</i>	Spindle Tree	1
<i>Fagus sp.</i>	Beech	1
<i>Franklinia sp.</i>	Franklin Tree	1
<i>Fraxinus americana</i>	Ash, White	1
<i>Freesia sp.</i>	Freesia	1
<i>Galium odoratum</i>	Sweet Woodruff	1
<i>Gelsemium sp.</i>	Carolina Jessamine; Evening Trumpet Flower	1
<i>Hakonechloa sp.</i>	Hakone Grass, Japanese Forest Grass	1
<i>Hedera canariensis</i>	Algerian Ivy	1
<i>Hyacinthus sp.</i>	Hyacinth	1
<i>Ilex crenata</i>	Holly, Japanese	1

<i>Ilex glabra</i>	Inkberry	1
<i>Ilex opaca</i>	Holly, American	1
<i>Ilex x meserveae</i>	Holly, Blue	1
<i>Iris cristata</i>	Crested Iris	1
<i>Iris kaempferi</i>	Japanese Iris	1
<i>Iris sibirica</i>	Siberian Iris	1
<i>Iris sp.</i>	Iris, Douglas	1
<i>Juglans nigra</i>	Walnut, Black (Non-Bearing)	1
<i>Lathyrus odoratus</i>	Sweet Pea	1
<i>Lespedeza bicolor</i>	Shrub Bush Clover	1
<i>Leucanthemum sp.</i>	Daisy	1
<i>Leymus arenarius</i>	Blue Lyme Grass	1
<i>Lobelia sp.</i>	Lobelia	1
<i>Lobularia maritima</i>	Sweet Alyssum	1
<i>Lychnis chalconica</i>	Maltese Cross	1
<i>Magnolia virginiana</i>	Sweet Bay	1
<i>Mahonia bealei</i>	Leatherleaf, Mahonia	1
<i>Mandevilla laxa</i>	Chilean Jasmine	1
<i>Maranta leuconeura</i>	Prayer Plant	1
<i>Mazus reptans</i>	Mazus	1
<i>Mentha x piperita</i>	Peppermint	1
<i>Myosotis sylvatica</i>	Forget-Me-Not, Garden	1
<i>Myrica cerifera</i>	Wax Myrtle	1
<i>Nemesia sp.</i>	Nemesia	1
<i>Osmunda sp.</i>	Fern, Royal, Flowering Fern	1
<i>Osteospermum sp.</i>	African Daisy	1
<i>Pachysandra terminalis</i>	Japanese Spurge	1
<i>Pachystachys lutea</i>	Yellow Shrimp Plant	1
<i>Pennisetum alopecuroides</i>	Chinese Pennisetum	1
<i>Pennisetum sp.</i>	Feathergrass	1
<i>Phoenix roebelinii</i>	Palm, Pygmy Date	1
<i>Pinus resinosa</i>	Pine, Red	1
<i>Pinus thunbergiana</i>	Pine, Jap. Black	1
<i>Pittosporum tobira</i>	Pittosporum, Japanese	1
<i>Plumbago auriculata</i>	Leadwort, Cape	1
<i>Podocarpus macrophyllus</i>	Southern Yew	1
<i>Polygonatum humile</i>	Dwarf Solomon's Seal	1
<i>Polygonatum multiflorum</i>	Variegated Solomon's Seal	1
<i>Polystichum munitum</i>	Fern, Western sword	1
<i>Primula sp.</i>	Primrose	1
<i>Prunus persica</i>	Peach (Non-Bearing)	1
<i>Pseudolarix sp.</i>	False Larch, Golden Larch	1
<i>Ptychosperma elegans</i>	Palm, Alexander	1
<i>Pyrus calleryana</i>	Pear, Bradford (Non-Bearing)	1
<i>Pyrus communis</i>	Pear (Non-Bearing)	1
<i>Quercus acutissima</i>	Oak, Sawtooth	1
<i>Quercus alba</i>	Oak, White	1

<i>Quercus velutina</i>	Oak, Black	1
<i>Quercus virginiana</i>	Oak, Live;Southern	1
<i>Rosa rugosa</i>	Japanese Rose, Turkestan Rose	1
<i>Rosmarinus officinalis</i>	Rosemary	1
<i>Russelia equisetiformis</i>	Coral Plant, Fountain	1
<i>Sequoiadendron giganteum</i>	Giant Sequoia;Redwood	1
<i>Solenostemon sp.</i>	SOLENOSTEMON	1
<i>Solidago sphacelata</i>	Goldenrod, Autumn	1
<i>Sorbus sp.</i>	Mountain Ash	1
<i>Stachys byzantina</i>	Lamb's-Ears	1
<i>Stachytarpheta mutabilis</i>	Coral Porterweed	1
<i>Strelitzia sp.</i>	Bird-Of-Paradise	1
<i>Syzygium paniculatum</i>	Eugenia	1
<i>Thymus sp.</i>	Thyme (Non-Bearing)	1
<i>Tiarella sp.</i>	Foamflower, False Miterwort	1
<i>Torenia sp.</i>	Wishbone Flower	1
<i>Tradescantia virginiana</i>	Spiderwort	1
<i>Tridens flavus</i>	Purple Top	1
<i>Trifolium reflexum</i>	Clover, Buffalo	1
<i>Tsuga canadensis</i>	Hemlock, Canada	1
<i>Vaccinium sp.</i>	Blueberry (Non-Bearing)	1
<i>Viburnum juddii</i>	Viburnum juddii	1
<i>Vitex sp.</i>	Chaste Shrub	1
<i>Washingtonia robusta</i>	Palm, Mexican Fan	1
<i>Washingtonia sp.</i>	Palm, Washington, Windmill	1
<i>Weigela florida</i>	Weigela, Oldfashioned	1
<i>Yucca filamentosa</i>	Adams-Needle	1

IR-4 Ornamental Horticulture Program Crop Selection Worksheet

- 1). In your Regional Breakout Discussions, review the annual survey results for your region and new Ornamental Project Requests.
- 2). The list below includes the crop species included in the IR-4 program for crop safety for the last 5 years tested on at least 3 different products. It also includes crops growers requested in the 2007 survey.
- 3). Place an X in the column for 25 crops important to your region.

Project: _____

Crop (Latin & Common Names)		North East	North Central	Southern	Western
Abelia sp.	Abelia				
Abies fraseri	Fir, Fraser				
Abies grandis	Fir, Grand; Giant Fir				
Abies sp.	Fir				
Acer palmatum	Maple				
Acer rubrum	Maple, Red				
Acer saccharum	Maple, Sugar				
Acer saccharinum	Maple, Silver				
Acer sp.	Maple				
Achillea millefolium	Yarrow				
Adiantum pedatum	Fern, American Maidenhair				
Agapanthus	Agapanthus				
Agastache sp.	Hyssop species				
Ageratum sp.	Ageratum				
Aglaonema sp.	Aglaonema				
Albizia julibrissin	Mimosa Silk Tree				
Alchemilla sp.	Lady's-Mantle				
Alnus sp.	Alder				
Amsonia sp.	Bluestar				
Andropogon gerardii	Big Blue Stem				
Andropogon virginicus	Broom Sedge				
Angelonia angustifolia	Angelonia				
Antennaria dioica	Pussy-Toes, Stoloniferous				
Antennaria parvifolia	Pussy-Toes, Small-leaf				
Antirrhinum majus	Snapdragon				
Aquilegia sp.	Columbine				

Arachniodes simplicor	Fern, Variegated Leatherleaf				
Armeria maritima	Thrift, Sea Pink				
Artemisia lactiflora	Mugwort, White				
Asclepias sp.	Butterfly Flower				
Aster ericoides	Aster				
Astilbe sp.	False Spirea				
Athyrium filix-femina	Fern, Lady				
Athyrium nipponicum	Fern, Lady				
Aubrieta sp.	Rock Cress				
Aucuba sp.	Aucuba				
Aurinia saxatilis	Basket-Of-Gold				
Baptisia australis	Blue False Indigo				
Begonia sp.	Begonia				
Berberis sp.	Barberry				
Betula papyrifera	Birch, Paper				
Betula pendula	European White Birch				
Betula sp.	Birch				
Brassica sp.	Ornamental Cabbage, Ornamental Kale				
Buddleia davidii	Butterfly Bush				
Buxus sp.	Boxwood				
Calamagrostis acutiflora	Feather Reed Grass				
Calamagrostis arundinacea	Reed Grass				
Calendula	Calendula				
Calibrachoa	Calibrachoa				
Camellia sp.	Camellia				
Campanula sp.	Bellflower				
Canna sp.	Canna				
Carex sp.	Sedge				
Cerastium tomentosum	Snow-In-Summer				
Cercis canadensis	Red Bud, Eastern				
Chamaecyparis obtusa	False cypress				
Chasmanthium latifolium	Northern Sea Oats, Wild Oats				
Chelone sp.	Turtlehead, Snakehead				
Chrysogonum sp.	Golden Star				
Cinerarea	Cinerarea				
Cladrastis sp.	Yellowwood				
Clematis sp.	Clematis				
Clethra alnifolia	Summersweet				
Coleus sp.	Coleus, Flamenettle				
Coreopsis sp.	Tickseed				
Cornus florida	Dogwood, Flowering				
Cornus kousa	Dogwood, Kousa				
Cortaderia	Pampas Grass				
Cotoneaster sp.	Cotoneaster				
Crategus	Hawthorne				
Cryptomeria	Cryptomeria				

Cuphea hyssopifolia	Mexican Heather, False Heather, Elfin Herb				
Cyclamen	Cyclamen				
Cyrtomium falcatum	Fern, Holly				
Cyrtomium fortunei	Fern, Japanese Holly				
Dahlia sp.	Dahlia				
Delosperma nubigenum	Hardy Ice Plant, Yellow Ice Plant				
Delosperma sp.	Delosperma sp.				
Delphinium sp.	Larkspur				
Dendranthema sp.	Chrysanthemum				
Dianthus deltoides	Maiden Pink				
Dianthus sp.	Pinks				
Dichantheium clandestinum	Deertongue				
Dichondra	Dichondra				
Digitalis sp.	Foxglove				
Dryopteris erythrosora	Fern, Autumn				
Dryopteris ludoviciana	Fern, Southern Shield				
Dryopteris x australis	Fern, Dixie Wood				
Echinacea sp.	Purple Coneflower				
Epipremnum aureum	Pothos				
Erigeron sp.	Fleabane				
Euonymus alatus	Winged Burning Bush				
Euonymus radicans	Purpleleaf Wintercreeper				
Euonymus sp.	Euonymus				
Eupatorium maculatum	Joepyee weed, Spotted				
Eupatorium purpureum	Joepyee weed, Sweetscented				
Euphorbia pulcherrima	Poinsettia				
Euphorbia sp.	Euphorbia sp.				
Fallugia paradoxa	Apache Plume				
Festuca ovina glauca	Blue Fescue				
Ficus benjamina / nitida	Weeping Fig, Benjamin Tree				
Fragaria sp.	Strawberry (Non-Bearing)				
Fraxinus sp.	Ash				
Gaillardia sp.	Blanket Flower				
Gardenia sp.	Gardenia sp.				
Gardenia augusta 'Radicans'	Cape Jasmine, Radicans				
Gaura lindheimeri	Gaura				
Gazania sp.	Treasure Flower				
Geranium magniflorum	Geranium				
Geranium sp.	Geranium				
Gerbera sp.	Transvaal Daisy				
Gladiolus sp.	Corn Flag, Sword Lily				
Gleditsia sp.	Honey Locust				
Gomphrena sp.	Globe Amaranth				
Gymnocladus dioica	Kentucky Coffee Tree				
Gypsophila elegans	Baby's-Breath				

Halesia carolina var. carolina	Silverbell Carolina				
Hedera helix L. ssp. Helix	English Ivy				
Helianthus salicifolius	Sunflower, Willowleaf				
Helianthus sp.	Sunflower				
Heliopsis helianthoides	False Sunflower, Smooth Oxeye				
Helleborus niger	Hellebore, Christmas rose, Lenten Rose				
Hemerocallis sp.	Daylily				
Heuchera sanguinea	Coral Bells, Alumroot				
Heuchera sp.	Alumroot				
Hibiscus sp.	Mallow, Rose Mallow				
Hibiscus syriacus	Rose-Of-Sharon, Althaea				
Hierochloe odorata	Indian Grass				
Hosta fortunei	Lily, Plantain				
Hosta sp.	Hosta				
Hydrangea macrophylla	Hydrangea, French				
Hydrangea sp.	Hydrangea				
Hypericum sp.	St.-Johns-Wort				
Iberis sp.	Candytuft				
Ilex cornuta	Holly, Chinese				
Ilex crenata	Holly				
Ilex sp.	Holly				
Ilex vomitoria 'nana'	Holly, Dwarf Yaupon				
Illicium sp.	Anise Tree				
Impatiens New Guinea hybrids	New Guinea Impatiens				
Impatiens sp.	Balsam				
Impatiens walleriana	New Guinea Impatiens				
Ipomoea batatas	Sweet Potato Vine				
Iris sp.	Flag				
Jasminum sp.	Jasmine, Jessamine				
Juniperus sp.	Juniper				
Juniperus virginiana	Cedar, Red				
Kalanchoe	Kalanchoe				
Kniphofia sp.	Poker Plant, Red-Hot-Poker				
Lagerstroemia indica	Crape Myrtle				
Lantana sp.	Shrub Verbena				
Lavandula angustifolia	English Lavender				
Lavandula sp.	Lavender				
Leucanthemum maximum	Shasta Daisy				
Leucothoe sp.	Fetterbush, Drooping Leucothoe				
Liatris sp.	Blazing-Star, Gayfeather				
Ligustrum sp.	Privet				
Lilium longiflorum	Lily, Easter				
Lilium sp.	Lily				
Limonium sp.	Statice				
Linum perenne L. ssp. Perenne	Blue flax				
Liriope muscari	Lilyturf, Big Blue;Giant				

Liriope sp.	Lilyturf, Creeping				
Lisianthus	Lisianthus				
Loropetalum sp.	Loropetalum				
Lupinus sp.	Lupine				
Magnolia grandiflora	Magnolia, Southern				
Magnolia sp.	Magnolia				
Malus sp.	Apple & Crabapple (Non-Bearing)				
Mandevilla	Mandevilla				
Matteuccia struthiopteris	Fern, Ostrich				
Metasequoia	Metasequoia				
Miscanthus sp.	Silver Grass				
Monarda didyma	Bee Balm				
Myrica pensylvanica	Bayberry				
Nandina domestica	Heavenly Bamboo				
Nepeta cataria	Catnip				
Nepeta x faasseni	Catmint				
Oenothera sp.	Evening Primrose, Sundrops				
Onoclea sensibilis	Fern, Sensitive				
Ophiopogon sp.	Mondo Grass, Lilyturf, Ker-Gawl				
Origanum libanoticum	Hopflower Oregano				
Osmunda cinnamomea	Fern, Cinnamon				
Osmunda regalis	Fern, Royal				
Osteopermum	Osteopermum				
Paeonia sp.	Peony				
Panicum virgatum	Switch-Grass				
Paspalum vaginatum	Seashore Paspalum				
Pelargonium sp.	Geranium				
Pennisetum setaceum	Fountain Grass				
Penstemon sp.	Beard-Tongue				
Pentas sp.	Pentas				
Perovskia sp.	Sage, Russian;Blue Spire				
Petunia sp.	Petunia				
Phalaris arundinacea	Ribbon-Grass, Gardeners-Garters				
Phlox paniculata	Phlox, Perennial				
Phlox sp.	Phlox				
Phlox subulata	Creeping Phlox, Moss Pink				
Phormium sp.	New Zealand Flax				
Photinia sp.	Photinia				
Picea abies	Spruce, Norway				
Picea glauca	Spruce, White; Cat				
Picea pungens	Spruce, Colorado				
Picea sp.	Spruce				
Pieris sp.	Andromeda				
Pinus mugo ssp. Mugo	Pine, Mugo & Mugho				
Pinus nigra	Pine, Austrian				
Pinus sp.	Pine				

<i>Pinus strobus</i>	Pine, White				
<i>Platanus</i> sp.	Plane Tree, Sycamore				
<i>Platycodon grandiflorus</i>	Balloon Flower				
<i>Polemonium</i> sp.	Jacob's Ladder				
<i>Polystichium polyblepharum</i>	Fern, Tassel				
<i>Polystichum acrostichoides</i>	Fern, Christmas				
<i>Populus</i> sp.	Aspen, Poplar				
<i>Portulaca</i> sp.	Moss Rose				
<i>Potentilla</i> sp.	Cinquefoil				
<i>Prunus sargentii</i>	Cherry, Sargent				
<i>Prunus</i> sp.	Cherry (Non-Bearing)				
<i>Pseudotsuga menziesii</i>	Fir, Douglas				
<i>Purshia mexicana</i>	Mexican cliff rose				
<i>Quercus palustris</i>	Oak, Pin				
<i>Quercus rubra</i>	Oak, Northern Red				
<i>Quercus</i> sp.	Oak				
<i>Raphiolepis indica</i>	Indian Hawthorn				
<i>Rhododendron</i> sp.	Azalea				
<i>Rhododendron</i> sp.	Azalea, & Rhododendron				
<i>Rhododendron</i> sp.	Rhododendron				
<i>Rosa</i> sp.	Rose				
<i>Rudbeckia bicolor</i>	Black-Eyed Susan				
<i>Rudbeckia fulgida speciosa</i>	Coneflower, Orange				
<i>Rudbeckia</i> sp.	Coneflower				
<i>Ruellia carolinensis</i>	Mexican Petunia				
<i>Saintpaulia</i> sp.	African Violet				
<i>Salix</i> sp.	Willow				
<i>Salvia daghestanica</i>	Sage				
<i>Salvia officinalis</i>	Sage, common				
<i>Salvia splendens</i>	Sage, Scarlet				
<i>Salvia sylvestris</i>	Sage, Ramona				
<i>Scabiosa</i> sp.	Pincushion Flower				
<i>Schizachyrium scoparium</i>	Little Blue Stem				
<i>Scutellaria racemosa</i>	Skullcap				
<i>Sedum</i> sp.	Stonecrop				
<i>Sempervivum tectorum</i>	Hen and chicks				
<i>Shepherdia argentea</i>	Buffalo Berry				
<i>Silene vulgaris</i> ssp. <i>Maritima</i>	Campion, Sea				
<i>Solidago rugosa</i>	Goldenrod, Wrinkleleaf				
<i>Solidago sempervirens</i>	Goldenrod, Seaside				
<i>Solidago</i> sp.	Goldenrod				
<i>Sorghastrum</i> sp.	Indian Grass, Wood Grass				
<i>Spathiphyllum</i> sp.	Spathe Flower, Spathiphyllum				
<i>Spiraea</i> sp.	Bridal-Wreath				
<i>Stokesia</i> sp.	Stokes Aster				
<i>Syringa</i> sp.	Lilac				

<i>Syringa vulgaris</i>	Lilac, Common				
<i>Tagetes</i> sp.	Marigold				
<i>Taxodium distichum</i>	Bald Cypress				
<i>Taxus media</i>	Yew				
<i>Taxus</i> sp.	Yew				
<i>Ternstroemia</i> sp.	Ternstroemia				
<i>Thuja plicata</i>	Cedar, Western Red				
<i>Thuja</i> sp.	Arborvitae				
<i>Thymus praecox</i>	Thyme, Creeping				
<i>Tiarella cordifolia</i>	Foamflower, Heartleaf				
<i>Tilia cordata</i>	Linden, Shamrock				
<i>Trachelospermum asiaticum</i>	Jasmine, Asian				
<i>Trachycarpus fortunei</i>	Palm, Windmill				
<i>Tradescantia</i> sp.	Spiderwort				
<i>Tradescantia x andersoniana</i>	Spiderwort				
<i>Trifolium repens</i>	Clover, White				
<i>Tsuga heterophylla</i>	Hemlock, Western				
<i>Tsuga</i> sp.	Hemlock				
<i>Tulipa</i> sp.	Tulip				
<i>Typha minima</i>	Cattails				
<i>Ulmus</i> sp.	Elm				
<i>Verbena</i> sp.	Vervain				
<i>Vernonia noveboracensis</i>	Ironweed, New York				
<i>Veronica</i> sp.	Speedwell, Brooklime				
<i>Viburnum dentatum</i>	Viburnum, arrowwood				
<i>Viburnum</i> sp.	Arrowwood				
<i>Viburnum trilobum</i>	Craneberry-bush				
<i>Vinca</i> sp.	Periwinkle				
<i>Viola</i> sp.	Pansy				
<i>Zinnia</i> sp.	Zinnia				

IR-4 Ornamental Horticulture Program
Weed Science Project Selection Worksheet

1). In your Regional Breakout Discussions, review the annual survey results for your region and new Ornamental Project Requests. Then discuss what are the most prevalent weed issues based on your experiences. These issues should be based on those weeds without adequate available control measures or crops without adequate weed-management tools.

2). Fill out the top five issues to growers in your region.

Project 1: _____ (5 points)

Project 2: _____ (4 points)

Project 3: _____ (3 points)

Project 4: _____ (2 points)

Project 5: _____ (1 point)

Section 4

2007 High Priority Projects – Entomology

The following pages contain details on the high priority projects for entomology, Thrips Efficacy and Borer & Beetle Efficacy, as well as some research on a couple non-high priority projects. The Ornamental Horticulture Research Database was queried to pull all studies and all pending or completed trials related to the 2007 high priority projects. In some cases, studies will not have any researchers listed; this happens where trials were cancelled or where studies were discussed for that project and researchers did not choose to research them. The database was also queried to pull any pending trials for 2007 in non-high priority projects but only to print project information relevant to those trials. For example, research was conducted on euonymus scale, but only information for the relevant studies appear – not all the studies related to the Scale Efficacy project.

Borer & Beetle Efficacy

Printed: 9/23/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26098 C	Bronze Birch Borer <i>Agrilus anxius</i>	European White Birch <i>Betula pendula</i>	Arena 50WDG <i>Clothianadin</i>	Field Container	2006	OH	Nielsen			O	
26100 B	Bronze Birch Borer <i>Agrilus anxius</i>	European White Birch <i>Betula pendula</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Field Container	2006	OH	Nielsen			O	
26099 C	Bronze Birch Borer <i>Agrilus anxius</i>	European White Birch <i>Betula pendula</i>	Flagship 25WG <i>Thiamethoxam</i>	Field Container	2006	OH	Nielsen			O	
26101 A	Bronze Birch Borer <i>Agrilus anxius</i>	European White Birch <i>Betula pendula</i>	NEI 25925 <i>Acetamiprid</i>	Field Container	2006	OH	Nielsen			O	
26102 A	Bronze Birch Borer <i>Agrilus anxius</i>	European White Birch <i>Betula pendula</i>	Safari 20SG <i>Dinotefuran</i>	Field Container	2006	OH	Nielsen			O	
25908 A	Apple tree borer, flat-hea <i>Chrysobothris femorata</i>	TBD <i>TBD</i>	Celero 16WSG <i>Clothianidin</i>	TBD	2006	KY	Potter			C	11/14/2006
25909 B	Apple tree borer, flat-hea <i>Chrysobothris femorata</i>	TBD <i>TBD</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	TBD	2006	KY	Potter			C	11/14/2006
25912 A	Apple tree borer, flat-hea <i>Chrysobothris femorata</i>	TBD <i>TBD</i>	NEI 25925 <i>Acetamiprid</i>	TBD	2006	KY	Potter			C	11/14/2006
25910 N	Apple tree borer, flat-hea <i>Chrysobothris femorata</i>	TBD <i>TBD</i>	Onyx <i>Bifenthrin</i>	TBD	2006	KY	Potter			C	11/14/2006
25911 A	Apple tree borer, flat-hea <i>Chrysobothris femorata</i>	TBD <i>TBD</i>	Safari 20SG <i>Dinotefuran</i>	TBD	2006	KY	Potter			C	11/14/2006
26942 A	Flea beetles, garden <i>Epitrix sp.</i>	Evening Primrose, Sundo <i>Oenothera sp.</i>	BAS 320i <i>Metaflumizone</i>	Field Container	2007	VA	Schultz		O. sp 'Sundrops'	P	
25511 A	Flea beetles, garden <i>Epitrix sp.</i>	Evening Primrose, Sundo <i>Oenothera sp.</i>	Celero 16WSG <i>Clothianidin</i>	Field Container	2006	VA	Schultz	Drench	O. speciosa var. berlandiere	C	11/16/2006
					2007	VA	Schultz		O. sp 'Sundrops'	P	
25477 C	Flea beetles, garden <i>Epitrix sp.</i>	Evening Primrose, Sundo <i>Oenothera sp.</i>	Discus <i>Imidacloprid + Cyfluthrin</i>	Field Container	2006	VA	Schultz	Drench	O. speciosa var. berlandieri	C	11/16/2006
25512 A	Flea beetles, garden <i>Epitrix sp.</i>	Evening Primrose, Sundo <i>Oenothera sp.</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Field Container	2006	VA	Schultz	Drench	O. speciosa var. berlandieri	C	11/16/2006
					2007	VA	Schultz		O. sp 'Sundrops'	P	

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Key: Priorities A, B, and C are researchable; N is not researchable - these may be completed studies or those with Standards. Trial Status: P = Planned, O = Ongoing, C = Complete, X = Cancelled, ? = Unknown

Borer & Beetle Efficacy

Printed: 9/23/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
25791 C	Flea beetles, garden <i>Epitrix sp.</i>	Evening Primrose, Sundo <i>Oenothera sp.</i>	Flagship 25WG <i>Thiamethoxam</i>	Field Container	2006	VA	Schultz	Drench	O. speciosa var. berlandieri	C	11/16/2006
<i>Trial Results: Inconclusive; population too low</i>											
26944 A	Flea beetles, garden <i>Epitrix sp.</i>	Evening Primrose, Sundo <i>Oenothera sp.</i>	Metarhizium anisoplia <i>Metarhizium anisopliae strain F52</i>	Field Container	2007	VA	Schultz		O. sp 'Sundrops'	P	
25831 N	Flea beetles, garden <i>Epitrix sp.</i>	Evening Primrose, Sundo <i>Oenothera sp.</i>	Onyx <i>Bifenthrin</i>	Field Container	2006	VA	Schultz	Spray	O. speciosa var. berlandieri	C	11/16/2006
<i>Trial Results: Inconclusive; population too low</i>											
26429 N	Flea beetles, garden <i>Epitrix sp.</i>	Evening Primrose, Sundo <i>Oenothera sp.</i>	Perm-Up 3.2EC <i>Permethrin</i>	Field Container	2006	VA	Schultz	Spray	Oenothera speciosa var. berlandieri	C	11/16/2006
<i>Trial Results: Inconclusive; population too low</i>											
25513 A	Flea beetles, garden <i>Epitrix sp.</i>	Evening Primrose, Sundo <i>Oenothera sp.</i>	Safari 20SG <i>Dinotefuran</i>	Field Container	2006	VA	Schultz	Drench	O. speciosa var. berlandieri	C	11/16/2006
<i>Trial Results: Population declined but numbers too low for statistical analysis</i>											
26943 A	Flea beetles, garden <i>Epitrix sp.</i>	Evening Primrose, Sundo <i>Oenothera sp.</i>	Tolfenpyrad (Nichino) <i>Tolfenpyrad</i>	Field Container	2007	VA	Schultz		O. sp 'Sundrops'	P	
25514 C	Flea beetles, garden <i>Epitrix sp.</i>	Evening Primrose, Sundo <i>Oenothera sp.</i>	TriStar 30SG <i>Acetamiprid</i>	Field Container	2006	VA	Schultz	Spray	O. speciosa var. berlandieri	C	11/16/2006
<i>Trial Results: Inconclusive; population too low</i>											
26103 N	Japanese Beetle - adults <i>Popillia japonica - adults</i>	Birch, Paper <i>Betula papyrifera</i>	Celero 16WSG <i>Clothianidin</i>	Field Container	2006	OH	Nielsen			O	
26105 A	Japanese Beetle - adults <i>Popillia japonica - adults</i>	Birch, Paper <i>Betula papyrifera</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Field Container	2006	OH	Nielsen			O	
26106 N	Japanese Beetle - adults <i>Popillia japonica - adults</i>	Birch, Paper <i>Betula papyrifera</i>	Onyx <i>Bifenthrin</i>	Field Container	2006	OH	Nielsen			O	
26107 N	Japanese Beetle - adults <i>Popillia japonica - adults</i>	Birch, Paper <i>Betula papyrifera</i>	Safari 20SG <i>Dinotefuran</i>	Field Container	2006	OH	Nielsen			O	
26104 C	Japanese Beetle - adults <i>Popillia japonica - adults</i>	Birch, Paper <i>Betula papyrifera</i>	TriStar 30SG <i>Acetamiprid</i>	Field Container	2006	OH	Nielsen			O	
26825 A	Japanese Beetle - adults <i>Popillia japonica - adults</i>	Rose-Of-Sharon, Althaea <i>Hibiscus syriacus</i>	BAS 320i <i>Metaflumizone</i>	Field In-Ground	2007	OH	Reding			P	
26756 N	Japanese Beetle - adults <i>Popillia japonica - adults</i>	Rose-Of-Sharon, Althaea <i>Hibiscus syriacus</i>	Celero 16WSG <i>Clothianidin</i>	Field In-Ground	2006	OH	Reding	Foliar		C	1/25/2007
					2006	OH	Reding	Drench		C	1/25/2007
<i>Trial Results: No significant reduction of feeding damage; no phytotoxicity and growth effect</i>											

Borer & Beetle Efficacy

Printed: 9/23/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26757 A	Japanese Beetle - adults	Rose-Of-Sharon, Althaea	DPX-E2Y45	Field In-Ground	2006	OH	Reding	Foliar		C	1/25/2007
	<i>Popillia japonica</i> - adults	<i>Hibiscus syriacus</i>	<i>Chlorantraniliprole</i>		2006	OH	Reding	Drench		C	1/25/2007
<i>Trial Results: No significant reduction of feeding damage; no phytotoxicity and growth effect</i>											
26758 A	Japanese Beetle - adults	Rose-Of-Sharon, Althaea	Safari 20SG	Field In-Ground	2006	OH	Reding	Foliar		C	1/25/2007
	<i>Popillia japonica</i> - adults	<i>Hibiscus syriacus</i>	<i>Dinotefuran</i>		2006	OH	Reding	Drench		C	1/25/2007
<i>Trial Results: No significant reduction of feeding damage; no phytotoxicity and growth effect</i>											
26759 C	Japanese Beetle - adults	Rose-Of-Sharon, Althaea	TriStar 70WSP	Field In-Ground	2006	OH	Reding	Foliar		C	1/25/2007
	<i>Popillia japonica</i> - adults	<i>Hibiscus syriacus</i>	<i>Acetamiprid</i>		2006	OH	Reding	Drench		C	1/25/2007
<i>Trial Results: No significant reduction of feeding damage; no phytotoxicity and growth effect</i>											
26473 A	Japanese Beetle - adults	Cherry, Sargent	BAS 320i	Field Container	2007	RI	Alm			P	
	<i>Popillia japonica</i> - adults	<i>Prunus sargentii</i>	<i>Metaflumizone</i>								
25520 A	Japanese Beetle - adults	Cherry, Sargent	Celero 16WSG	Field Container	2006	RI	Alm	Spray		C	11/2/2006 11/14/2006
	<i>Popillia japonica</i> - adults	<i>Prunus sargentii</i>	<i>Clothianidin</i>		<i>Trial Results: Excellent control up to 10 DAT</i>						
					2007	RI	Alm			P	
25521 A	Japanese Beetle - adults	Cherry, Sargent	DPX-E2Y45	Field Container	2006	RI	Alm	Spray		C	11/2/2006 11/14/2006
	<i>Popillia japonica</i> - adults	<i>Prunus sargentii</i>	<i>Chlorantraniliprole</i>		<i>Trial Results: Excellent control up to 31 DAT</i>						
					2007	RI	Alm			P	
26472 A	Japanese Beetle - adults	Cherry, Sargent	Metarhizium anisoplia	Field Container	2007	RI	Alm			P	
	<i>Popillia japonica</i> - adults	<i>Prunus sargentii</i>	<i>Metarhizium anisopliae strain F52</i>								
25524 N	Japanese Beetle - adults	Cherry, Sargent	Onyx	TBD	2006	RI	Alm	Spray		C	11/2/2006 11/14/2006
	<i>Popillia japonica</i> - adults	<i>Prunus sargentii</i>	<i>Bifenthrin</i>		<i>Trial Results: Excellent control up to 31 DAT</i>						
25522 A	Japanese Beetle - adults	Cherry, Sargent	Safari 20SG	Field Container	2006	RI	Alm	Spray		C	11/2/2006 11/14/2006
	<i>Popillia japonica</i> - adults	<i>Prunus sargentii</i>	<i>Dinotefuran</i>		<i>Trial Results: Virtually no control</i>						
					2007	RI	Alm			P	
26474 A	Japanese Beetle - adults	Cherry, Sargent	Tolfenpyrad (Nichino)	Field Container	2007	RI	Alm			P	
	<i>Popillia japonica</i> - adults	<i>Prunus sargentii</i>	<i>Tolfenpyrad</i>								
25523 C	Japanese Beetle - adults	Cherry, Sargent	TriStar 30SG	TBD	2006	RI	Alm	Spray		C	11/2/2006 11/14/2006
	<i>Popillia japonica</i> - adults	<i>Prunus sargentii</i>	<i>Acetamiprid</i>		<i>Trial Results: 100 % control up to 31 DAT</i>						
26612 A	Japanese Beetle - adults	Cherry, Sargent	V-10112 2G	Field Container	2007	RI	Alm			P	
	<i>Popillia japonica</i> - adults	<i>Prunus sargentii</i>	<i>Dinotefuran</i>								
26945 A	Japanese Beetle - adults	Rose	BAS 320i	Field Container	2007	VA	Schultz			P	
	<i>Popillia japonica</i> - adults	<i>Rosa sp.</i>	<i>Metaflumizone</i>								
26946 A	Japanese Beetle - adults	Rose	Celero 16WSG	Field Container	2007	VA	Schultz			P	
	<i>Popillia japonica</i> - adults	<i>Rosa sp.</i>	<i>Clothianidin</i>								

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Borer & Beetle Efficacy

Printed: 9/23/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26948	A Japanese Beetle - adults <i>Popillia japonica - adults</i>	Rose <i>Rosa sp.</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Field Container	2007	VA	Schultz			P	
26950	A Japanese Beetle - adults <i>Popillia japonica - adults</i>	Rose <i>Rosa sp.</i>	Metarhizium anisoplia <i>Metarhizium anisopliae strain F52</i>	Field Container	2007	VA	Schultz			P	
26949	A Japanese Beetle - adults <i>Popillia japonica - adults</i>	Rose <i>Rosa sp.</i>	Onyx <i>Bifenthrin</i>	Field Container	2007	VA	Schultz			P	
26947	A Japanese Beetle - adults <i>Popillia japonica - adults</i>	Rose <i>Rosa sp.</i>	Safari 20SG <i>Dinotefuran</i>	Field Container	2007	VA	Schultz			P	
26951	A Japanese Beetle - adults <i>Popillia japonica - adults</i>	Rose <i>Rosa sp.</i>	Tolfenpyrad (Nichino) <i>Tolfenpyrad</i>	Field Container	2007	VA	Schultz			P	
26487	A Japanese Beetle - adults <i>Popillia japonica - adults</i>	Willow <i>Salix sp.</i>	Celero 16WSG <i>Clothianidin</i>	Field Container	2006	GA	Braman	Spray	<i>S. gracilistyla</i> 'Melanostachys'	C	12/14/2006
<i>Trial Results: Poor efficacy</i>											
26488	A Japanese Beetle - adults <i>Popillia japonica - adults</i>	Willow <i>Salix sp.</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Field Container	2006	GA	Braman	Spray	<i>S. gracilistyla</i> 'Melanostachys'	C	12/14/2006
<i>Trial Results: Good efficacy</i>											
26491	A Japanese Beetle - adults <i>Popillia japonica - adults</i>	Willow <i>Salix sp.</i>	Flagship 25WG <i>Thiamethoxam</i>	Field Container	2006	GA	Braman	Spray	<i>S. gracilistyla</i> 'Melanostachys'	C	12/14/2006
<i>Trial Results: Fair efficacy</i>											
26492	C Japanese Beetle - adults <i>Popillia japonica - adults</i>	Willow <i>Salix sp.</i>	Precise <i>Acephate</i>	Field Container	2006	GA	Braman	Broadcast	<i>S. gracilistyla</i> 'Melanostachys'	C	
<i>Trial Results: Fair efficacy</i>											
26489	N Japanese Beetle - adults <i>Popillia japonica - adults</i>	Willow <i>Salix sp.</i>	Safari 20SG <i>Dinotefuran</i>	Field Container	2006	GA	Braman	Spray	<i>S. gracilistyla</i> 'Melanostachys'	C	12/14/2006
<i>Trial Results: Poor efficacy</i>											
26493	N Japanese Beetle - adults <i>Popillia japonica - adults</i>	Willow <i>Salix sp.</i>	Scimitar <i>Lambda-cyhalothrin</i>	Field Container	2006	GA	Braman	Spray	<i>S. gracilistyla</i> 'Melanostachys'	C	12/14/2006
<i>Trial Results: Excellent efficacy</i>											
26490	C Japanese Beetle - adults <i>Popillia japonica - adults</i>	Willow <i>Salix sp.</i>	TriStar 70WSP <i>Acetamiprid</i>	Field Container	2006	GA	Braman	Spray	<i>S. gracilistyla</i> 'Melanostachys'	C	12/14/2006
<i>Trial Results: Excellent efficacy</i>											
0	N Japanese Beetle - adults <i>Popillia japonica - adults</i>	TBD <i>TBD</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	TBD	2007	GA	Braman			P	
26547	A Japanese Beetle - adults <i>Popillia japonica - adults</i>	TBD <i>TBD</i>	Metarhizium anisoplia <i>Metarhizium anisopliae strain F52</i>	TBD	2007	GA	Braman			P	

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Borer & Beetle Efficacy

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26617 A	Japanese Beetle - adults <i>Popillia japonica - adults</i>	Linden, Shamrock <i>Tilia cordata</i>	BAS 320i <i>Metaflumizone</i>	TBD	2007	RI	Alm			P	
25515 N	Japanese Beetle - adults <i>Popillia japonica - adults</i>	Linden, Shamrock <i>Tilia cordata</i>	Celero 16WSG <i>Clothianidin</i>	TBD	2006	RI	Alm	Spray	'Bailyei'	C	11/2/2006 11/14/2006
25516 A	Japanese Beetle - adults <i>Popillia japonica - adults</i>	Linden, Shamrock <i>Tilia cordata</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	TBD	2006	RI	Alm	Spray	'Bailyei'	C	11/2/2006 11/14/2006
					2007	RI	Alm			P	
26546 A	Japanese Beetle - adults <i>Popillia japonica - adults</i>	Linden, Shamrock <i>Tilia cordata</i>	Metarhizium anisoplia <i>Metarhizium anisopliae strain F52</i>	TBD	2007	RI	Alm			P	
25519 N	Japanese Beetle - adults <i>Popillia japonica - adults</i>	Linden, Shamrock <i>Tilia cordata</i>	Onyx <i>Bifenthrin</i>	TBD	2006	RI	Alm	Spray	'Bailyei'	C	11/2/2006 11/14/2006
25517 N	Japanese Beetle - adults <i>Popillia japonica - adults</i>	Linden, Shamrock <i>Tilia cordata</i>	Safari 20SG <i>Dinotefuran</i>	TBD	2006	RI	Alm	Spray	'Bailyei'	C	11/2/2006 11/14/2006
25518 C	Japanese Beetle - adults <i>Popillia japonica - adults</i>	Linden, Shamrock <i>Tilia cordata</i>	TriStar 30SG <i>Acetamiprid</i>	TBD	2006	RI	Alm	Spray	'Bailyei'	C	11/2/2006 11/14/2006
26402 A	Viburnum leaf beetle <i>Pyrrhalta viburni</i>	Arrowwood <i>Viburnum sp.</i>	BAS 320i <i>Metaflumizone</i>	TBD	2007	NY	Weston			P	
					2007	VT	Costa			P	
25733 A	Viburnum leaf beetle <i>Pyrrhalta viburni</i>	Arrowwood <i>Viburnum sp.</i>	Celero 16WSG <i>Clothianidin</i>	TBD	2006	VT	Costa	Foliar	V. dentatum	C	11/17/2006
					2007	NY	Weston			P	
					2007	VT	Costa			P	
25734 A	Viburnum leaf beetle <i>Pyrrhalta viburni</i>	Arrowwood <i>Viburnum sp.</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	TBD	2006	VT	Costa	Foliar	V. dentatum	C	11/17/2006
					2007	NY	Weston			P	
					2007	VT	Costa			P	
26403 A	Viburnum leaf beetle <i>Pyrrhalta viburni</i>	Arrowwood <i>Viburnum sp.</i>	Metarhizium anisoplia <i>Metarhizium anisopliae strain F52</i>	TBD	2007	NY	Weston			P	
					2007	VT	Costa			P	
25735 A	Viburnum leaf beetle <i>Pyrrhalta viburni</i>	Arrowwood <i>Viburnum sp.</i>	Safari 20SG <i>Dinotefuran</i>	TBD	2006	VT	Costa	Foliar	V. dentatum	C	11/17/2006
					2007	NY	Weston			P	
					2007	VT	Costa			P	
26404 A	Viburnum leaf beetle <i>Pyrrhalta viburni</i>	Arrowwood <i>Viburnum sp.</i>	Tolfenpyrad (Nichino) <i>Tolfenpyrad</i>	TBD	2007	NY	Weston			P	
					2007	VT	Costa			P	

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Borer & Beetle Efficacy

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
25736 C	Viburnum leaf beetle <i>Pyrrhalta viburni</i>	Arrowwood <i>Viburnum sp.</i>	TriStar 30SG <i>Acetamiprid</i>	TBD	2006	VT	Costa	Foliar	V. dentatum	C	11/17/2006
<i>Trial Results: Effective control; equal to standard permethrin</i>											
26613 A	Viburnum leaf beetle <i>Pyrrhalta viburni</i>	Arrowwood <i>Viburnum sp.</i>	V-10112 2G <i>Dinotefuran</i>	TBD	2007	VT	Costa			P	
					2007	VT	Weston			P	
0 A	TBD <i>TBD</i>	TBD <i>TBD</i>	BAS 320i <i>Metaflumizone</i>	TBD	2007	AL	Foshee			P	
					2007	GA	Braman			P	
					2007	OH	Nielsen			P	
0 A	TBD <i>TBD</i>	TBD <i>TBD</i>	Celero 16WSG <i>Clothianidin</i>	TBD	2007	AL	Foshee			P	
					2007	OH	Nielsen			P	
0 A	TBD <i>TBD</i>	TBD <i>TBD</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	TBD	2007	AL	Foshee			P	
					2007	OH	Nielsen			P	
0 A	TBD <i>TBD</i>	TBD <i>TBD</i>	Metarhizium anisoplia <i>Metarhizium anisopliae strain F52</i>	TBD	2007	AL	Foshee			P	
					2007	OH	Nielsen			P	
0 A	TBD <i>TBD</i>	TBD <i>TBD</i>	Safari 20SG <i>Dinotefuran</i>	TBD	2007	AL	Foshee			P	
					2007	OH	Nielsen			P	
0 A	TBD <i>TBD</i>	TBD <i>TBD</i>	Tolfenpyrad (Nichino) <i>Tolfenpyrad</i>	TBD	2007	AL	Foshee			P	
					2007	OH	Nielsen			P	
0 A	TBD <i>TBD</i>	TBD <i>TBD</i>	V-10112 2G <i>Dinotefuran</i>	TBD	2007	OH	Nielsen			P	
					2007	OH	Nielsen			P	
25221 C	Ambrosia Beetle <i>Xylosandrus crassiusculu</i>	Mimosa Silk Tree <i>Albizia julibrissin</i>	Allectus SC <i>Bifenthrin + Imidacloprid</i>	Field Container	2006	FL	Mizell			P	
					2007	FL	Mizell			P	
26181 C	Ambrosia Beetle <i>Xylosandrus crassiusculu</i>	Mimosa Silk Tree <i>Albizia julibrissin</i>	Azatin XL <i>Azadirachtin</i>	Field Container	2006	FL	Mizell	Tree Bolt Immersion		C	9/29/2006 11/14/2006
<i>Trial Results: Poor efficacy</i>											
26849 B	Ambrosia Beetle <i>Xylosandrus crassiusculu</i>	Mimosa Silk Tree <i>Albizia julibrissin</i>	BAS 320i <i>Metaflumizone</i>	TBD	2007	FL	Mizell			P	
25479 A	Ambrosia Beetle <i>Xylosandrus crassiusculu</i>	Mimosa Silk Tree <i>Albizia julibrissin</i>	Celero 16WSG <i>Clothianidin</i>	Field Container	2005	FL	Mizell			C	9/15/2005 11/14/2006
					2006	FL	Mizell	Tree bolt immersion		C	9/29/2006 11/14/2006
<i>Trial Results: Poor efficacy</i>											
26180 N	Ambrosia Beetle <i>Xylosandrus crassiusculu</i>	Mimosa Silk Tree <i>Albizia julibrissin</i>	DEET <i>DEET</i>	Field Container	2006	FL	Mizell	Tree Bolt Immersion		C	9/29/2006 11/14/2006
<i>Trial Results: Effective control in one of three trials; best product</i>											

Borer & Beetle Efficacy

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
24764 B	Ambrosia Beetle	Mimosa Silk Tree	Discus	Field Container	2005	FL	Mizell			C	9/15/2005 11/14/2006
	<i>Xylosandrus crassiusculus</i>	<i>Albizia julibrissin</i>	<i>Imidacloprid + Cyfluthrin</i>		2006	FL	Mizell	Tree bolt immersion		C	9/29/2006 11/14/2006
<i>Trial Results: Poor efficacy</i>											
25481 A	Ambrosia Beetle	Mimosa Silk Tree	DPX-E2Y45	Field Container	2005	FL	Mizell			C	9/15/2005 11/14/2006
	<i>Xylosandrus crassiusculus</i>	<i>Albizia julibrissin</i>	<i>Chlorantraniliprole</i>		2007	FL	Mizell			P	
25480 N	Ambrosia Beetle	Mimosa Silk Tree	Dursban	Field Container	2005	FL	Mizell			C	9/15/2005 11/14/2006
	<i>Xylosandrus crassiusculus</i>	<i>Albizia julibrissin</i>	<i>Chlorpyrifos</i>		2006	FL	Mizell	Tree bolt immersion		C	9/29/2006 11/14/2006
<i>Trial Results: Poor efficacy</i>											
25483 N	Ambrosia Beetle	Mimosa Silk Tree	Endosulfan	Field Container	2005	FL	Mizell			C	9/15/2005 11/14/2006
	<i>Xylosandrus crassiusculus</i>	<i>Albizia julibrissin</i>	<i>Endosulfan</i>								
26850 C	Ambrosia Beetle	Mimosa Silk Tree	Metarhizium anisoplia	Field Container	2007	FL	Mizell			O	
	<i>Xylosandrus crassiusculus</i>	<i>Albizia julibrissin</i>	<i>Metarhizium anisopliae strain F52</i>								
25220 N	Ambrosia Beetle	Mimosa Silk Tree	Onyx	Field Container	2005	FL	Mizell			C	9/15/2005 11/14/2006
	<i>Xylosandrus crassiusculus</i>	<i>Albizia julibrissin</i>	<i>Bifenthrin</i>		2006	FL	Mizell	Tree bolt immersion		C	9/29/2006 11/14/2006
<i>Trial Results: Effective control in one of three trials</i>											
25482 N	Ambrosia Beetle	Mimosa Silk Tree	Talstar NF	Field Container	2005	FL	Mizell			C	9/15/2005 11/14/2006
	<i>Xylosandrus crassiusculus</i>	<i>Albizia julibrissin</i>	<i>Bifenthrin</i>								
26182 C	Ambrosia Beetle	Mimosa Silk Tree	Tempo 20WP	Field Container	2006	FL	Mizell			C	9/29/2006 11/14/2006
	<i>Xylosandrus crassiusculus</i>	<i>Albizia julibrissin</i>	<i>Cyfluthrin</i>					Tree bolt immersion			
<i>Trial Results: Poor efficacy</i>											
26137 N	Ambrosia Beetle	Red Bud, Eastern	Onyx	Field In-Ground	2004	TX	Ludwig			C	7/26/2006 11/14/2006
	<i>Xylosandrus crassiusculus</i>	<i>Cercis canadensis</i>	<i>Bifenthrin</i>								<i>Trial Results: Inconclusive results due to application timing</i>
26138 N	Ambrosia Beetle	Red Bud, Eastern	Talstar	Field In-Ground	2004	TX	Ludwig			C	7/28/2006 11/14/2006
	<i>Xylosandrus crassiusculus</i>	<i>Cercis canadensis</i>	<i>Bifenthrin</i>								<i>Trial Results: Results inconclusive due to application timing</i>
26828 A	Ambrosia Beetle	Dogwood, Kousa	Celero 16WSG	Field Container	2007	OH	Reding			P	
	<i>Xylosandrus crassiusculus</i>	<i>Cornus kousa</i>	<i>Clothianidin</i>								
26826 A	Ambrosia Beetle	Dogwood, Kousa	DPX-E2Y45	Field Container	2007	OH	Reding			P	
	<i>Xylosandrus crassiusculus</i>	<i>Cornus kousa</i>	<i>Chlorantraniliprole</i>								
26827 A	Ambrosia Beetle	Dogwood, Kousa	Safari 20SG	Field Container	2007	OH	Reding			P	
	<i>Xylosandrus crassiusculus</i>	<i>Cornus kousa</i>	<i>Dinotefuran</i>								

Q-Biotype Whitefly Efficacy

Printed: 9/23/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26086	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Agri 50 <i>Agri 50</i>	Greenhouse	2006	CA	Parrella			P	
25188	N Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Aria 50SG <i>Fonicamid</i>	Greenhouse	2005	GA	Oetting	Drench		C	1/20/2006
					2006	CA	Parrella	Drench		P	
					2006	NY	Sanderson			P	
26140	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	ARY-50401 <i>Plant Extract</i>	Greenhouse	2006	GA	Oetting	Drench		C	11/30/2006
25970	N Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Avid 0.15EC <i>Abamectin</i>	Greenhouse	2006	CA	Bethke			P	
					2006	GA	Oetting	Drench		C	11/30/2006
					2006	NY	Sanderson			P	
26089	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Avid 0.15EC + Scimit <i>abamectin + cyfluthrin</i>	Greenhouse	2006	CA	Bethke			P	
					2006	GA	Oetting	Drench		C	11/30/2006
25969	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Avid 0.15EC + Talstar <i>abamectin + bifenthrin</i>	Greenhouse							
26087	N Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Avid 0.15EC + Tame <i>abamectin + fenpropathrin</i>	Greenhouse	2006	CA	Bethke			P	
					2006	GA	Oetting	Drench		C	11/30/2006
					2006	NY	Sanderson			P	
26032	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Azatin XL <i>Azadirachtin</i>	Greenhouse	2006	CA	Bethke			P	
25857	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	BotaniGard <i>Beauveria bassiana</i>	Greenhouse	2006	CA	Parrella			P	
26704	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Botanigard 22WP <i>Beauveria bassiana</i>	Greenhouse	2006	NY	Gilrein		'Orion Red'	C	10/6/2006
26705	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	BotaniGard ES <i>Beauveria bassiana</i>	Greenhouse	2006	GA	Oetting			C	11/30/2006
					2006	NY	Gilrein		'Orion Red'	C	10/6/2006
25161	N Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Celero 16WSG <i>Clothianidin</i>	Greenhouse	2005	CA	Bethke	Drench		O	
					2005	GA	Oetting	Drench	'Dynasty Red'	C	1/20/2006
					<i>Trial Results: Suppression of adults and slightly better management of immatures (~75%) with 6.3 oz per 100 gal drenched at 120 ml per 6" pot.</i>						
25978	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Discus <i>Imidacloprid + Cyfluthrin</i>	Greenhouse							

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Key: Priorities A, B, and C are researchable; N is not researchable - these may be completed studies or those with Standards. Trial Status: P = Planned, O = Ongoing, C = Complete, X = Cancelled, ? = Unknown

Q-Biotype Whitefly Efficacy

Printed: 9/23/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
25739	N Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Distance <i>Pyriproxyfen</i>	Greenhouse							
25186	N Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Greenhouse	2005	GA	Oetting	Drench	'Dynasty Red'	C	1/20/2006
					2006	CA	Parrella			P	
					2006	GA	Oetting			C	11/30/2006
26131	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	DPX-HGW86 <i>DPX-HGW86</i>	Greenhouse	2006	GA	Oetting	Drench		C	11/30/2006
					2006	NY	Sanderson			P	
25972	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Dursban <i>Chlorpyrifos</i>	Greenhouse							
26084	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	EcoTrol <i>EcoTrol</i>	Greenhouse	2006	CA	Parrella	Foliar		P	
					2006	GA	Oetting	Drench		C	11/30/2006
25977	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Endeavor <i>Pymetrozine</i>	Greenhouse	2006	CA	Parrella			P	
25976	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Enstar II <i>Kinoprene</i>	Greenhouse							
26708	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	ERASE <i>Jojoba oil</i>	Greenhouse	2006	NY	Gilrein		'Orion Red'	C	10/6/2006
25160	N Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Flagship 25WG <i>Thiamethoxam</i>	Greenhouse	2005	CA	Bethke	Drench		C	
					2005	GA	Oetting	Foliar spray	'Dynasty Red'	C	2/15/2006
					2006	CA	Bethke			P	
25187	N Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Judo <i>Spiromesifen</i>	Greenhouse	2005	GA	Oetting	Foliar spray	'Dynasty Red'	C	1/20/2006
					2006	NY	Gilrein		'Orion Red'	C	10/6/2006
25159	N Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Marathon II <i>Imidacloprid</i>	Greenhouse	2005	CA	Bethke	Drench		C	
26701	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Metarhizium anisoplia <i>Metarhizium anisopliae strain F52</i>	Greenhouse	2006	NY	Gilrein		'Orion Red'	C	10/6/2006
25737	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	MilStop <i>Potassium bicarbonate</i>	Greenhouse	2005	GA	Oetting	Foliar	'Dynasty Red'	C	1/20/2006
											<i>Trial Results: Mediocre control of adults and immatures with 2.5 lb per 100 gal foliar application.</i>
26706	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	M-Pede <i>Horticulture Soap</i>	Greenhouse	2006	NY	Gilrein		'Orion Red'	C	10/6/2006

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Q-Biotype Whitefly Efficacy

Printed: 9/23/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG	
25858	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Naturalis <i>Beauveria bassiana</i>	Greenhouse								
26702	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Ornazin 3%EC <i>Azadirachtin</i>	Greenhouse	2006	NY	Gilrein		'Orion Red'	C	10/6/2006	
25980	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Orthene TT&O + Tam <i>acephate + fenpropathrin</i>	Greenhouse	2006	NY	Sanderson			P		
25979	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Orthene TTO 97 <i>Acephate</i>	Greenhouse	2006	NY	Sanderson			P		
26082	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Pedestal <i>Novaluron</i>	Greenhouse	2006	CA	Parrella			P		
					2006	GA	Oetting	Drench		C	11/30/2006	
26707	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	ProMate Revoke <i>Potassium salts of fatty acids</i>	Greenhouse	2006	NY	Gilrein		'Orion Red'	C	10/6/2006	
26142	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	QRD 400 <i>Not specified</i>	Greenhouse	2006	GA	Oetting			C	11/30/2006	
25157	N Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Safari 20SG <i>Dinotefuran</i>	Greenhouse	2005	CA	Bethke	Foliar spray		C		
					2005	CA	Bethke	Drench		C		
					2005	GA	Oetting	Drench	'Dynasty Red'	C	1/20/2006	
					Trial Results: Great control of adults (>90%) and excellent control of immatures (>95%) with 24 oz per 100 gal drenched at 120 ml per 6" pot.							
					2006	NY	Gilrein		'Orion Red'	C	10/6/2006	
25971	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Sanmite <i>Pyridaben</i>	Greenhouse								
26088	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Scimitar <i>Lambda-cyhalothrin</i>	Greenhouse	2006	CA	Bethke			P		
					2006	GA	Oetting	Drench		C	11/30/2006	
26703	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Sucroicide <i>Sucrose octanoate ester</i>	Greenhouse	2006	NY	Gilrein		'Orion Red'	C	10/6/2006	
25974	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Talstar <i>Bifenthrin</i>	Greenhouse								
25973	C Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Talus 40SC <i>Buprofezin</i>	Greenhouse								
25975	N Sweet Potato Whitefly - <i>Bemisia Q-biotype</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Tame 2.4 EC <i>Fenpropathrin</i>	Greenhouse	2006	CA	Bethke			P		
					2006	GA	Oetting	Drench		C	11/30/2006	
					2006	NY	Sanderson			P		

Q-Biotype Whitefly Efficacy

Printed: 9/23/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
25738	C Sweet Potato Whitefly - Bemisia Q-biotype	Poinsettia <i>Euphorbia pulcherrima</i>	TriCon (BW 420) <i>BW 420</i>	Greenhouse	2005	GA	Oetting			C	1/20/2006
<i>Trial Results: Some initial control of adults, but in general <50% control for immatures and adults with a 0.8% foliar application.</i>											
26085	C Sweet Potato Whitefly - Bemisia Q-biotype	Poinsettia <i>Euphorbia pulcherrima</i>	TriStar 30SG <i>Acetamiprid</i>	Greenhouse	2006	CA	Parrella	Foliar		P	
					2006	GA	Oetting	Drench		C	11/30/2006
25158	C Sweet Potato Whitefly - Bemisia Q-biotype	Poinsettia <i>Euphorbia pulcherrima</i>	TriStar 70WSP <i>Acetamiprid</i>	Greenhouse	2005	CA	Bethke	Foliar spray		C	
					2005	GA	Oetting	Foliar spray	'Dynasty Red'	C	2/15/2006
26012	C Sweet Potato Whitefly - Bemisia Q-biotype	Transvaal Daisy <i>Gerbera sp.</i>	Celero 16WSG <i>Clothianidin</i>	Greenhouse							
26013	C Sweet Potato Whitefly - Bemisia Q-biotype	Transvaal Daisy <i>Gerbera sp.</i>	Flagship 25WG <i>Thiamethoxam</i>	Greenhouse							
26014	C Sweet Potato Whitefly - Bemisia Q-biotype	Transvaal Daisy <i>Gerbera sp.</i>	Marathon II <i>Imidacloprid</i>	Greenhouse							
26015	C Sweet Potato Whitefly - Bemisia Q-biotype	Transvaal Daisy <i>Gerbera sp.</i>	Safari 20SG <i>Dinotefuran</i>	Greenhouse							
26016	C Sweet Potato Whitefly - Bemisia Q-biotype	Transvaal Daisy <i>Gerbera sp.</i>	TriStar 30SG <i>Acetamiprid</i>	Greenhouse							
0	C Sweet Potato Whitefly - Bemisia Q-biotype	TBD <i>TBD</i>	Aria 50SG <i>Flonicamid</i>	Greenhouse	2006	AZ	Naranjo			P	
0	C Sweet Potato Whitefly - Bemisia Q-biotype	TBD <i>TBD</i>	Avid 0.15EC <i>Abamectin</i>	Greenhouse	2006	AZ	Naranjo			P	
0	C Sweet Potato Whitefly - Bemisia Q-biotype	TBD <i>TBD</i>	Distance <i>Pyriproxyfen</i>	Greenhouse	2006	AZ	Naranjo			P	
0	C Sweet Potato Whitefly - Bemisia Q-biotype	TBD <i>TBD</i>	Pedestal <i>Novaluron</i>	Greenhouse	2006	AZ	?			P	
0	C Sweet Potato Whitefly - Bemisia Q-biotype	TBD <i>TBD</i>	Safari 20SG <i>Dinotefuran</i>	Greenhouse	2006	AZ	Naranjo			P	
0	C Sweet Potato Whitefly - Bemisia Q-biotype	TBD <i>TBD</i>	Sun Spray Ultra-Fine <i>Horticultural Oil</i>	Greenhouse	2006	AZ	?			P	
0	C Sweet Potato Whitefly - Bemisia Q-biotype	TBD <i>TBD</i>	Talstar <i>Bifenthrin</i>	Greenhouse	2006	AZ	Naranjo			P	
0	C Sweet Potato Whitefly - Bemisia Q-biotype	TBD <i>TBD</i>	tbd <i>tbd</i>	Greenhouse	2007	GA	Oetting	Rotational Program		P	
0	C Sweet Potato Whitefly - Bemisia Q-biotype	TBD <i>TBD</i>	TriCon (BW 420) <i>BW 420</i>	Greenhouse	2006	IL	Cloyd			?	

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QRD Crop Safety

Printed: 9/23/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26647	C Phytotoxicity <i>Phytotoxicity</i>	Angelonia <i>Angelonia angustifolia</i>	QRD 400 <i>Not specified</i>	Greenhouse	2007	LA	Chen			P	
26648	C Phytotoxicity <i>Phytotoxicity</i>	Boston Daisy <i>Argyranthemum sp.</i>	QRD 400 <i>Not specified</i>	Greenhouse	2007	LA	Chen			P	
26649	C Phytotoxicity <i>Phytotoxicity</i>	Begonia <i>Begonia sp.</i>	QRD 400 <i>Not specified</i>	Greenhouse	2007	LA	Chen			P	
26650	C Phytotoxicity <i>Phytotoxicity</i>	Calibrachoa <i>Calibrachoa sp.</i>	QRD 400 <i>Not specified</i>	Greenhouse	2007	LA	Chen			P	
26626	C Phytotoxicity <i>Phytotoxicity</i>	Chrysanthemum <i>Dendranthema sp.</i>	QRD 400 <i>Not specified</i>	Greenhouse	2007	LA	Chen			O	
26651	C Phytotoxicity <i>Phytotoxicity</i>	Pinks <i>Dianthus sp.</i>	QRD 400 <i>Not specified</i>	Greenhouse	2007	LA	Chen			P	
26627	C Phytotoxicity <i>Phytotoxicity</i>	New Guinea Impatiens <i>Impatiens New Guinea hyb</i>	QRD 400 <i>Not specified</i>	Greenhouse	2007	LA	Chen			O	
26625	C Phytotoxicity <i>Phytotoxicity</i>	Geranium <i>Pelargonium sp.</i>	QRD 400 <i>Not specified</i>	Greenhouse	2007	LA	Chen			O	
26628	C Phytotoxicity <i>Phytotoxicity</i>	Petunia <i>Petunia sp.</i>	QRD 400 <i>Not specified</i>	Greenhouse	2007	LA	Chen			O	
26629	C Phytotoxicity <i>Phytotoxicity</i>	Periwinkle <i>Vinca sp.</i>	QRD 400 <i>Not specified</i>	Greenhouse	2007	LA	Chen			O	

Scale Efficacy

Printed: 9/23/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26720 C	Calico Scale <i>Eulecanium cerasorum</i>	TBD <i>TBD</i>	Safari 20SG <i>Dinotefuran</i>	Commercial Lan	2007	KY	Potter			C	9/5/2007 9/5/2007
<i>Trial Results: Excellent control</i>											
26829 C	Euonymus Scale <i>Unaspis euonymi</i>	TBD <i>TBD</i>	BYI 8330 240SC <i>Spirotetramat</i>	Field In-Ground	2007	OH	Nielsen			P	
26683 C	Euonymus Scale <i>Unaspis euonymi</i>	TBD <i>TBD</i>	Safari 20SG <i>Dinotefuran</i>	Field In-Ground	2007	OH	Nielsen			P	

Seed Treatment - Aphids & Leps

Printed: 9/23/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26723 C	TBD <i>TBD</i>	Ornamental Cabbage, Orna <i>Brassica sp.</i>	Aria 50SG <i>Flonicamid</i>	Greenhouse	2007	TX	Ludwig			P	
26727 C	TBD <i>TBD</i>	Ornamental Cabbage, Orna <i>Brassica sp.</i>	BAS 350i <i>Fipronil</i>	Greenhouse	2007	TX	Ludwig			P	
26724 C	TBD <i>TBD</i>	Ornamental Cabbage, Orna <i>Brassica sp.</i>	Celero 16WSG <i>Clothianidin</i>	Greenhouse	2007	TX	Ludwig			P	
26726 C	TBD <i>TBD</i>	Ornamental Cabbage, Orna <i>Brassica sp.</i>	Conserve SC <i>Spinosad</i>	Greenhouse	2007	TX	Ludwig			P	
26725 C	TBD <i>TBD</i>	Ornamental Cabbage, Orna <i>Brassica sp.</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Greenhouse	2007	TX	Ludwig			P	

Spirotetramat Crop Safety

Printed: 9/23/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26952	C Phytotoxicity <i>Phytotoxicity</i>	Begonia <i>Begonia sp.</i>	BYI 8330 240SC <i>Spirotetramat</i>	Greenhouse	2007	LA	Chen			P	
					2007	TX	Ludwig			P	
26954	C Phytotoxicity <i>Phytotoxicity</i>	Chrysanthemum <i>Dendranthema sp.</i>	BYI 8330 240SC <i>Spirotetramat</i>	Greenhouse	2007	LA	Chen			P	
26953	C Phytotoxicity <i>Phytotoxicity</i>	Carnation <i>Dianthus caryophyllus</i>	BYI 8330 240SC <i>Spirotetramat</i>	Greenhouse	2007	LA	Chen			P	
26960	C Phytotoxicity <i>Phytotoxicity</i>	Balsam <i>Impatiens sp.</i>	BYI 8330 240SC <i>Spirotetramat</i>	Greenhouse	2007	LA	Chen			P	
					2007	TX	Ludwig			P	
26973	C Phytotoxicity <i>Phytotoxicity</i>	Magnolia <i>Magnolia sp.</i>	BYI 8330 240SC <i>Spirotetramat</i>	Field Container	2007	LA	Chen			P	
26957	C Phytotoxicity <i>Phytotoxicity</i>	Geranium <i>Pelargonium sp.</i>	BYI 8330 240SC <i>Spirotetramat</i>	Greenhouse	2007	TX	Ludwig			P	
26965	C Phytotoxicity <i>Phytotoxicity</i>	Petunia <i>Petunia sp.</i>	BYI 8330 240SC <i>Spirotetramat</i>	Greenhouse	2007	TX	Ludwig			P	
26963	C Phytotoxicity <i>Phytotoxicity</i>	Marigold <i>Tagetes sp.</i>	BYI 8330 240SC <i>Spirotetramat</i>	Greenhouse	2007	TX	Ludwig			P	
26969	C Phytotoxicity <i>Phytotoxicity</i>	Wishbone Flower <i>Torenia sp.</i>	BYI 8330 240SC <i>Spirotetramat</i>	Greenhouse	2007	LA	Chen			P	
26970	C Phytotoxicity <i>Phytotoxicity</i>	Vervain <i>Verbena sp.</i>	BYI 8330 240SC <i>Spirotetramat</i>	Greenhouse	2007	TX	Ludwig			P	
26974	C Phytotoxicity <i>Phytotoxicity</i>	Arrowwood <i>Viburnum sp.</i>	BYI 8330 240SC <i>Spirotetramat</i>	Field Container	2007	LA	Chen			P	
26971	C Phytotoxicity <i>Phytotoxicity</i>	Periwinkle <i>Vinca sp.</i>	BYI 8330 240SC <i>Spirotetramat</i>	Greenhouse	2007	TX	Ludwig			P	
26964	C Phytotoxicity <i>Phytotoxicity</i>	Pansy <i>Viola sp.</i>	BYI 8330 240SC <i>Spirotetramat</i>	Greenhouse	2007	LA	Chen			P	
26972	C Phytotoxicity <i>Phytotoxicity</i>	Zinnia <i>Zinnia sp.</i>	BYI 8330 240SC <i>Spirotetramat</i>	Greenhouse	2007	TX	Ludwig			P	

Thrips Efficacy

Printed: 9/23/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
25275	C	Western Flower Thrips <i>Frankliniella occidentali</i>	Hardy Mum <i>Dendranthema x morifolium</i>	Pylon <i>Chlorfenapyr</i>	Greenhouse	1999	OH	Lindquist	'Bright Stephanie'	C	3/10/2000 8/24/2001
26689	C	Western Flower Thrips <i>Frankliniella occidentali</i>	Transvaal Daisy <i>Gerbera sp.</i>	Allectus SC <i>Bifenthrin + Imidacloprid</i>	Greenhouse	2006	CA	Parrella		C	7/18/2007
26125	C	Western Flower Thrips <i>Frankliniella occidentali</i>	Transvaal Daisy <i>Gerbera sp.</i>	Aria 50SG <i>Fonicamid</i>	Greenhouse	2006	CA	Parrella		C	7/18/2007
						2006	OH	Canas		C	10/5/2006
26121	N	Western Flower Thrips <i>Frankliniella occidentali</i>	Transvaal Daisy <i>Gerbera sp.</i>	BAS 320i <i>Metaflumizone</i>	Greenhouse	2006	OH	Canas		C	10/5/2006
26129	A	Western Flower Thrips <i>Frankliniella occidentali</i>	Transvaal Daisy <i>Gerbera sp.</i>	BYI 8330 240SC <i>Spirotetramat</i>	Greenhouse	2006	CA	Parrella		C	7/18/2007
						2006	OH	Canas		C	10/5/2006
						2007	CA	Parrella		P	
26124	C	Western Flower Thrips <i>Frankliniella occidentali</i>	Transvaal Daisy <i>Gerbera sp.</i>	Celero 16WSG <i>Clothianidin</i>	Greenhouse	2006	CA	Parrella		C	7/18/2007
						2006	OH	Canas		C	10/5/2006
26128	N	Western Flower Thrips <i>Frankliniella occidentali</i>	Transvaal Daisy <i>Gerbera sp.</i>	Conserve SC <i>Spinosad</i>	Greenhouse	2006	CA	Parrella		C	7/18/2007
						2006	CA	Parrella		C	7/18/2007
						2006	OH	Canas		C	10/5/2006
						2007	CA	Parrella		P	
26122	C	Western Flower Thrips <i>Frankliniella occidentali</i>	Transvaal Daisy <i>Gerbera sp.</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Greenhouse	2006	CA	Parrella		P	
						2006	OH	Canas		C	10/5/2006
26055	A	Western Flower Thrips <i>Frankliniella occidentali</i>	Transvaal Daisy <i>Gerbera sp.</i>	Flagship 25WG <i>Thiamethoxam</i>	Greenhouse	2006	CA	Parrella		C	7/18/2007
						2007	CA	Parrella		P	
26975	N	Western Flower Thrips <i>Frankliniella occidentali</i>	Transvaal Daisy <i>Gerbera sp.</i>	Mesurool 75-W <i>Methicarb</i>	Greenhouse	2006	CA	Parrella		C	7/18/2007
						2007	CA	Parrella		P	
26976	A	Western Flower Thrips <i>Frankliniella occidentali</i>	Transvaal Daisy <i>Gerbera sp.</i>	Metarhizium anisoplia <i>Metarhizium anisopliae strain F52</i>	Greenhouse	2007	CA	Parrella		P	
26126	N	Western Flower Thrips <i>Frankliniella occidentali</i>	Transvaal Daisy <i>Gerbera sp.</i>	Overture <i>Pyridalyl</i>	Greenhouse	2006	OH	Canas		C	10/5/2006
						2007	CA	Parrella		P	
						2007	MS	Gu		P	
26123	C	Western Flower Thrips <i>Frankliniella occidentali</i>	Transvaal Daisy <i>Gerbera sp.</i>	Pylon <i>Chlorfenapyr</i>	Greenhouse	2006	CA	Parrella		C	7/18/2007
						2006	OH	Canas		C	10/5/2006
26127	C	Western Flower Thrips <i>Frankliniella occidentali</i>	Transvaal Daisy <i>Gerbera sp.</i>	S1812 35WP VC1638 <i>Pyridalyl</i>	Greenhouse	2006	OH	Canas		C	10/5/2006

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26130 A	Western Flower Thrips <i>Frankliniella occidentali</i>	Transvaal Daisy <i>Gerbera sp.</i>	Tolfenpyrad (Nichino) <i>Tolfenpyrad</i>	Greenhouse	2006	CA	Parrella			C	7/18/2007
					2006	OH	Canas			C	10/5/2006
					2007	CA	Parrella			P	
26688 C	Western Flower Thrips <i>Frankliniella occidentali</i>	Transvaal Daisy <i>Gerbera sp.</i>	TriCon (BW 420) <i>BW 420</i>	Greenhouse	2006	CA	Parrella			C	7/18/2007
26061 C	Western Flower Thrips <i>Frankliniella occidentali</i>	Transvaal Daisy <i>Gerbera sp.</i>	TriStar 30SG <i>Acetamiprid</i>	Greenhouse	2006	CA	Parrella			C	7/18/2007
					2006	CA	Parrella			C	7/18/2007
26998 C	Western Flower Thrips <i>Frankliniella occidentali</i>	New Guinea Impatiens <i>Impatiens New Guinea hyb</i>	Aria 50SG <i>Fonicamid</i>	Greenhouse	2006	LA	Chen			C	8/3/2007
27001 A	Western Flower Thrips <i>Frankliniella occidentali</i>	New Guinea Impatiens <i>Impatiens New Guinea hyb</i>	BYI 8330 240SC <i>Spirotetramat</i>	Greenhouse	2006	LA	Chen			C	8/3/2007
27002 C	Western Flower Thrips <i>Frankliniella occidentali</i>	New Guinea Impatiens <i>Impatiens New Guinea hyb</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Greenhouse	2006	LA	Chen			C	8/3/2007
26821 A	Western Flower Thrips <i>Frankliniella occidentali</i>	New Guinea Impatiens <i>Impatiens New Guinea hyb</i>	Flagship 25WG <i>Thiamethoxam</i>	Greenhouse	2006	LA	Chen			C	8/3/2007
					2007	OH	Reding	Foliar		P	
					2007	OH	Reding	Drench		P	
27000 C	Western Flower Thrips <i>Frankliniella occidentali</i>	New Guinea Impatiens <i>Impatiens New Guinea hyb</i>	Overture <i>Pyridalyl</i>	Greenhouse	2006	LA	Chen			C	8/3/2007
25276 C	Western Flower Thrips <i>Frankliniella occidentali</i>	New Guinea Impatiens <i>Impatiens New Guinea hyb</i>	Pylon <i>Chlorfenapyr</i>	Greenhouse	1999	OH	Lindquist		'Riviera Deep Salmon'	C	3/10/2000 8/24/2001
					2006	LA	Chen			P	
26999 C	Western Flower Thrips <i>Frankliniella occidentali</i>	New Guinea Impatiens <i>Impatiens New Guinea hyb</i>	S1812 35WP VC1638 <i>Pyridalyl</i>	Greenhouse	2006	LA	Chen			C	8/3/2007
26822 A	Western Flower Thrips <i>Frankliniella occidentali</i>	New Guinea Impatiens <i>Impatiens New Guinea hyb</i>	Safari 20SG <i>Dinotefuran</i>	Greenhouse	2007	OH	Reding	Drench		P	
					2007	OH	Reding	Foliar		P	
26185 A	Western Flower Thrips <i>Frankliniella occidentali</i>	New Guinea Impatiens <i>Impatiens New Guinea hyb</i>	Tolfenpyrad (Nichino) <i>Tolfenpyrad</i>	Greenhouse	2006	LA	Chen			C	8/3/2007
					2007	OH	Reding			P	
26111 C	Western Flower Thrips <i>Frankliniella occidentali</i>	Moss Rose <i>Portulaca sp.</i>	Aria 50SG <i>Fonicamid</i>	Greenhouse	2006	TX	Ludwig	Foliar		C	4/2/2007
<i>Trial Results: No efficacy at 120 g per 100 gal</i>											
26109 N	Western Flower Thrips <i>Frankliniella occidentali</i>	Moss Rose <i>Portulaca sp.</i>	BAS 320i <i>Metaflumizone</i>	Greenhouse	2006	TX	Ludwig	Foliar		C	4/2/2007
<i>Trial Results: No efficacy at 16 fl oz per 100 gal</i>											
26110 A	Western Flower Thrips <i>Frankliniella occidentali</i>	Moss Rose <i>Portulaca sp.</i>	BYI 8330 240SC <i>Spirotetramat</i>	Greenhouse	2006	TX	Ludwig	Foliar		C	4/2/2007
<i>Trial Results: Good efficacy 14 DAT at 1.7 fl oz per 100 gal; trial ended prematurely</i>											

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26112	C	Western Flower Thrips <i>Frankliniella occidentali</i>	Moss Rose <i>Portulaca sp.</i>	Celero 16WSG <i>Clothianidin</i>	Greenhouse	2006	TX	Ludwig	Drench	C	4/2/2007
<i>Trial Results: Excellent efficacy 14 DAT at 4 oz per 100 gal; trial ended prematurely</i>											
26113	C	Western Flower Thrips <i>Frankliniella occidentali</i>	Moss Rose <i>Portulaca sp.</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Greenhouse	2006	TX	Ludwig	Foliar	C	4/2/2007
<i>Trial Results: No significant efficacy 14 DAT at 20 fl oz per 100 gal; trial ended prematurely</i>											
26114	C	Western Flower Thrips <i>Frankliniella occidentali</i>	Moss Rose <i>Portulaca sp.</i>	DPX-HGW86 <i>DPX-HGW86</i>	Greenhouse	2006	TX	Ludwig	Foliar	C	4/2/2007
<i>Trial Results: Excellent and good efficacy 14 DAT at 40 fl oz per 100 gal with and w/o surfactant; trial ended prematurely</i>											
26115	A	Western Flower Thrips <i>Frankliniella occidentali</i>	Moss Rose <i>Portulaca sp.</i>	Flagship 25WG <i>Thiamethoxam</i>	Greenhouse	2006	TX	Ludwig	Drench	C	4/2/2007
<i>Trial Results: Excellent efficacy 14 DAT at 4 oz per 100 gal; trial ended prematurely</i>											
					Greenhouse	2006	TX	Ludwig	Foliar	C	4/2/2007
<i>Trial Results: Excellent efficacy 14 DAT at 4 oz per 100 gal; trial ended prematurely</i>											
26116	N	Western Flower Thrips <i>Frankliniella occidentali</i>	Moss Rose <i>Portulaca sp.</i>	Overture <i>Pyridalyl</i>	Greenhouse	2006	TX	Ludwig	Foliar	C	4/2/2007
<i>Trial Results: Excellent efficacy 14 DAT at 8 and 12 oz per 100 gal; trial ended prematurely</i>											
26120	C	Western Flower Thrips <i>Frankliniella occidentali</i>	Moss Rose <i>Portulaca sp.</i>	S1812 35WP VC1638 <i>Pyridalyl</i>	Greenhouse	2006	TX	Ludwig	Foliar	C	4/2/2007
<i>Trial Results: Excellent efficacy 14 DAT at 8 and 12 oz per 100 gal; trial ended prematurely</i>											
26118	A	Western Flower Thrips <i>Frankliniella occidentali</i>	Moss Rose <i>Portulaca sp.</i>	Tolfenpyrad (Nichino) <i>Tolfenpyrad</i>	Greenhouse	2006	TX	Ludwig	Foliar	C	4/2/2007
<i>Trial Results: Excellent efficacy 14 DAT at 21 fl oz per 100 gal; trial ended prematurely</i>											
26119	C	Western Flower Thrips <i>Frankliniella occidentali</i>	Moss Rose <i>Portulaca sp.</i>	TriStar 30SG <i>Acetamiprid</i>	Greenhouse	2006	TX	Ludwig	Foliar	C	4/2/2007
<i>Trial Results: Excellent efficacy 14 DAT at 8 oz per 100 gal; trial ended prematurely</i>											
26684	N	Western Flower Thrips <i>Frankliniella occidentali</i>	Rose <i>Rosa sp.</i>	Avid 0.15EC <i>Abamectin</i>	Greenhouse	2006	WA	Walsh		C	4/4/2007
26041	N	Western Flower Thrips <i>Frankliniella occidentali</i>	Rose <i>Rosa sp.</i>	BAS 320i <i>Metaflumizone</i>	Greenhouse	2006	WA	Walsh		P	
26686	A	Western Flower Thrips <i>Frankliniella occidentali</i>	Rose <i>Rosa sp.</i>	BYI 8330 240SC <i>Spirotetramat</i>	Greenhouse	2006	WA	Walsh		C	4/4/2007
26042	C	Western Flower Thrips <i>Frankliniella occidentali</i>	Rose <i>Rosa sp.</i>	Celero 16WSG <i>Clothianidin</i>	Greenhouse	2006	WA	Walsh		C	
26685	N	Western Flower Thrips <i>Frankliniella occidentali</i>	Rose <i>Rosa sp.</i>	Conserve SC <i>Spinosad</i>	Greenhouse	2006	WA	Walsh		C	4/4/2007
26046	C	Western Flower Thrips <i>Frankliniella occidentali</i>	Rose <i>Rosa sp.</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Greenhouse	2006	WA	Walsh		P	
26043	A	Western Flower Thrips <i>Frankliniella occidentali</i>	Rose <i>Rosa sp.</i>	Flagship 25WG <i>Thiamethoxam</i>	Greenhouse	2006	WA	Walsh		C	

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26047	N Western Flower Thrips <i>Frankliniella occidentali</i>	Rose <i>Rosa sp.</i>	Overture <i>Pyridalyl</i>	Greenhouse	2006	WA	Walsh			P	
26044	C Western Flower Thrips <i>Frankliniella occidentali</i>	Rose <i>Rosa sp.</i>	Pylon <i>Chlorfenapyr</i>	Greenhouse	2006	WA	Walsh			C	4/4/2007
26045	A Western Flower Thrips <i>Frankliniella occidentali</i>	Rose <i>Rosa sp.</i>	Tolfenpyrad (Nichino) <i>Tolfenpyrad</i>	Greenhouse	2006	WA	Walsh			C	4/4/2007
26048	C Western Flower Thrips <i>Frankliniella occidentali</i>	Rose <i>Rosa sp.</i>	TriStar 30SG <i>Acetamiprid</i>	Greenhouse	2006	WA	Walsh			C	
0	C Western Flower Thrips <i>Frankliniella occidentali</i>	TBD <i>TBD</i>	Aria 50SG <i>Flonicamid</i>	Greenhouse	2006	NY	Sanderson			P	
0	N Western Flower Thrips <i>Frankliniella occidentali</i>	TBD <i>TBD</i>	BAS 320i <i>Metaflumizone</i>	Greenhouse	2006	NY	Sanderson			P	
0	A Western Flower Thrips <i>Frankliniella occidentali</i>	TBD <i>TBD</i>	BYI 8330 240SC <i>Spirotetramat</i>	Greenhouse	2006 2007 2007	NY MI OH	Sanderson Davis Canas			P P P	
0	C Western Flower Thrips <i>Frankliniella occidentali</i>	TBD <i>TBD</i>	Celero 16WSG <i>Clothianidin</i>	Greenhouse	2006	NY	Sanderson			P	
0	C Western Flower Thrips <i>Frankliniella occidentali</i>	TBD <i>TBD</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Greenhouse	2006	NY	Sanderson			P	
0	B Western Flower Thrips <i>Frankliniella occidentali</i>	TBD <i>TBD</i>	Marathon Ultra <i>Imidacloprid + cyfluthrin</i>	Greenhouse	2007 2007 2007	KS LA OH	Cloyd Chen Canas			P P P	
0	C Western Flower Thrips <i>Frankliniella occidentali</i>	TBD <i>TBD</i>	Pylon <i>Chlorfenapyr</i>	Greenhouse	2006 2007 2007	NY LA OH	Sanderson Chen Canas			P P P	
26710	C Cuban Laurel Thrips <i>Gynaikothrips ficorum</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	BotaniGard <i>Beauveria bassiana</i>	Greenhouse	2006	MS	Held			C	1/30/2007
26711	C Cuban Laurel Thrips <i>Gynaikothrips ficorum</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	MilStop <i>Potassium bicarbonate</i>	Greenhouse	2006	MS	Held			C	1/30/2007
26709	C Gynaikothrips uzeli <i>Gynaikothrips uzeli</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	Allectus SC <i>Bifenthrin + Imidacloprid</i>	Greenhouse	2006	MS	Held			C	1/30/2007
26049	C Gynaikothrips uzeli <i>Gynaikothrips uzeli</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	Aria 50SG <i>Flonicamid</i>	Greenhouse	2006	MS	Held			C	1/30/2007

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25466	N Gynaikothrips uzeli <i>Gynaikothrips uzeli</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	Avid 0.15EC <i>Abamectin</i>	Greenhouse	2005	MS	Held			C	10/28/2005
25468	C Gynaikothrips uzeli <i>Gynaikothrips uzeli</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	Azatin XL <i>Azadirachtin</i>	Greenhouse	2005 2006	MS MS	Held Held			C C	10/28/2005 1/30/2007
26051	C Gynaikothrips uzeli <i>Gynaikothrips uzeli</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	BYI 8330 240SC <i>Spirotetramat</i>	Greenhouse	2006	MS	Held			C	1/30/2007
25472	C Gynaikothrips uzeli <i>Gynaikothrips uzeli</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	Celero 16WSG <i>Clothianidin</i>	Greenhouse	2005	MS	Held			C	10/28/2005
25041	C Gynaikothrips uzeli <i>Gynaikothrips uzeli</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	Conserve SC <i>Spinosad</i>	Greenhouse	2005	MS	Held			C	10/28/2005
25464	C Gynaikothrips uzeli <i>Gynaikothrips uzeli</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	Discus <i>Imidacloprid + Cyfluthrin</i>	Greenhouse	2005	MS	Held			C	10/28/2005
26052	C Gynaikothrips uzeli <i>Gynaikothrips uzeli</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Greenhouse	2006	MS	Held			C	1/30/2007
25470	C Gynaikothrips uzeli <i>Gynaikothrips uzeli</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	Dursban 50 W <i>Chlorpyrifos</i>	Greenhouse	2005	MS	Held			C	10/28/2005
25038	C Gynaikothrips uzeli <i>Gynaikothrips uzeli</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	Flagship 25WG <i>Thiamethoxam</i>	Greenhouse	2005	MS	Held			C	10/28/2005
25465	C Gynaikothrips uzeli <i>Gynaikothrips uzeli</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	Marathon 1% granular <i>Imidacloprid</i>	Greenhouse	2005	MS	Held			C	10/28/2005
25040	C Gynaikothrips uzeli <i>Gynaikothrips uzeli</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	Overture <i>Pyridalyl</i>	Greenhouse	2005	MS	Held			C	10/28/2005
25037	C Gynaikothrips uzeli <i>Gynaikothrips uzeli</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	Safari 20SG <i>Dinotefuran</i>	Greenhouse	2005	MS	Held			C	10/28/2005
25475	C Gynaikothrips uzeli <i>Gynaikothrips uzeli</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	SaferSoap	Greenhouse	2005 2006	MS MS	Held Held			C C	10/28/2005 1/30/2007
25469	C Gynaikothrips uzeli <i>Gynaikothrips uzeli</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	Sevin SL <i>Carbaryl</i>	Greenhouse	2005	MS	Held			C	10/28/2005
26713	C Gynaikothrips uzeli <i>Gynaikothrips uzeli</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	Surround WP <i>Kaolin Clay</i>	Greenhouse	2006	MS	Held			C	1/30/2007
25467	C Gynaikothrips uzeli <i>Gynaikothrips uzeli</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	Talstar NF <i>Bifenthrin</i>	Greenhouse	2005 2006	MS MS	Held Held			C C	10/28/2005 1/30/2007
25471	C Gynaikothrips uzeli <i>Gynaikothrips uzeli</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	Tempo Ultra <i>Cyfluthrin</i>	Greenhouse	2005	MS	Held			C	10/28/2005

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26712	C Gynaikothrips uzeli <i>Gynaikothrips uzeli</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	TriCon (BW 420) <i>BW 420</i>	Greenhouse	2006	MS	Held			C	1/30/2007
25039	C Gynaikothrips uzeli <i>Gynaikothrips uzeli</i>	Weeping Fig, Benjamin Tr <i>Ficus benjamina / nitida</i>	TriStar 70WSP <i>Acetamiprid</i>	Greenhouse	2005	MS	Held			C	10/28/2005
26676	A Chilli Thrips, Yellow Te <i>Scirtothrips dorsalis</i>	Rose <i>Rosa sp.</i>	BYI 8330 240SC <i>Spirotetramat</i>	Greenhouse	2007	TX	Ludwig			P	
26677	A Chilli Thrips, Yellow Te <i>Scirtothrips dorsalis</i>	Rose <i>Rosa sp.</i>	Flagship 25WG <i>Thiamethoxam</i>	Greenhouse	2007	TX	Ludwig			P	
26747	C Chilli Thrips, Yellow Te <i>Scirtothrips dorsalis</i>	Rose <i>Rosa sp.</i>	Marathon Ultra <i>Imidacloprid + cyfluthrin</i>	Greenhouse	2007	TX	Ludwig			P	
26678	A Chilli Thrips, Yellow Te <i>Scirtothrips dorsalis</i>	Rose <i>Rosa sp.</i>	Metarhizium anisoplia <i>Metarhizium anisopliae strain F52</i>	Greenhouse	2007	TX	Ludwig			P	
26680	A Chilli Thrips, Yellow Te <i>Scirtothrips dorsalis</i>	Rose <i>Rosa sp.</i>	Overture <i>Pyridalyl</i>	Greenhouse	2007	TX	Ludwig			P	
26746	C Chilli Thrips, Yellow Te <i>Scirtothrips dorsalis</i>	Rose <i>Rosa sp.</i>	Pylon <i>Chlorfenapyr</i>	Greenhouse	2007	TX	Ludwig			P	
26682	A Chilli Thrips, Yellow Te <i>Scirtothrips dorsalis</i>	Rose <i>Rosa sp.</i>	QRD 400 <i>Not specified</i>	Greenhouse	2007	TX	Ludwig			P	
26681	A Chilli Thrips, Yellow Te <i>Scirtothrips dorsalis</i>	Rose <i>Rosa sp.</i>	Safari 20SG <i>Dinotefuran</i>	Greenhouse	2007	TX	Ludwig			P	
26679	A Chilli Thrips, Yellow Te <i>Scirtothrips dorsalis</i>	Rose <i>Rosa sp.</i>	Tolfenpyrad (Nichino) <i>Tolfenpyrad</i>	Greenhouse	2007	TX	Ludwig			P	
26751	C Chilli Thrips, Yellow Te <i>Scirtothrips dorsalis</i>	Rose <i>Rosa sp.</i>	TriStar 30SG <i>Acetamiprid</i>	Greenhouse	2007	TX	Ludwig			P	
0	A TBD <i>TBD</i>	TBD <i>TBD</i>	Flagship 25WG <i>Thiamethoxam</i>	Greenhouse	2006	NY	Sanderson			P	
					2007	MI	Davis			P	
0	A TBD <i>TBD</i>	TBD <i>TBD</i>	Metarhizium anisoplia <i>Metarhizium anisopliae strain F52</i>	TBD	2007	KS	Cloyd			P	
					2007	LA	Chen			P	
					2007	MI	Davis			P	
					2007	MS	Gu			P	
					2007	OH	Canas			P	

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0	C	TBD <i>TBD</i>	TBD <i>TBD</i>	Overture <i>Pyridalyl</i>	Greenhouse	2006	NY	Sanderson		P	
					2007	KS	Cloyd			P	
					2007	MI	Davis			P	
					2007	OH	Canas			P	
0	B	TBD <i>TBD</i>	TBD <i>TBD</i>	QRD 400 <i>Not specified</i>	Greenhouse	2007	KS	Cloyd		P	
					2007	LA	Chen			P	
0	C	TBD <i>TBD</i>	TBD <i>TBD</i>	Safari 20SG <i>Dinotefuran</i>	Greenhouse	2007	OH	Canas		P	
0	A	TBD <i>TBD</i>	TBD <i>TBD</i>	Tolfenpyrad (Nichino) <i>Tolfenpyrad</i>	Greenhouse	2006	NY	Sanderson		P	
					2007	MI	Davis			P	
0	C	TBD <i>TBD</i>	TBD <i>TBD</i>	TriStar 30SG <i>Acetamiprid</i>	Greenhouse	2006	NY	Sanderson		P	
25561	C	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	Allectus SC <i>Bifenthrin + Imidacloprid</i>	Cold Storage	2006	MI	Davis	Dipped in solution <i>Trial Results: Excellent efficacy at 21.3 oz per 100 gal</i>	C	2/2/2007
25565	C	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	Aria 50SG <i>Flonicamid</i>	Cold Storage	2006	MI	Davis	Dipped in solution <i>Trial Results: Virtually no efficacy at 100 oz per 100 gal; significant stunting</i>	C	2/2/2007
25560	N	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	Avid 0.15EC <i>Abamectin</i>	Cold Storage	2006	MI	Davis	Dipped in solution <i>Trial Results: Excellent efficacy at 8 oz per 100 gal</i>	C	2/2/2007
25562	N	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	Azatin XL <i>Azadirachtin</i>	Cold Storage	2006	MI	Davis	Dipped in solution <i>Trial Results: Good efficacy at 16 oz per 100 gal</i>	C	2/2/2007
25692	A	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	BYI 8330 240SC <i>Spirotetramat</i>	Cold Storage	2006	MI	Davis	Dipped in solution <i>Trial Results: Excellent efficacy at 1.7 oz per 100 gal</i>	C	2/2/2007
26674	C	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	Carzol	Cold Storage	2006	MI	Davis	Dipped in solution <i>Trial Results: Good efficacy at 1 lb per 100 gal; significant stunting</i>	C	2/2/2007
25550	C	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	Celero 16WSG <i>Clothianidin</i>	Cold Storage	2006	MI	Davis	Dipped in solution <i>Trial Results: Excellent efficacy at 4 oz per 100 gal; significant stunting</i>	C	2/2/2007
25688	N	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	Conserve SC <i>Spinosad</i>	Cold Storage	2006	MI	Davis	Dipped in solution <i>Trial Results: Excellent efficacy at 11 oz per 100 gal; significant stunting</i>	C	2/2/2007
25568	N	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	Diazinon 50W <i>Diazinon</i>	Cold Storage	2006	MI	Davis	Dipped in solution <i>Trial Results: Diazinon 4E at 3 pt per 100 gal - excellent efficacy</i>	C	2/2/2007
25691	C	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	Discus <i>Imidacloprid + Cyfluthrin</i>	Cold Storage	2006	MI	Davis	Dipped in solution <i>Trial Results: Excellent efficacy at 25 oz per 100 gal</i>	C	2/2/2007

Key: Priorities A, B, and C are researchable; N is not researchable - these may be completed studies or those with Standards. Trial Status: P = Planned, O = Ongoing, C = Complete, X = Cancelled, ? = Unknown

Thrips Efficacy

Printed: 9/23/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
25551 C	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	Flagship 25WG <i>Thiamethoxam</i>	Cold Storage	2006	MI	Davis	Dipped in solution		C	2/2/2007
<i>Trial Results: Excellent efficacy at 2 oz per 100 gal</i>											
26675 C	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	Marathon II <i>Imidacloprid</i>	Cold Storage	2006	MI	Davis	Dipped in solution		C	2/2/2007
<i>Trial Results: Merit 75WP at 16 gram per 100 gal - excellent efficacy</i>											
25689 N	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	Mesurool 75-W <i>Methicarb</i>	Cold Storage	2006	MI	Davis	Dipped in solution		C	2/2/2007
<i>Trial Results: Excellent efficacy at 1 lb per 100 gal</i>											
25563 C	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	MilStop <i>Potassium bicarbonate</i>	Cold Storage	2006	MI	Davis			C	2/2/2007
25556 N	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	NNI-0101 <i>NNI-0101</i>	Cold Storage	2006	MI	Davis	Dipped in solution		C	2/2/2007
<i>Trial Results: No efficacy at 8.41 ml per 3 gal</i>											
25567 N	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	Orthene TTO 97 <i>Acephate</i>	Cold Storage	2006	MI	Davis	Dipped in solution		C	2/2/2007
<i>Trial Results: Excellent efficacy at 8 oz per 100 gal</i>											
25558 B	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	Overture <i>Pyridalyl</i>	Cold Storage	2006	MI	Davis	Dipped in solution		C	2/2/2007
<i>Trial Results: Excellent efficacy at 8 oz per 100 gal</i>											
25559 C	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	Pedestal <i>Novaluron</i>	Cold Storage	2006	MI	Davis	Dipped in solution		C	2/2/2007
<i>Trial Results: Excellent efficacy at 8 oz per 100 gal</i>											
25552 C	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	Pylon <i>Chlorfenapyr</i>	Cold Storage	2006	MI	Davis	Dipped in solution		C	2/2/2007
<i>Trial Results: Excellent efficacy at 10 oz per 100 gal</i>											
25557 C	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	Safari 20SG <i>Dinotefuran</i>	Cold Storage	2006	MI	Davis	Dipped in solution		C	2/2/2007
<i>Trial Results: Excellent efficacy at 24 oz per 100 gal</i>											
25566 N	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	Talstar <i>Bifenthrin</i>	Cold Storage	2006	MI	Davis	Dipped in solution		C	2/2/2007
<i>Trial Results: Excellent efficacy at 21.7 oz per 100 gal</i>											
25555 A	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	Tolfenpyrad (Nichino) <i>Tolfenpyrad</i>	Cold Storage	2006	MI	Davis	Dipped in solution		C	2/2/2007
<i>Trial Results: Excellent efficacy at 9.29 ml per 3 gal</i>											
25690 B	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	TriCon (BW 420) <i>BW 420</i>	Cold Storage	2006	MI	Davis	Dipped in solution		C	2/2/2007
<i>Trial Results: Poor to fair efficacy at 1 oz per gal</i>											
25554 C	Gladiolus Thrips <i>Thrips simplex</i>	Corn Flag, Sword Lily <i>Gladiolus sp.</i>	TriStar 30SG <i>Acetamiprid</i>	Cold Storage	2006	MI	Davis	Dipped in solution		C	2/2/2007
<i>Trial Results: Excellent efficacy at 64 gram per 100 gal with or without Capsil</i>											

True Bug Efficacy

Printed: 9/23/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26851 B	Tarnished Plant Bugs <i>Lygus sp.</i>	Statice <i>Limonium sp.</i>	Aria 50SG <i>Flonicamid</i>	Field In-Ground	2007	CA	Uber		'Misty'	P	
26852 B	Tarnished Plant Bugs <i>Lygus sp.</i>	Statice <i>Limonium sp.</i>	BAS 320i <i>Metaflumizone</i>	Field In-Ground	2007	CA	Uber		'Misty'	P	
26853 B	Tarnished Plant Bugs <i>Lygus sp.</i>	Statice <i>Limonium sp.</i>	Pedestal <i>Novaluron</i>	Field In-Ground	2007	CA	Uber		'Misty'	P	
26854 B	Tarnished Plant Bugs <i>Lygus sp.</i>	Statice <i>Limonium sp.</i>	TriStar 30SG <i>Acetamiprid</i>	Field In-Ground	2007	CA	Uber		'Misty'	P	
26405 B	Tarnished Plant Bugs <i>Lygus sp.</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	Aria 50SG <i>Flonicamid</i>	Field In-Ground	2007	WA	Walsh			P	
26406 B	Tarnished Plant Bugs <i>Lygus sp.</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	BAS 320i <i>Metaflumizone</i>	Field In-Ground	2007	WA	Walsh			P	
26407 B	Tarnished Plant Bugs <i>Lygus sp.</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	Pedestal <i>Novaluron</i>	Field In-Ground	2007	WA	Walsh			P	
26408 B	Tarnished Plant Bugs <i>Lygus sp.</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	TriStar 30SG <i>Acetamiprid</i>	Field In-Ground	2007	WA	Walsh			P	

White Grub & Root Weevil Efficacy

Printed: 9/23/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26824 A	Oriental Beetle <i>Anomala orientalis</i>	Dogwood, Kousa <i>Cornus kousa</i>	Metarhizium anisoplia <i>Metarhizium anisopliae strain F52</i>	Field Container	2007	OH	Reding			P	
26823 A	Oriental Beetle <i>Anomala orientalis</i>	Dogwood, Kousa <i>Cornus kousa</i>	Safari 20SG <i>Dinotefuran</i>	Field Container	2007	OH	Reding			P	
25119 A	Oriental Beetle <i>Anomala orientalis</i>	Holly <i>Ilex sp.</i>	Celero 16WSG <i>Clothianidin</i>	Field In-Ground	2005	NJ	Freiberger			C	6/1/2006
25125 B	Oriental Beetle <i>Anomala orientalis</i>	Holly <i>Ilex sp.</i>	Discus <i>Imidacloprid + Cyfluthrin</i>	Field In-Ground	2005	NJ	Freiberger			C	6/1/2006
25123 C	Oriental Beetle <i>Anomala orientalis</i>	Holly <i>Ilex sp.</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Field In-Ground	2005	NJ	Freiberger			C	6/1/2006
25121 C	Oriental Beetle <i>Anomala orientalis</i>	Holly <i>Ilex sp.</i>	Flagship 25WG <i>Thiamethoxam</i>	Field In-Ground	2005	NJ	Freiberger			C	6/1/2006
26938 A	Oriental Beetle <i>Anomala orientalis</i>	Rhododendron <i>Rhododendron sp.</i>	BAS 320i <i>Metaflumizone</i>	Field Container	2007	NY	Gilrein			P	
26935 A	Oriental Beetle <i>Anomala orientalis</i>	Rhododendron <i>Rhododendron sp.</i>	Celero 16WSG <i>Clothianidin</i>	Field Container	2007	NY	Gilrein			P	
26936 A	Oriental Beetle <i>Anomala orientalis</i>	Rhododendron <i>Rhododendron sp.</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Field Container	2007	NY	Gilrein			P	
26941 C	Oriental Beetle <i>Anomala orientalis</i>	Rhododendron <i>Rhododendron sp.</i>	Flagship 25WG <i>Thiamethoxam</i>	Field Container	2007 2007	NY NY	Gilrein Gilrein			P P	
26940 C	Oriental Beetle <i>Anomala orientalis</i>	Rhododendron <i>Rhododendron sp.</i>	Flagship Granular <i>Thiamethoxam</i>	Field Container	2007	NY	Gilrein			P	
26939 A	Oriental Beetle <i>Anomala orientalis</i>	Rhododendron <i>Rhododendron sp.</i>	Metarhizium anisoplia <i>Metarhizium anisopliae strain F52</i>	Field Container	2007	NY	Gilrein			P	
26937 A	Oriental Beetle <i>Anomala orientalis</i>	Rhododendron <i>Rhododendron sp.</i>	Safari 20SG <i>Dinotefuran</i>	Field Container	2007	NY	Gilrein			P	
26610 A	Oriental Beetle <i>Anomala orientalis</i>	Rhododendron <i>Rhododendron sp.</i>	V-10112 2G <i>Dinotefuran</i>	Field Container	2007	NY	Gilrein			P	
26760 A	Oriental Beetle <i>Anomala orientalis</i>	Lilac, Common <i>Syringa vulgaris</i>	Celero 16WSG <i>Clothianidin</i>	Field Container	2006	OH	Reding			C	1/25/2007
26761 C	Oriental Beetle <i>Anomala orientalis</i>	Lilac, Common <i>Syringa vulgaris</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Field Container	2006	OH	Reding			C	1/25/2007

White Grub & Root Weevil Efficacy

Printed: 9/23/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
25796 A	Oriental Beetle <i>Anomala orientalis</i>	Lilac, Common <i>Syringa vulgaris</i>	Safari 20SG <i>Dinotefuran</i>	Field Container	2005	OH	Reding	Drench		C	2/6/2006
					2006	OH	Reding			C	1/25/2007
					2007	OH	Reding			P	
26070 C	Oriental Beetle <i>Anomala orientalis</i>	TBD <i>TBD</i>	Cal-Agri-50 <i>Potassium phosphate</i>	Greenhouse							
26069 A	Oriental Beetle <i>Anomala orientalis</i>	TBD <i>TBD</i>	Celero 16WSG <i>Clothianidin</i>	Greenhouse							
26067 C	Oriental Beetle <i>Anomala orientalis</i>	TBD <i>TBD</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Greenhouse							
26068 N	Oriental Beetle <i>Anomala orientalis</i>	TBD <i>TBD</i>	Marathon II <i>Imidacloprid</i>	Greenhouse							
26066 C	Oriental Beetle <i>Anomala orientalis</i>	TBD <i>TBD</i>	Metarhizium anisoplia <i>Metarhizium anisopliae strain F52</i>	Greenhouse							
26071 N	Oriental Beetle <i>Anomala orientalis</i>	TBD <i>TBD</i>	Sevin SL <i>Carbaryl</i>	Greenhouse							
25120 A	Oriental Beetle <i>Anomala orientalis</i>	Arborvitae <i>Thuja sp.</i>	Celero 16WSG <i>Clothianidin</i>	Field In-Ground	2005	NJ	Freiberger			C	6/1/2006
25126 B	Oriental Beetle <i>Anomala orientalis</i>	Arborvitae <i>Thuja sp.</i>	Discus <i>Imidacloprid + Cyfluthrin</i>	Field In-Ground	2005	NJ	Freiberger			C	6/1/2006
25124 C	Oriental Beetle <i>Anomala orientalis</i>	Arborvitae <i>Thuja sp.</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Field In-Ground	2005	NJ	Freiberger			C	6/1/2006
25122 C	Oriental Beetle <i>Anomala orientalis</i>	Arborvitae <i>Thuja sp.</i>	Flagship 25WG <i>Thiamethoxam</i>	Field In-Ground	2005	NJ	Freiberger			C	6/1/2006
26065 N	Black Vine Weevil - gru <i>Otiorhynchus sulcatus</i> -	False Spirea <i>Astilbe sp.</i>	Marathon II <i>Imidacloprid</i>	Greenhouse							
26064 C	Black Vine Weevil - gru <i>Otiorhynchus sulcatus</i> -	False Spirea <i>Astilbe sp.</i>	Metarhizium anisoplia <i>Metarhizium anisopliae strain F52</i>	Greenhouse							
26063 A	Black Vine Weevil - gru <i>Otiorhynchus sulcatus</i> -	False Spirea <i>Astilbe sp.</i>	Safari 20SG <i>Dinotefuran</i>	Greenhouse							
26471 A	Black Vine Weevil - gru <i>Otiorhynchus sulcatus</i> -	Strawberry (Non-Bearing) <i>Fragaria sp.</i>	BAS 320i <i>Metaflumizone</i>	Field Container	2007	CT	Cowles	Pre-Plant Soil Incorporation		C	4/18/2007 4/18/2007
					2007	CT	Cowles			Drench - Curative	C

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White Grub & Root Weevil Efficacy

Printed: 9/23/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26468	A Black Vine Weevil - gru <i>Otiorhynchus sulcatus</i> -	Strawberry (Non-Bearing) <i>Fragaria sp.</i>	Celero 16WSG <i>Clothianidin</i>	Field Container	2007	CT	Cowles	Drench - Curative		C	4/18/2007 4/18/2007
26857	B Black Vine Weevil - gru <i>Otiorhynchus sulcatus</i> -	Strawberry (Non-Bearing) <i>Fragaria sp.</i>	Discus <i>Imidacloprid + Cyfluthrin</i>	Field Container	2007	CT	Cowles	Drench - Curative		C	4/18/2007 4/18/2007
26469	A Black Vine Weevil - gru <i>Otiorhynchus sulcatus</i> -	Strawberry (Non-Bearing) <i>Fragaria sp.</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Field Container	2007	CT	Cowles	Pre-Plant Soil Incorporation Drench - Curative		C	4/18/2007 4/18/2007 4/18/2007 4/18/2007
26858	C Black Vine Weevil - gru <i>Otiorhynchus sulcatus</i> -	Strawberry (Non-Bearing) <i>Fragaria sp.</i>	Flagship 25WG <i>Thiamethoxam</i>	Field Container	2007	CT	Cowles	Soil Incorporation		C	4/18/2007 4/18/2007
26467	A Black Vine Weevil - gru <i>Otiorhynchus sulcatus</i> -	Strawberry (Non-Bearing) <i>Fragaria sp.</i>	Metarhizium anisoplia <i>Metarhizium anisopliae strain F52</i>	Field Container	2007	CT	Cowles	Pre-Plant Soil Incorporation		C	4/18/2007 4/18/2007
26470	A Black Vine Weevil - gru <i>Otiorhynchus sulcatus</i> -	Strawberry (Non-Bearing) <i>Fragaria sp.</i>	Safari 20SG <i>Dinotefuran</i>	Field Container	2007	CT	Cowles	Drench - Curative		C	4/18/2007 4/18/2007
26856	N Black Vine Weevil - gru <i>Otiorhynchus sulcatus</i> -	Strawberry (Non-Bearing) <i>Fragaria sp.</i>	Talstar NG <i>Bifenthrin</i>	Field Container	2007	CT	Cowles	Soil Incorporation		C	4/18/2007 4/18/2007
25795	A Black Vine Weevil - gru <i>Otiorhynchus sulcatus</i> -	Spruce, White; Cat <i>Picea glauca</i>	Safari 20SG <i>Dinotefuran</i>	Field Container	2005	OH	Reding	Drench		C	2/6/2006
25200	A Black Vine Weevil - gru <i>Otiorhynchus sulcatus</i> -	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Safari 20SG <i>Dinotefuran</i>	Field Container	2004	OH	Reding	Drench	'Nova Zembla'	C	2/1/2005 2/22/2005 <i>Trial Results: Very little efficacy at 0.75, 1.5 and 3.0 lb product per 100 gal when drenched onto mature and pupating larvae; no injury at any rate.</i>
25201	A Black Vine Weevil - gru <i>Otiorhynchus sulcatus</i> -	Stonecrop <i>Sedum sp.</i>	Safari 20SG <i>Dinotefuran</i>	Field Container	2004	OH	Reding	Drench	'Vera Jameson'	C	2/1/2005 2/22/2005 <i>Trial Results: Excellent efficacy at 0.75, 1.5, and 3.0 lb product per 100 gal when drenched shortly before adults layed eggs; no injury at any rate.</i>
					2005	OH	Reding	Drench	'Vera Jameson'	C	2/6/2006 <i>Trial Results: No efficacy at 6, 12, and 24 oz product per 100 gal with drench application prior to adults laying eggs; no injury.</i>
26753	N Black Vine Weevil - gru <i>Otiorhynchus sulcatus</i> -	Stonecrop <i>Sedum spurium</i>	Celero 16WSG <i>Clothianidin</i>	Field Container	2006	OH	Reding	Drench	'Vera Jameson'	C	1/25/2007 <i>Trial Results: 0.64 oz ai per 100 gal; excellent efficacy on larvae; significantly reduced adult feeding damage; no phytotoxicity; plant significantly taller than Untreated</i>
26754	A Black Vine Weevil - gru <i>Otiorhynchus sulcatus</i> -	Stonecrop <i>Sedum spurium</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Field Container	2006	OH	Reding	Drench	'Vera Jameson'	C	1/25/2007 <i>Trial Results: 0.8 oz ai per 100 gal; excellent efficacy on larvae; no significant reduction of adult feeding damage; no phytotoxicity; plant not significantly taller than Untreated</i>
26755	A Black Vine Weevil - gru <i>Otiorhynchus sulcatus</i> -	Stonecrop <i>Sedum spurium</i>	Safari 20SG <i>Dinotefuran</i>	Field Container	2006	OH	Reding	Drench	'Vera Jameson'	C	1/25/2007 <i>Trial Results: 4.8 oz ai per 100 gal; excellent efficacy on larvae; significantly reduced adult feeding damage; no phytotoxicity; plant significantly taller than Untreated</i>

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White Grub & Root Weevil Efficacy

Printed: 9/23/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26090 A	Black Vine Weevil - gru	Yew	Celero 16WSG	Field Container	2006	OH	Nielsen		'Densiformis'	C	1/8/2007
	<i>Otiorhynchus sulcatus</i> -	<i>Taxus media</i>	<i>Clothianidin</i>		2006	RI	Alm	Drench	'Nigra'	C	12/1/2006
<i>Trial Results: No control of black vine weevil, good control of oriental beetle larvae</i>											
26091 C	Black Vine Weevil - gru	Yew	DPX-E2Y45	Field Container	2006	OH	Nielsen		'Densiformis'	C	1/8/2007
	<i>Otiorhynchus sulcatus</i> -	<i>Taxus media</i>	<i>Chlorantraniliprole</i>		2006	RI	Alm	Drench	'Nigra'	C	12/1/2006
<i>Trial Results: No significant control of black vine weevil, excellent control of oriental beetle larvae</i>											
26096 C	Black Vine Weevil - gru	Yew	Flagship 25WG	Field Container	2006	OH	Nielsen		'Densiformis'	C	1/8/2007
	<i>Otiorhynchus sulcatus</i> -	<i>Taxus media</i>	<i>Thiamethoxam</i>								
26097 C	Black Vine Weevil - gru	Yew	Mach 2 Liquid	Field Container	2006	OH	Nielsen		'Densiformis'	C	1/8/2007
	<i>Otiorhynchus sulcatus</i> -	<i>Taxus media</i>	<i>Halofenazide</i>								
26093 C	Black Vine Weevil - gru	Yew	Marathon 1% granular	Field Container	2006	OH	Nielsen		'Densiformis'	C	1/8/2007
	<i>Otiorhynchus sulcatus</i> -	<i>Taxus media</i>	<i>Imidacloprid</i>								
26092 C	Black Vine Weevil - gru	Yew	Metarhizium anisoplia	Field Container	2006	OH	Nielsen		'Densiformis'	C	1/8/2007
	<i>Otiorhynchus sulcatus</i> -	<i>Taxus media</i>	<i>Metarhizium anisopliae strain F52</i>								
26094 C	Black Vine Weevil - gru	Yew	Precise	Field Container	2006	OH	Nielsen		'Densiformis'	C	1/8/2007
	<i>Otiorhynchus sulcatus</i> -	<i>Taxus media</i>	<i>Acephate</i>								
26095 N	Black Vine Weevil - gru	Yew	Talstar NG	Field Container	2006	OH	Nielsen		'Densiformis'	C	1/8/2007
	<i>Otiorhynchus sulcatus</i> -	<i>Taxus media</i>	<i>Bifenthrin</i>								
25432 A	Black Vine Weevil - gru	Yew	Safari 20SG	Field Container	2004	OH	Reding	Foliar	'Brownii'	C	2/1/2005 2/22/2005
	<i>Otiorhynchus sulcatus</i> -	<i>Taxus sp.</i>	<i>Dinotefuran</i>								
	<i>Trial Results: Good to excellent efficacy at 0.75, 1.5, and 3.0 lb product per 100 gal with foliar application shortly before adults layed eggs; no injury at any rate.</i>										
						2005	OH	Reding	Drench	'Brownii'	C
					2006	OH	Nielsen		T. media 'Densiformis'	C	1/8/2007
					2006	RI	Alm	Drench	'Nigra'	C	12/1/2006
<i>Trial Results: No significant control of black vine weevil, excellent control of oriental beetle larvae</i>											
0	A	Black Vine Weevil - gru	TBD	Celero 16WSG	Field Container	2007	OH	Nielsen		P	
		<i>Otiorhynchus sulcatus</i> -	<i>TBD</i>	<i>Clothianidin</i>							
0	C	Black Vine Weevil - gru	TBD	DPX-E2Y45	Field Container	2007	OH	Nielsen		P	
		<i>Otiorhynchus sulcatus</i> -	<i>TBD</i>	<i>Chlorantraniliprole</i>							
0	A	Black Vine Weevil - gru	TBD	Safari 20SG	Field Container	2007	OH	Nielsen		P	
		<i>Otiorhynchus sulcatus</i> -	<i>TBD</i>	<i>Dinotefuran</i>							
25032 C	Strawberry Rootworm	Azalea, & Rhododendron	Flagship 25WG	Field Container	2005	AL	Hesselein			C	6/26/2006
	<i>Paria fragariae ssp. Fra</i>	<i>Rhododendron sp.</i>	<i>Thiamethoxam</i>								

White Grub & Root Weevil Efficacy

Printed: 9/23/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
25034	C Strawberry Rootworm <i>Paria fragariae ssp. Fra</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Mach 2 Liquid <i>Halofenazide</i>	Field Container	2005	AL	Hesselein			C	6/26/2006
25035	C Strawberry Rootworm <i>Paria fragariae ssp. Fra</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Marathon 60WP <i>Imidacloprid</i>	Field Container	2005	AL	Hesselein			C	6/26/2006
26790	N Strawberry Rootworm <i>Paria fragariae ssp. Fra</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Ornazin 3%EC <i>Azadirachtin</i>	Field Container	2005	AL	Hesselein			C	6/26/2006
25279	N Strawberry Rootworm <i>Paria fragariae ssp. Fra</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Orthene TTO 97 <i>Acephate</i>	Field Container	2005	AL	Hesselein			C	6/26/2006
25033	C Strawberry Rootworm <i>Paria fragariae ssp. Fra</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Talstar <i>Bifenthrin</i>	Field Container	2005	AL	Hesselein			C	6/26/2006
26611	A Strawberry Rootworm <i>Paria fragariae ssp. Fra</i>	Azalea <i>Rhododendron sp.</i>	V-10112 2G <i>Dinotefuran</i>	Field Container	2007	AL	Hesselein			P	
26494	A Japanese Beetle - grubs <i>Popillia japonica - grubs</i>	Rose <i>Rosa sp.</i>	Celero 16WSG <i>Clothianidin</i>	Field Container	2006	GA	Braman	Drench	'Caldwell Pink'	C	4/4/2007
26495	C Japanese Beetle - grubs <i>Popillia japonica - grubs</i>	Rose <i>Rosa sp.</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Field Container	2006	GA	Braman	Drench	'Caldwell Pink'	C	4/4/2007
26497	C Japanese Beetle - grubs <i>Popillia japonica - grubs</i>	Rose <i>Rosa sp.</i>	Flagship 25WG <i>Thiamethoxam</i>	Field Container	2006	GA	Braman	Drench	'Caldwell Pink'	C	4/4/2007
26498	N Japanese Beetle - grubs <i>Popillia japonica - grubs</i>	Rose <i>Rosa sp.</i>	Mach 2 Granular <i>Halofenazide</i>	Field Container	2006	GA	Braman	Soil surface	'Caldwell Pink'	C	4/4/2007
26499	C Japanese Beetle - grubs <i>Popillia japonica - grubs</i>	Rose <i>Rosa sp.</i>	Precise <i>Acephate</i>	Field Container	2006	GA	Braman	Soil surface	'Caldwell Pink'	C	
26496	A Japanese Beetle - grubs <i>Popillia japonica - grubs</i>	Rose <i>Rosa sp.</i>	Safari 20SG <i>Dinotefuran</i>	Field Container	2006	GA	Braman	Drench	'Caldwell Pink'	C	4/4/2007
26500	N Japanese Beetle - grubs <i>Popillia japonica - grubs</i>	Rose <i>Rosa sp.</i>	Talstar <i>Bifenthrin</i>	Field Container	2006	GA	Braman	Drench	'Caldwell Pink'	C	4/4/2007
0	A Japanese Beetle - grubs <i>Popillia japonica - grubs</i>	TBD <i>TBD</i>	Celero 16WSG <i>Clothianidin</i>	Field Container	2007	GA	Braman			P	
0	C Japanese Beetle - grubs <i>Popillia japonica - grubs</i>	TBD <i>TBD</i>	DPX-E2Y45 <i>Chlorantraniliprole</i>	Field Container	2007	GA	Braman			P	
0	A Japanese Beetle - grubs <i>Popillia japonica - grubs</i>	TBD <i>TBD</i>	Safari 20SG <i>Dinotefuran</i>	Field Container	2007	GA	Braman			P	

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Key: Priorities A, B, and C are researchable; N is not researchable - these may be completed studies or those with Standards. Trial Status: P = Planned, O = Ongoing, C = Complete, X = Cancelled, ? = Unknown

White Grub & Root Weevil Efficacy

Printed: 9/23/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
0	A	TBD	TBD	BAS 320i	2007	AL	Hesselein			P	
		<i>TBD</i>	<i>TBD</i>	<i>Metaflumizone</i>	2007	GA	Braman			P	
					2007	OH	Nielsen			P	
0	A	TBD	TBD	Celero 16WSG	2007	AL	Hesselein			P	
		<i>TBD</i>	<i>TBD</i>	<i>Clothianidin</i>							
0	A	TBD	TBD	DPX-E2Y45	2007	AL	Hesselein			P	
		<i>TBD</i>	<i>TBD</i>	<i>Chlorantraniliprole</i>							
0	A	TBD	TBD	Metarhizium anisoplia	2007	AL	Hesselein			P	
		<i>TBD</i>	<i>TBD</i>	<i>Metarhizium anisopliae strain F52</i>	2007	GA	Braman			P	
					2007	OH	Nielsen			P	
0	A	TBD	TBD	Safari 20SG	2004	OH	?			C	2/1/2005 2/1/2005
		<i>TBD</i>	<i>TBD</i>	<i>Dinotefuran</i>	2007	AL	Hesselein			P	

New Requests for Insecticides: Bifenthrin

Date of Request: 9/18/2007 12:08:00 PM

Related PRNumbers:

Name: Martin Langmaid

Affiliation: Monrovia Growers

State: GA

ProjectType: ConductCropSafety

Crop Information: Broadleaf Evergreen/Deciduous Tree/Shrub

Scientific Name: *Citrus sp, Vaccinium sp, and others*

Common Name: Fruit Trees or Shrubs

Plant Stage Liner

UseSite: nursery container, greenho

TradeName: Talstar Nursery Granular

ActiveIngredients: Bifenthrin

Rate Per Application: Rate dependant on bulk de

Volume Per Application: Volume dependant of bulk

Number of Applications one

Application Interval: none

Research Target:

Efficacy Target:

Economic Impact: This would clear up the label for all growers of fruit in the SE US that are in the USDA IFA zone. With Florida citrus under quarantine markets will open up for other producers.

Labeled Products: bifenthrin, tefluthrin, and fipronil

Comments: Talstar or other designated insecticide products stipulated by USDA in the Fire Ant Free Nursery Program is required by ornamental growers for shipments out of the IFA zone. It is incorporated into the media at potting at a rate based on the bulk density of the media and the desired certification period. The label states: "For soil incorporation into potting media used in containerized plantings of ornamental, trees, shrubs, plants, flowers, conifers, Christmas trees, and non - bearing fruit and nut trees, bushes." As we read this as long as we apply the Talstar to young "non-bearing" age fruit we would be OK. We would like the label changed to make it clearer as to the use on fruit trees or bushes. We were instrumental in getting the herb use added to the label through IR4. If herbs can be added then it would seem that a clearer statement concerning fruit maybe possible. We also understand that this may have to go over to the food group but we are ornamental growers.

Top 10 Insect Groups for Herbaceous Plant Materials Separated by Geography.

	Insect/Mite (Weighted Ranking)			
Region	North Central	Northeast	Southern	Western
Survey Count	83	33	183	77
1	Mites & Spider Mites (71)	Aphids (39)	Mites & Spider Mites (131)	Mites & Spider Mites (77)
2	Thrips (58)	Mites & Spider Mites (27)	Scale & Mealybugs (123)	Aphids (65)
3	Aphids (47)	Thrips (26)	Aphids (96)	Thrips (50)
4	Fungus Gnats (38)	White Grubs & Root Weevils (13)	Thrips (93)	White Grubs & Root Weevils (31)
5	Whiteflies (38)	Scale & Mealybugs (11)	Whiteflies (89)	Whiteflies (31)
6	White Grubs & Root Weevils (31)	Borers & Beetles (9)	Borers & Beetles (26)	Borers & Beetles (19)
7	Scale & Mealybugs (23)	Fungus Gnats (7)	Lace Bugs (22)	Fungus Gnats (17)
8	Borers & Beetles (23)	Whiteflies (7)	Lepidopterans (22)	Scale & Mealybugs (17)
9	Leaf Hoppers (14)	Lepidopterans (3)	White Grubs & Root Weevils (21)	Leafminers (11)
10	Leafminers (8)	Lace Bugs (3)	Ants (16)	Lygus (7)

Top 10 Insect Groups for Woody Plant Materials Separated by Geography.

	Insect/Mite (Weighted Ranking)			
Region	North Central	Northeast	Southern	Western
Survey Count	55	31	184	82
1	Mites & Spider Mites (45)	Mites & Spider Mites (28)	Scale & Mealybugs (155)	Mites & Spider Mites (91)
2	White Grubs & Root Weevils (32)	Aphids (26)	Mites & Spider Mites (128)	Aphids (61)
3	Borers & Beetles (28)	White Grubs & Root Weevils (17)	Aphids (114)	White Grubs & Root Weevils (51)
4	Thrips (26)	Scale & Mealybugs (14)	Whiteflies (81)	Borers & Beetles (35)
5	Aphids (21)	Borers & Beetles (13)	Thrips (54)	Thrips (30)
6	Scale & Mealybugs (20)	Lepidopterans (10)	Borers & Beetles (48)	Lygus (18)
7	Whiteflies (16)	Thrips (10)	Ants (39)	Scale & Mealybugs (18)
8	Leaf Hoppers (11)	Leaf Hoppers (5)	White Grubs & Root Weevils (30)	Fungus Gnats (13)
9	Other (9)	Whiteflies (4)	Other (24)	Whiteflies (12)
10	Fungus Gnats (7)	Lace Bugs (3)	Lace Bugs (22)	Other (11)

New Products / Solutions List - Insects and Mites

Printed: 9/21/2007

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
E,E,-8,10-Dodecadien-1-ol	Checkmate CM-F			Suterra	Pheromone	Codling Moth		No	
?	QCIDE			BioProspect	Plant derived bio-insecticide.	Broad spectrum insecticide.			
Abamectin	Agrimek	Avid	100-896	IJO Products	Macrocylic lactone glucoside (Avermectin)	Broad-spectrum acaroids with activity on leafminers, Colorado potato beetle, mites and pear psylla. Weak against sucking insects and thrips. Good IPM tool with short re-entry interval. Translaminar activity providing long residual activity.	For use on ornamental plants including shadehouse, greenhouse, field-grown ornamentals, foliage plants, Christmas trees, and other woody ornamentals. Registrant endorses adding new plants to label.	Yes	No
Acequinocyl	Kanemite, Piton	Shuttle		Arysta Lifescience	Quinolinone	Broad spectrum mite control (no rust mite activity). Unique mode of action Easy on beneficials with long residual activity	Registered for use in ornamentals, limited mite species on label	Yes	Yes
Acetamiprid	Assail	Tristar		Cleary Chemical Co./Nisso America	Chloronicotinyl	Broad-spectrum control with contact and systemic activity via foliar applications. Excellent on sucking pests like aphids and whitefly.	OP Alternative. Registered for unspecified greenhouse ornamental crops. Requests regional pest efficacy and crop safety data.	Yes	Yes
Azadirachtin	Aza-Direct Ecozin Neemix	Ornazin		Gowan, AMVAC Chemical Corp. SePro, Certis	Ecdysone disruptor	Disrupts insect molting. Target pests include whitefly, leafminer, Lepidoptera, thrips, fungus gnats, vine weevils	Biopesticide. Registered for use in ornamental greenhouses, shadehouses, interiorscapes and nurseries on turfgrass, shrubs, trees and ornamentals.	Yes	No
<i>Bacillus thuringiensis</i>	Foray	Foray		Valent USA	Bacteria	Lepidoperan species	Biopesticide. Registered on forests, shade trees ornamental shrubs, ornamental trees, and non-bearing fruit and nut trees. Registrant endorses adding new plants to label.	Yes	No
<i>Beauveria bassiana</i>	Mycotrol			Emerald Bioagriculture	Insect pathogenic fungi	Corn borer, grasshopper, cricket, locust, aphids and whitefly	Biopesticide.	No	No
<i>Beauveria bassiana</i>	Naturalis			Troy Bio-Sciences	Insect pathogenic fungi	Corn borer, grasshopper, cricket, locust, aphids and whitefly	Biopesticide.	No	No
<i>Beauveria brongniartii</i>				Federal Republic of Germany	Insect pathogenic fungi	Targeted for soil dwelling pests	Biopesticide.	No	No
Bifenazate	Acramite	Floramite		Chemtura	Carbazate - New mode of action with no cross resistance	Controls spider and red mites, including eggs and motiles. Provides quick knockdown. Safe on predator mites.	Product registered for homeowner and commercial use on ornamentals.	Yes	Yes
Bifenthrin		Menace		Nufarm Americas	Pyrethroid	Broad spectrum activity on aphids, ants, armyworms, cutworms, beetles, mites, and weevils.	Interested in developing Menace for ornamental uses. Expand label on additional pests and plants. Additional crop safety data needed.	Yes	No

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
Bifenthrin	Brigade Capture Wisdom	Talstar, Onyx, EQEF295		FMC, AMVAC Chemical Corp.	Pyrethroid	Broad spectrum activity on aphids, armyworms, cutworms, flea beetles, mites, corn borers.	Interested in developing Onyx for ornamental uses. Expand label on beetles and borers. Additional crop safety data needed comparing Onyx to Astro.	Yes	No
BioMite™				Natural Plant Protection	Combination product containing Citronellol Geraniol Nerolidol and Farnesol	Unspecified mites	Biopesticide.	No	No
Bistrifluron	DBI-3204			Dongbu Hannong Chemical	Benzoylphenyl urea	Active against lepidopteran pests, whitefly. It acts by inhibiting chitin synthesis (Insect Growth Regulator)		No	No
Buprofezin	Applaud Courier	Talus		Nichino America /SePRO	Thiadiazine - IGR, unique mode of action, inhibits chitin synthesis	Good activity for nymphal stages of leafhoppers, plant hoppers, scales, mealybugs, psylla, and whiteflies. Very safe to bees.	OP Alternative. Registered on indoor and outdoor ornamentals. Interested in further development, including scale/mealy bug control, for ornamentals.	Yes	Yes
Chlorantraniliprole (DPX-E2Y45, Rynaxypyr)	Altacor Coragen			DuPont	Ryanodine Receptor Modulator	Foliar & Systemic coleoptera & lepidoptera larvae and others			
Chlorfenapyr		Pylon		BASF /Olympic	Pyrrrole	Controls selective lepidopteran larva, mites, thrips, and foliar nematodes.	Registered on begonia, chrysanthemum, Transvaal daisy, vervain and several flowering greenhouse plants. No plans to expand label for production ornamentals in container and field nurseries at the present time.	No	No
Chromfenozide	Matric			Nippon Kayaku /Sankyo	Insect Growth Regulator	Specific to lepidopteran pests, novel ecodyosone agonist.		No	No
<i>Chrysoperla carnea</i>	Kagetaro			Arysta Lifescience	Bio-insecticide	Controls aphids	Biopesticide.	No	No
Cinnamaldehyde	Cinnacure, Cinnamite			Proguard	Natural Product	Aphids, mites and the diseases downy mildew, powdery mildew, botrytis, and brown rots.	Biopesticide.	No	No
Clofentezine	Apollo	Ovation		Makhteshim-Agan	Tetrazine	Acaricide for eggs of <u>Panonychus ulmi</u> and <u>Tetranychus</u> spp.		No	No
Clothianidin	Poncho, Clutch	Celero		Arysta Lifescience (soil & foliar markets Bayer Environmental Sciences (seed)	Neonicotinoid	Contact and stomach activity. Activity on plum curculio, aphids, leafhoppers, apple maggot, leafminers, leaf rollers, codling moth, pear psylla, leaf hoppers, white grubs, weevils, armyworms, cutworms, mealy bugs and others.	OP replacement, registered for production ornamentals and interiorscape uses.	No	No
Clove/Cinnamon/Mint Oils	Valoram II			Soil Technologies Corp.	Natural Product	Shown to contact kill and repel numerous insect pests		No	No
<i>Cydia pomonella</i> granulose virus	Virosoft CP4			Arysta	Granulosis Virus	Controls Codling moth	Biopesticide.	No	No

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
<i>Cydia pomonella</i> granulose virus	Granupom			Biobest	Granulosis Virus	Controls Codling moth	Biopesticide.	No	No
Cyfluthrin	Baythroid Renounce	Tempo, Decathlon		Bayer Environmental Sciences	Pyrethroid	Controls cabbage looper, potato leafhopper, Colorado potato beetle, European corn borer, flea beetle, potato tuberworm, citrus thrips, whiteflies.	Interested in developing for ornamental uses. Need efficacy and crop safety data.	Yes	No
Cypermethrin	Demon			FMC	Pyrethroid	Residual activity on cutworms, thrips, leaf hopper, weevils, armyworms, lygus bug, plant bugs, corn earworm, aphids, and beetles.	For use on lawns and ornamentals in landscaped areas in and around buildings. NOT FOR USE in commercial greenhouses or nurseries.	No	No
Cyromazine	Triguard	Citation	100-667	Syngenta	Triazine with insecticide growth regulator activity	Leafminers, maggots, fungus gnats; and shore flies.	For use in landscape ornamentals; container grown ornamentals; greenhouse, lath and shadehouse grown ornamental bedding plants, and ornamental crops; and interiorscapes; and shore flies, only in greenhouse ornamental crops and interiorscapes. Registrant endorses adding new plants to label.	Yes	No
Deltamethrin	Decis	DeltaGard		Bayer Environmental Sciences	Pyrethroid	A broad spectrum residual insecticide for the control of ants, beetles, bugs, armyworms, mites, centipedes, chiggers, cockroaches, crickets, cutworms, wasps, skipper, fire ants, firebrats, grasshoppers, lawn moths, leafhoppers, silverfish, sod webworms, spiders, springtails, ticks, and weevils.	OP Alternative. For use in turfgrasses, landscape ornamentals (including interior plantscapes) and around perimeters of residential, commercial and recreational areas. No interest in further development for ornamental uses.	No	No
Diflubenzuron	Dimilin, Micromite	Adept		Chemtura	Substituted benzoylurea, Insect Growth Regulator	Wide range of leaf feeding insects.	No interest in further development for ornamental uses.	No	No
Dinotefuran	Venom	Safari		Valent USA /Mitsui	Neonicotinoid Subclass: furanicotinyl	Systemic uptake via roots, traslaminar with foliar application. Different subclass than other neonicotinoids. Controls aphid, fungus gnat, some wood boring beetles, thrips, adegids, leaf miners, soft scale, armored scale, mealybug, codling moth, whitefly, flea beetle, and Colorado potato beetle.	OP Alternative. Registered on ornamentals in fall 2004. Registrant endorses adding new ornamental plants and pests to label, especially landscape pests.	Yes	Yes
DPX-HGW86	NA	NA		DuPont	Ryanodine Receptor Modulator	Foliar & Systemic coleoptera & lepidoptera larvae and others			
Emamectin Benzoate	Proclaim Denim			Syngenta	Synthetic Avermectin analogue	Effective on larval Lepidoptera (Beet/fall armyworms, cabbage webworms, corn earworms, imported cabbage worm, cabbage looper) and leafminers	OP Alternative. No interest in further development for ornamental uses.	No	No

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
Ethiprole	RPA 107382			Bayer Environmental Sciences	Phenylpyrazole	Broad spectrum activity against chewing and sucking insects		No	No
Etoxazole	Zeal	TetraSan		Valent USA	Oxazoline Growth regulator	Insecticide/acaricide for control of <u>Panonychus</u> spp and <u>Tetranychus</u> spp, including hexythiazox resistant mite strains. Inhibition of molting, effective on eggs, larvae, & nymphs. Trnaslaminar.	Registered on unspecified bedding plants, flowering plants, foliage plants, ground covers, non-bearing fruit trees, non-bearing nut trees, unspecified ornamental shrubs and ornamental trees. Registration pending for residential landscapes.	Yes	Yes
Fenoxycarb		Award	100-722	Syngenta	Non-neurotoxic carbamate - IGR	AWARD: Fire ants and Big-Headed ant control.	AWARD: May be used in and around container and field-grown ornamental and nonbearing nursery stock, and on sod farms (commercial turf). Award may also be used on turf and other non-agricultural land including, but not limited to, airports, roadsides, school grounds, golf courses, parks, picnic grounds, sports fields, other recreational areas, ornamental gardens, cemeteries, and other landscaped areas.	No	No
Fenoxycarb		Precision		Syngenta	Non-neurotoxic carbamate - IGR	PRECISION: selected insect control, including whiteflies, soft scales, fungus gnats, thrips, shore flies, and Lepidopterous leafminers.	PRECISION: For use in container and landscape ornamentals, nonbearing fruit and nut trees in nurseries, Christmas tree plantations, ground covers, greenhouse, lath and shade house ornamental crops, and interiorscapes.	No	No
Fenpropathrin	Danitol	Tame		Valent USA	Pyrethroid	Aphids, whitefly, various worms, mites, glassy winged sharpshooter, and stinkbugs.	Registered on unspecified ornamentals shrubs, conifers, deciduous trees, non-deciduous trees, palms and non-bearing nursery fruit trees.	No	No
Fenpyroximate	Fujimite	Akari		Nichino America / SePro	Phenoxyppyrazole	Controls mites, including two-spotted, European, red and citrus rust mite, and psylla.	Interested in further development in ornamentals.	Yes	Yes
Fipronil	Regent	Ceasefire CHIPCO Choice, Topchoice		BASF (liquid); Bayer Environmental Sciences (Granular)	Phenylpyrazole - A broad spectrum neurotoxin, unique mode of action	Controls mole crickets, nuisance ants, imported fire ants, fleas, and ticks. Systemic activity, with long residual.	The granular formulation is registered and marketed by Bayer for use on turfgrass such as golf turf, sport fields, commercial lawns, cemeteries, parks, campsites, recreational areas, home lawns, school grounds, and sod farms. Also for use in landscape beds. Possible interest by both Bayer and BASF in additional ornamental uses. Bayer is not interested in further development for ornamental uses.	No	No

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
Flonicamid	Beleaf, Turbine	Aria		FMC & ISK	Cyanomethany trifluoromethyl nicotinamide.	Effective against aphids, thrips, leafhoppers, plant bug and other sucking pests. Provides rapid anti-feeding activity. Non-toxic to beneficials	OP Replacement Product. Pending use on greenhouse ornamentals and field nursery crops. Additional crop safety data needed.	Yes	No
Fluacrypyrin	Titaron			Nippon Soda	Methoxyacrylate	Acaricide		No	
Flufenzin				Chinoïn	Not disclosed.	Acaricide		No	
Flupyrzolos	Seon Bong			Dongbu Hannong	Not disclosed.	Diamondback moth		No	
Gamma-Cyhalothrin	Pytech			Dow AgroSciences	Pyrethroid	Same use as other pyrethroids, but at lower rate.		No	
Halofenozide		Mach 2		Dow AgroSciences	Molt accelerating compound	Controls grubs and Lepidoptera larvae.	Considering registration on container and field grown ornamental and nursery plants.	Yes	No
Hexythiazox	Savey Onager			Gowan	Carboxamide	Mites eggs and immature stages		No	
Hydramethylnon		Amdro		BASF	Amidinohydrazone	Slow acting insecticide, formulated as a bait that is effective on ants	For use in and around container or field grown ornamental and non-food bearing nursery stock, and on sod farms (commercial turf). May also be applied to the soil around non-bearing fruit or nut trees. For use on lawns, landscaped areas, golf courses and other noncropland areas such as airports, roadsides, cemeteries, commercial grounds, parks, school grounds, picnic grounds, athletic fields and other recreational areas, as well as on grounds surrounding poultry houses or corrals and other animal holding areas. May also be applied to grass forage in certain states. No plans for additional development in ornamentals.	No	No
Imidacloprid	Nuprid	Mallet		Nufarm Americas	Chloronicotinyl	Primarily effective against sucking insects (aphid, whitefly, scale, etc.) as well as beetles and grubs. Controls numerous pests that are resistant to insecticides.	OP Alternative. Interested in developing ornamental uses. Need crop safety data.	Yes	No
Imidacloprid	Admire Provado	Marathon II Marathon 60 Marathon 1G		Bayer Environmental Sciences / OHP	Neonicotinoid	Primarily effective against sucking insects (aphid, whitefly, scale, etc.) as well as beetles and grubs.	OP Alternative. Interested in developing ornamental uses. Need crop safety data.	Yes	No
Indian Meal Moth Granulosis Virus	Fruitguard-V Nutguard-V			AgriVir, LLC	Virus	Indian meal moth	Biopesticide. Registered on dried fruit and nuts.	No	No
Indoxacarb	Avaunt Steward	Provaunt Advion		DuPont	Voltage dependent sodium channel blockers	Lepidoptera Larvae and Piercing/Sucking insects and fire ants			
Iron Phosphate	Sluggo			W. Neudoff	Iron salt	Slugs and snails	Biopesticide.	No	No
Jojoba Oil	Detur E-Rase			IJO Products	Natural Product	Controls whitefly and powdery mildew	Biopesticide.	No	No
Kaolin	Surround			Engelhard Corporation	Clay	Various insect and mite pest.	Biopesticide.	No	No

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
Lambda-Cyhalothrin	Karate Warrior	Demand		Syngenta	Pyrethroid	Broad spectrum insect control.	DEMAND: For use by commercial applicators in, on and around buildings and structures where turf and ornamentals are grown including lawns, ornamental trees and shrubs around residential, institutional, public, commercial, agricultural and industrial buildings; and parks, recreational areas and athletic fields.	No	No
Lambda-Cyhalothrin	Karate Warrior	Scimitar	100-1088	Syngenta	Pyrethroid	Broad spectrum insect control.	SCIMITAR: For use in ornamentals and lawns in landscaped areas around residential, institutional, public, commercial and industrial buildings, parks, recreational areas and athletic fields.	No	No
<i>Mamestra configurata</i> Granulosis virus	Virosoft Viral Insecticide			Biotepp	Mamestra configurata Granulosis virus	Can be applied as a preventative treatment at planting or a curative foliar treatment for bertha armyworm.	Biopesticide.	No	No
Metaflumizone	Alverde BAS 320i	BAS 320i		BASF	Hydrazine carboxamide	Highly active against major lepidopterous larvae and coleopteran (larvae & adults) pest species No cross resistance to existing chemistries.	Pending use on certain food use crops.	Pending Decision	No
<i>Metarhizium anisopliae</i>	Greenguard			Bio-Care	Metarhizium anisopliae	Locust	Biopesticide.	No	No
<i>Metarhizium anisopliae</i>	Taerain			Earth BioScience	Metarhizium anisopliae	Controls black vine weevil, whitefly, thrips, and mites.	Biopesticide. Interested in developing for ornamentals.	Yes	No
Methoxyfenozide	Intrepid, Runner			Dow AgroSciences	Diacylhydrazine – (Molt accelerating compound)	Similar to tebufenozide in that it only controls Lepidoptera larvae. Better on budworm/bollworm, leafminers and diamondback moth. Excellent fit with IPM programs.		No	
Methomyl	Lannate	NA		DuPont	Acetylcholine esterase inhibitor	Broad Spectrum systemic - aphid, beetles, thrips, etc.			
Metofluthrin	S-1264			Valent USA	Pyrethroid	Broad spectrum insect control.	Not registered in the USA. Therefore, no plans to develop for ornamental uses in USA.	No	No
Milbemectin	Ultraflora			Sankyo & Gowan	Macrocylic lactone	Excellent miticide, also controls aphids, leafminers, thrips, leafhoppers	OP Alternative.	No	Yes
Novaluron	Diamond Rimon	Pedestal		Makhteshim-Agan & Chemtura	Insect Growth Regulator (chitin synthesis inhibitor)	Effective against Lepidoptera, whitefly, thrips, leaf miners. Strictly a contact material, no systemic activity.	Registered for all container grown ornamentals except poinsettias.	No	Yes
Noviflumuron	DE-007			Dow AgroSciences	Difluorobenzamide	Insect growth regulator for control of urban pests, such as ants and termites.		No	

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
Olive Fly Attract and Kill				Thermo Trilogy	Pheromone	Olive fruit fly.		No	
Oxamyl	Vydate	NA		DuPont	Acetylcholine esterase inhibitor	Broad Spectrum systemic - aphid, fungus gnat, leafhopper, leafminer, whitefly, thrip, scale, mealybug, mite, etc.	Investigate as a drench or soil incorporation.		
<i>Paelamyces fumosoroseus</i>	Pre-Fe-Ral			Biobest	Microbial	Whitefly.	Biopesticide. Interested in development for ornamentals.	Yes	No
PAVOIS	Granulosis virus			Bayer Environmental Sciences	<i>Carpocapsa</i> spp.	Product controls two generations of susceptible insects.	Biopesticide.	No	No
Profluthrin	S-1840			Valent USA	Pyrethroid	Broad spectrum insect control.	Not registered in the USA. Therefore, no plans to develop for ornamental uses in USA.	No	No
Propylene glycol monolaurate	Acaritouch			Toagosei Co., Ltd.	Propylene glycol	Tetranychid mites.	Pending use on unspecified ornamentals.	Yes	No
Pymetrozine	Fulfill	Endeavor	100-913	Syngenta	Pyridine azomethine	Controls sucking insects (aphids/whiteflies). The product has a rapid knockdown on aphids if direct sprays contact them.	OP Alternative. For use on landscape ornamentals, field grown ornamentals, container grown ornamentals, nonbearing fruit and nut trees in nurseries, Christmas trees, ground covers, and ornamental plants in greenhouses, lath- and shade-houses and interiorscapes.	No	Yes
Pyridaben	Pyramite	Sanmite		BASF	Pyridazinone	Activity on mites and whiteflies. A new class of insecticide offering long-term residual control. Good for IPM/ resistance management.	Fully registered in nurseries and greenhouses. Scotts interested in expanding label for control of additional pests. Data needed to demonstrate consistent control of aphids, mealybugs and scales.	Yes	No
Pyridalyl	S-1812 Tesoro	Overture		Valent USA	Pyridine	Good activity against lepidoptera and thrips. Effective against pyrethroid resistant insects. Safe on beneficials.	OP Replacement Product. Registration pending 4th Q 2006 for use on ornamentals. Need efficacy data for lepidopteran insects and thrips other than western flower thrips.	Yes	No
Pyriproxyfen	Esteem Knack	Distance IGR		Valent USA	Pyridine (IGR-selective juvenile hormone analog).	Controls scales, whiteflies, thrips, pear psylla, codling moth, ants, euonymus scale, fungus gnats, shore flues and suppression of mealy bugs. Effective on eggs and immature stages, not effective on adults. Excellent for IPM Programs.	OP Alternative. Registered shrubs, ornamental plants, flowering plants, foliage plants, ornamental trees and groundcovers except salvia, ghost plant, Boston fern, schefflera, gardenia, coral bells and poinsettia after bract formation. Need efficacy data for additional scale species.	Yes	Yes
Rosemary Oil	Hexacide			EcoSmart Technologies	Natural Product	Kills scale insects on contact, minimal impact on beneficials.	Biopesticide. Interested in development for ornamentals.	No	No

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
Spinosad	GF-120 Naturalyte Spintor Success	Conserve		Dow AgroScience	Macrocyclic lactone	Controls thrips, Lepidopterous larvae, sawflies, Chrysomelid leaf feeding beetles, Dipterous gall midges, Dipterous leafminers fire ants and fruitflies. Has low environmental impact, good residual activity, and is safe to many beneficial insects making it ideal for use in IPM programs.	OP Alternative. For use in turfgrass and herbaceous & woody ornamentals in nurseries or in greenhouses. Fire Ant applications may be made in turfgrass and ornamentals in greenhouses and in other outdoor areas.	No	Yes
Spirodiclofen	BAJ 2740 Envidor Daniemon			Bayer Environmental Sciences	Spirocyclic phenyl-substituted tetrionic acid	Broad-spectrum activity against mites, psyllad nymphs, and scale crawlers. Very active on eggs, larvae, and quiescent stages). Tetranychus species. It is ideal for IPM programs, easy on predatory mites and insects.		No	
Spiromesifen	Oberon	Forbid Judo		Bayer Environmental Sciences OHP	Spirocyclic phenyl-substituted tetrionic acid	Effective against all-important whitefly and mite species as a contact insecticide/acaricide. Juvenile mite stages are often more susceptible than adults, Highly effective against whitefly nymphs. Significant effect on the otherwise difficult to control pupal stage.	Interested in developing for ornamentals. Need crop safety data, especially on flowering part of the plant..	Yes	No
Spirotetramat	BYI 8330 Movento			Bayer Environmental Science	Tetrionic Acid	Whitefly,aphids,thrips,mites, plus others		Yes	Unknown
<i>Spodoptera exigua</i>	Spod-X			Certis	Nuclear polyhedrosis virus	<i>Spodoptera</i> larvae	Biopesticide.	No	No
<i>Streptomyces</i>	Virtuoso			AgraQuest	Streptomyces based bio-insecticide	Broad spectrum activity against selective lepidoptera, flea, flies and mites.	Biopesticide.	No	No
Sucrose Octanoate Esters				AVA Chemical Ventures	Biochemical Sugar	Being evaluated for control for glassy-winged sharpshooter.			
Tebufenozide	Confirm			Dow AgroSciences	Diacylhydrazine – (Molt accelerating compound)	Controls only Lepidoptera larvae. Safe to beneficial insects with low environmental impact. Excellent for IPM programs.	OP Alternative.	No	Yes
Tebufenpyrad	Pyranica			United Agri. Products, & Nichino America	Pyrazole	Broad spectrum miticide.	Registered on greenhouse ornamentals. Future of this product uncertain at present time.	No	No
Tebupirimphos + cyfluthin	Aztec			Amvac	Organophosphate and Pyrethroid	A soil insecticide, active against a wide range of insets, including corn rootworm, wireworm, white grub and seed corn maggot.		No	
Tefluthrin	Force			Syngenta	Pyrethroid	Controls a wide range of soil insects including rootworms, cutworms, wireworms and grubs.	Used on corn	No	

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
Thiacloprid	Calypso			Bayer Environmental Sciences	Second generation neonicotinoid.	Broad spectrum systemic control of sucking and chewing pests including aphids, whiteflies, leafhoppers, plant bugs, pear psylla, weevils, fruit flies, oriental fruit moth, leafminers and codling moth. <u>Very safe to bees.</u>	Interested in developing for ornamental uses. Need efficacy and crop safety data.	Yes	No
Thiamethoxam	Actara, Platinum	Flagship	100-955	Syngenta	Second-generation Neonicotinoid. Systemic in plant by root uptake and transport in xylem	Broad-spectrum foliar and systemic activity against soil pests, and many sucking/chewing pests. Effective against aphids, fire ants, galls, whitefly, thrips, leafhopper, mealybugs plant bugs, and larvae of certain beetles, chafers, Black turfgrass ataenius and Aphodius spp.	OP Alternative. For use on ornamental plants grown in greenhouses, lath and shadehouses, containers, field nurseries (including non-bearing fruit and nut trees) and on Christmas trees. Registrant endorses adding new plants and pests to label.	Yes	No
Thiocyclam	Evisect			Arysta Lifescience	Trithianamine	Insect IGR		No	
Tolfenpyrad	Hachihachi	tbd		Nichino America	Pyrazole	Effective against diamondback moths, other moths, thrips and aphid.	Under evaluation for development in ornamental crops.	Yes	No
V4C Virus	Galaxy			Analytica	Viral Insecticide	Effective against lepidopderan insects.	Biopesticide.	No	No
<i>Verticillium lecanii</i>	Mycotal			Arysta Lifescience	Bio-insecticide	Effective against whitefly.	Biopesticide.	No	No
Zeta-cypermethrin	Fury Mustang			FMC	Pyrethroid	Controls cutworms, thrips, and armyworms, ect.	OP Alternative.	No	No

Section 5

2007 High Priority Projects – Pathology

The following pages contain details on the high priority projects for pathology, *Phytophthora* Efficacy and *Pythium* Efficacy, as well as some research on a couple non-high priority projects. The Ornamental Horticulture Research Database was queried to pull all studies and all pending or completed trials related to the 2007 high priority projects. In some cases, studies will not have any researchers listed; this happens where trials were cancelled or where studies were discussed for that project and researchers did not choose to research them. The database was also queried to pull any pending trials for 2007 in non-high priority projects but only to print project information relevant to those trials. For example, research was conducted on *Xanthomonas*, but only information for the relevant studies appear – not all the studies related to the *Xanthomonas* Efficacy project.

Phytophthora Efficacy

Printed: 9/20/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG	
26855	B <i>Phytophthora cactorum</i>	Rhododendron <i>Rhododendron sp.</i>	Disarm <i>Fluoxastrobin</i>	Greenhouse	2007	WA	Chastagner			P		
26379	A <i>Phytophthora cactorum</i>	Rhododendron <i>Rhododendron sp.</i>	Heritage <i>Azoxystrobin</i>	Field Container	2007	NH	Pennucci			P		
26933	A <i>Phytophthora cactorum</i>	Rhododendron <i>Rhododendron sp.</i>	Heritage <i>Azoxystrobin</i>	Greenhouse	2007	WA	Chastagner			P		
26378	A <i>Phytophthora cactorum</i>	Rhododendron <i>Rhododendron sp.</i>	Segway <i>Cyazofamid</i>	Field Container	2007	NH	Pennucci			P		
26934	A <i>Phytophthora cactorum</i>	Rhododendron <i>Rhododendron sp.</i>	Segway <i>Cyazofamid</i>	Greenhouse	2007	WA	Chastagner			P		
26380	A <i>Phytophthora cactorum</i>	Rhododendron <i>Rhododendron sp.</i>	V-10161 <i>V-10161</i>	Field Container	2007	NH	Pennucci			P		
26932	A <i>Phytophthora cactorum</i>	Rhododendron <i>Rhododendron sp.</i>	V-10161 <i>V-10161</i>	Greenhouse	2007	WA	Chastagner			P		
21523	N <i>Phytophthora cinnamomi</i>	Fir <i>Abies sp.</i>	Stature DM <i>Dimethomorph</i>	Greenhouse	2003 2004	OR NC	? Benson			C C	1/1/1975 12/1/2004	3/1/2004 1/1/2005
					Trial Results: All rates significantly reduced disease ratings and increased top dry weights (6.4, 12.4, 25.6 oz per 100 gal).							
25855	C <i>Phytophthora cinnamomi</i>	Alder <i>Alnus sp.</i>	Disarm <i>Fluoxastrobin</i>	Greenhouse	2006	UT	Kratsch		<i>Alnus maritima</i>	P		
25851	N <i>Phytophthora cinnamomi</i>	Alder <i>Alnus sp.</i>	Fenstop <i>Fenamidone</i>	Greenhouse	2006	UT	Kratsch		<i>Alnus maritima</i>	P		
25856	N <i>Phytophthora cinnamomi</i>	Alder <i>Alnus sp.</i>	Insignia <i>Pyraclostrobin</i>	Greenhouse	2006	UT	Kratsch		<i>Alnus maritima</i>	P		
25852	C <i>Phytophthora cinnamomi</i>	Alder <i>Alnus sp.</i>	MultiGuard <i>Furfural</i>	Greenhouse	2006	UT	Kratsch		<i>Alnus maritima</i>	P		
25853	N <i>Phytophthora cinnamomi</i>	Alder <i>Alnus sp.</i>	NOA 446510 <i>Mandipropamid</i>	Greenhouse	2006	UT	Kratsch		<i>Alnus maritima</i>	P		
25850	N <i>Phytophthora cinnamomi</i>	Alder <i>Alnus sp.</i>	Segway <i>Cyazofamid</i>	Greenhouse	2006	UT	Kratsch		<i>Alnus maritima</i>	P		
25854	N <i>Phytophthora cinnamomi</i>	Alder <i>Alnus sp.</i>	V-10161 <i>V-10161</i>	Greenhouse	2006	UT	Kratsch		<i>Alnus maritima</i>	P		
26156	N <i>Phytophthora cinnamomi</i>	Fetterbush, Drooping Leuc <i>Leucothoe sp.</i>	Alude <i>Potassium phosphite</i>	Field Container	2006	NJ	Gould			O		
26159	C <i>Phytophthora cinnamomi</i>	Fetterbush, Drooping Leuc <i>Leucothoe sp.</i>	Disarm <i>Fluoxastrobin</i>	Field Container	2006	NJ	Gould			O		

Key: Priorities A, B, and C are researchable; N is not researchable - these may be completed studies or those with Standards. Trial Status: P = Planned, O = Ongoing, C = Complete, X = Cancelled, ? = Unknown

Phytophthora Efficacy

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26158	N <i>Phytophthora cinnamomi</i>	Fetterbush, Drooping Leuc <i>Leucothoe sp.</i>	Insignia <i>Pyraclostrobin</i>	Field Container	2006	NJ	Gould			O	
26157	N <i>Phytophthora cinnamomi</i>	Fetterbush, Drooping Leuc <i>Leucothoe sp.</i>	Segway <i>Cyazofamid</i>	Field Container	2006	NJ	Gould			O	
27008	B <i>Phytophthora cinnamomi</i>	Mexican cliff rose <i>Purshia mexicana</i>	Aliette WDG <i>Fosetyl Al</i>	Greenhouse	2006	UT	Kratsch			C	8/29/2007
27003	B <i>Phytophthora cinnamomi</i>	Mexican cliff rose <i>Purshia mexicana</i>	Alude <i>Potassium phosphite</i>	Greenhouse	2006	UT	Kratsch			C	8/29/2007
27004	B <i>Phytophthora cinnamomi</i>	Mexican cliff rose <i>Purshia mexicana</i>	BioPhos 43L <i>Dipotassium phosphonate + Dipotassium phosphate</i>	Greenhouse	2006	UT	Kratsch			C	8/29/2007
25847	C <i>Phytophthora cinnamomi</i>	Mexican cliff rose <i>Purshia mexicana</i>	Disarm <i>Fluoxastrobin</i>	Greenhouse	2006	UT	Kratsch			C	8/29/2007
25844	N <i>Phytophthora cinnamomi</i>	Mexican cliff rose <i>Purshia mexicana</i>	Fenstop <i>Fenamidone</i>	Greenhouse	2006	UT	Kratsch			C	8/29/2007
27005	B <i>Phytophthora cinnamomi</i>	Mexican cliff rose <i>Purshia mexicana</i>	Heritage <i>Azoxystrobin</i>	Greenhouse	2006	UT	Kratsch			C	8/29/2007
25848	N <i>Phytophthora cinnamomi</i>	Mexican cliff rose <i>Purshia mexicana</i>	Insignia <i>Pyraclostrobin</i>	Greenhouse	2006	UT	Kratsch			C	8/29/2007
27006	B <i>Phytophthora cinnamomi</i>	Mexican cliff rose <i>Purshia mexicana</i>	Magellan <i>Mono- and Dibasic Sodium, Potassium and Ammonium Phosphites</i>	Greenhouse	2006	UT	Kratsch			C	8/29/2007
25849	C <i>Phytophthora cinnamomi</i>	Mexican cliff rose <i>Purshia mexicana</i>	MultiGuard <i>Furfural</i>	Greenhouse	2006	UT	Kratsch			C	8/29/2007
27011	B <i>Phytophthora cinnamomi</i>	Mexican cliff rose <i>Purshia mexicana</i>	Muscodor albus <i>Muscodor albus</i>	Greenhouse	2006	UT	Kratsch			C	8/29/2007
25845	N <i>Phytophthora cinnamomi</i>	Mexican cliff rose <i>Purshia mexicana</i>	NOA 446510 <i>Mandipropamid</i>	Greenhouse	2006	UT	Kratsch			C	8/29/2007
25843	N <i>Phytophthora cinnamomi</i>	Mexican cliff rose <i>Purshia mexicana</i>	Segway <i>Cyazofamid</i>	Greenhouse	2006	UT	Kratsch			C	8/29/2007
27009	B <i>Phytophthora cinnamomi</i>	Mexican cliff rose <i>Purshia mexicana</i>	Stature <i>Dimethomorph + Mancozeb</i>	Greenhouse	2006	UT	Kratsch			C	8/29/2007

Phytophthora Efficacy

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
27010	B <i>Phytophthora cinnamomi</i>	Mexican cliff rose <i>Purshia mexicana</i>	Terrazole 35% WP <i>Etridiazole</i>	Greenhouse	2006	UT	Kratsch			C	8/29/2007
25846	N <i>Phytophthora cinnamomi</i>	Mexican cliff rose <i>Purshia mexicana</i>	V-10161 <i>V-10161</i>	Greenhouse	2006	UT	Kratsch			C	8/29/2007
27007	B <i>Phytophthora cinnamomi</i>	Mexican cliff rose <i>Purshia mexicana</i>	Vital 4L <i>Potassium phosphite</i>	Greenhouse	2006	UT	Kratsch			C	8/29/2007
26534	C <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Actinovate <i>Actinovate</i>	Greenhouse	2006	WA	Chastagner	Drench	'Purple Splendour'	C	1/8/2007 5/8/2007 <i>Trial Results: No significant reduction in disease with 10 oz per 100 gal.</i>
24918	N <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Aliette WDG <i>Fosetyl Al</i>	Field Container	2004	NC	Benson	Drench	R. obtusum 'Hinodegiri'	C	1/13/2006 6/27/2006 <i>Trial Results: Excellent efficacy with drench application of 12.8 oz per 100 gal.</i>
					2004	NC	Benson	Foliar	R. obtusum 'Hinodegiri'	C	1/13/2006 6/27/2006 <i>Trial Results: Great efficacy with foliar application of 80 oz per 100 gal.</i>
					2005	NH	Pennucci	Drench	'Parade'	C	9/6/2006 5/8/2007 <i>Trial Results: No statistical differences among treatments.</i>
					2005	NH	Pennucci	Drench	'Popcorn'	C	9/6/2006 5/8/2007 <i>Trial Results: No statistical differences among treatments.</i>
					2005	NH	Pennucci	Drench	'Lollipop'	C	9/6/2006 5/8/2007 <i>Trial Results: No statistical differences among treatments.</i>
					2005	NH	Pennucci	Drench	'Ribbon Candy'	C	9/6/2006 5/8/2007 <i>Trial Results: No statistical differences among treatments.</i>
					2005	NY	Becker	Foliar	'Lees Dark Purple'	C	11/18/2005 6/27/2006 <i>Trial Results: No statistical difference among treatments</i>
					2005	NY	Becker	Foliar	R. catawbiensis 'boursault'	C	11/18/2005 6/27/2006 <i>Trial Results: No statistical difference among treatments</i>
					2005	NY	Becker	Foliar	'Nova zembla'	C	11/18/2005 6/27/2006 <i>Trial Results: No statistical difference among treatments</i>
					2005	NY	Becker	Foliar	R. catawbiensis 'alba'	C	11/18/2005 6/27/2006 <i>Trial Results: No statistical difference among treatments</i>
					2005	NY	Becker	Foliar	R. maximum 'roseum'	C	11/18/2005 6/27/2006 <i>Trial Results: No statistical difference among treatments</i>
					2006	NC	Benson	Foliar	R. obtusum 'Hinodegiri'	C	11/17/2006 5/8/2007 <i>Trial Results: Excellent efficacy at 5 lbs per 100 gal foliar spray.</i>
25842	N <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Aliette WDG <i>Fosetyl Al</i>	Greenhouse	2005	WA	Chastagner	Drench		C	10/5/2006 4/3/2007 <i>Trial Results: Good efficacy at 5 lb per 100 gal, but inoculated and non-inoculated checks had no disease.</i>
					2006	WA	Chastagner	Drench	'Purple Splendour'	C	1/8/2007 5/8/2007 <i>Trial Results: No significant reduction in disease with 12.8 oz per 100 gal.</i>

Phytophthora Efficacy

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG			
24913	N <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Alude <i>Potassium phosphite</i>	Field Container	2005	NC	Benson	Drench	R. obtusum 'Hinodegiri'	C	10/20/2005 6/27/2006			
					<i>Trial Results: Excellent efficacy with drench applications of 6.25 and 12.5 fl oz per 100 gal.</i>									
					2005	NH	Pennucci	Drench	'Parade'	C	9/6/2006 5/8/2007			
					<i>Trial Results: No statistical differences among treatments.</i>									
					2005	NH	Pennucci	Drench	'Popcorn'	C	9/6/2006 5/8/2007			
					<i>Trial Results: No statistical differences among treatments.</i>									
					2005	NH	Pennucci	Drench	'Lollipop'	C	9/6/2006 5/8/2007			
					<i>Trial Results: No statistical differences among treatments.</i>									
					2005	NH	Pennucci	Drench	'Ribbon Candy'	C	9/6/2006 5/8/2007			
<i>Trial Results: No statistical differences among treatments.</i>														
25837	N <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Alude <i>Potassium phosphite</i>	Greenhouse	2005	WA	Chastagner	Drench	'Nova Zembla'	C	10/5/2006 4/3/2007			
					<i>Trial Results: Mediocre efficacy at 12.7 fl oz per 100 gal, but inoculated and non-inoculated checks had no disease.</i>									
					2006	WA	Chastagner	Drench	'Purple Splendour'	C	1/8/2007 5/8/2007			
					<i>Trial Results: Significant reduction in disease with 12.7 fl oz per 100 gal.</i>									
					2006	WA	Chastagner	Foliar	'Purple Splendour'	C	1/8/2007 5/8/2007			
<i>Trial Results: No significant reduction in disease with 2 quarts per 100 gal.</i>														
26174	N <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Banol <i>Propamocarb hydrochloride</i>	Field Container	2005	NH	Pennucci	Drench	'Parade'	C	9/6/2006 5/8/2007			
					<i>Trial Results: No statistical differences among treatments.</i>									
					2005	NH	Pennucci	Drench	'Popcorn'	C	9/6/2006 5/8/2007			
					<i>Trial Results: No statistical differences among treatments.</i>									
					2005	NH	Pennucci	Drench	'Lollipop'	C	9/6/2006 5/8/2007			
<i>Trial Results: No statistical differences among treatments.</i>														
2005	NH	Pennucci	Drench	'Ribbon Candy'	C	9/6/2006 5/8/2007								
<i>Trial Results: No statistical differences among treatments.</i>														

Phytophthora Efficacy

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG					
25488	N <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	BioPhos 43L <i>Dipotassium phosphonate + Dipotassium phosphate</i>	Field Container	2004	NC	Benson	Foliar	R. obtusum 'Hinodegiri'	C	1/13/2006 6/27/2006					
					<i>Trial Results: Excellent efficacy with foliar application of 2 gal per 100 gal.</i>											
					2005	NC	Benson	Foliar	R. obtusum 'Hinodegiri'	C	10/20/2005 6/27/2006					
					<i>Trial Results: Excellent efficacy with 2 gal per 100 gal.</i>											
					2005	NH	Pennucci	Drench	'Parade'	C	9/6/2006 5/8/2007					
					<i>Trial Results: No statistical differences among treatments.</i>											
					2005	NH	Pennucci	Drench	'Popcorn'	C	9/6/2006 5/8/2007					
					<i>Trial Results: No statistical differences among treatments.</i>											
25802	N <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	BioPhos 43L <i>Dipotassium phosphonate + Dipotassium phosphate</i>	Greenhouse	2005	WA	Chastagner	Drench	'Nova Zembla'	C	10/5/2006 4/3/2007					
					<i>Trial Results: Good efficacy at 2 gal per 100 gal, but inoculated and non-inoculated checks had no disease.</i>											
					2006	WA	Chastagner	Drench	'Purple Splendour'	C	1/8/2007 5/8/2007					
					<i>Trial Results: No significant reduction in disease with 64 fl oz per 100 gal.</i>											
					2006	WA	Chastagner	Foliar	'Purple Splendour'	C	1/8/2007 5/8/2007					
					<i>Trial Results: No significant reduction in disease with 64 fl oz per 100 gal.</i>											
					25677	C <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Calirus (PMA300) <i>Dikegulac sodium</i>	Field Container	2006	NC	Benson	Foliar	R. obtusum 'Hinodegiri'	C	11/17/2006 5/8/2007
										<i>Trial Results: Excellent efficacy with 150 fl oz per 100 gal foliar spray.</i>						
25242	N <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Captan	Field Container						2005	NC	Benson		R. obtusum 'Hinodegiri'	C	10/20/2005 6/27/2006
										<i>Trial Results: Poor control with 10 oz per 100 gal drench application.</i>						
										2005	NH	Pennucci	Drench	'Parade'	C	9/6/2006 5/8/2007
										<i>Trial Results: No statistical differences among treatments.</i>						
										2005	NH	Pennucci	Drench	'Popcorn'	C	9/6/2006 5/8/2007
										<i>Trial Results: No statistical differences among treatments.</i>						
2005	NH	Pennucci	Drench	'Lollipop'	C	9/6/2006 5/8/2007										
<i>Trial Results: No statistical differences among treatments.</i>																
25801	N <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Captan	Greenhouse	2005	WA	Chastagner	Drench	'Nova Zembla'	C	10/5/2006 4/3/2007					
					<i>Trial Results: Good efficacy at 20 oz per 100 gal, but inoculated and non-inoculated checks had no disease.</i>											
					2006	WA	Chastagner	Drench	'Purple Splendour'	C	1/8/2007 5/8/2007					
					<i>Trial Results: No significant reduction in disease with 4 oz per 100 gal.</i>											

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26175	N <i>Phytophthora cinnamomi</i> <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Daconil <i>Chlorothalonil</i>	Field Container	2005	NH	Pennucci	Drench	'Parade'	C	9/6/2006 5/8/2007
					<i>Trial Results: No statistical differences among treatments.</i>						
					2005	NH	Pennucci	Drench	'Popcorn'	C	9/6/2006 5/8/2007
					<i>Trial Results: No statistical differences among treatments.</i>						
26175	N	Azalea, & Rhododendron	Daconil	Field Container	2005	NH	Pennucci	Drench	'Lollipop'	C	9/6/2006 5/8/2007
					<i>Trial Results: No statistical differences among treatments.</i>						
					2005	NH	Pennucci	Drench	'Ribbon Candy'	C	9/6/2006 5/8/2007
					<i>Trial Results: No statistical differences among treatments.</i>						
25548	N <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Disarm <i>Fluoxastrobin</i>	Field Container	2006	NC	Benson	Drench	R. obtusum 'Hinodegiri'	C	11/17/2006 5/8/2007
					<i>Trial Results: Excellent efficacy with 3 oz per 100 gal drench application.</i>						
25548	N	Azalea, & Rhododendron	Disarm	Field Container	2006	NJ	Gould			O	
26186	C <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Disarm <i>Fluoxastrobin</i>	Greenhouse	2005	WA	Chastagner	Drench		C	10/5/2006 4/3/2007
					<i>Trial Results: Good efficacy at 4 pints per 100 gal, but inoculated and non-inoculated checks had no disease.</i>						
					2006	WA	Chastagner	Drench	'Purple Splendour'	C	1/8/2007 5/8/2007
<i>Trial Results: No significant reduction in disease with 3 fl oz per 100 gal.</i>											
24910	N <i>Phytophthora cinnamomi</i> <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Fenstop <i>Fenamidone</i>	Field Container	2004	NC	Benson	Foliar	R. catawbiense 'Roseum Elegans'	C	1/13/2006 6/27/2006
					<i>Trial Results: Good efficacy with 28 and 56 fl oz/100 gal; poor efficacy with 14 fl oz per 100 gal.</i>						
					2004	NC	Benson	Drench	R. obtusum 'Hinodegiri'	C	1/13/2006 6/27/2006
					<i>Trial Results: Excellent efficacy with drench application of 14 fl oz per 100 gal.</i>						
					2005	NC	Benson	Drench	R. obtusum 'Hinodegiri'	C	10/20/2005 6/27/2006
					<i>Trial Results: Excellent efficacy with drench application of 14 and 28 fl oz per 100 gal</i>						
24910	N	Azalea, & Rhododendron	Fenstop	Field Container	2006	NC	Benson	Drench	R. obtusum 'Hinodegiri'	C	11/17/2006 5/8/2007
					<i>Trial Results: Excellent efficacy with 7.0 and 14.0 fl oz per 100 gal drench application.</i>						
25834	N <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Fenstop <i>Fenamidone</i>	Greenhouse	2005	WA	Chastagner	Drench	'Nova Zembla'	C	10/5/2006 4/3/2007
					<i>Trial Results: Good efficacy at 14 and 28 oz per 100 gal, but inoculated and non-inoculated checks had no disease.</i>						
					2006	WA	Chastagner	Drench	'Purple Splendour'	C	1/8/2007 5/8/2007
<i>Trial Results: No significant reduction in disease with 7 and 14 fl oz per 100 gal.</i>											
26173	N <i>Phytophthora cinnamomi</i> <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Fluazinam <i>Fluazinam</i>	Field Container	2005	NH	Pennucci	Drench	'Parade'	C	9/6/2006 5/8/2007
					<i>Trial Results: No statistical differences among treatments.</i>						
					2005	NH	Pennucci	Drench	'Popcorn'	C	9/6/2006 5/8/2007
					<i>Trial Results: No statistical differences among treatments.</i>						
					2005	NH	Pennucci	Drench	'Lollipop'	C	9/6/2006 5/8/2007
<i>Trial Results: No statistical differences among treatments.</i>											
26173	N	Azalea, & Rhododendron	Fluazinam	Field Container	2005	NH	Pennucci	Drench	'Ribbon Candy'	C	9/6/2006 5/8/2007
					<i>Trial Results: No statistical differences among treatments.</i>						

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26535 A	Phytophthora cinnamomi <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Heritage <i>Azoxystrobin</i>	Greenhouse	2006	WA	Chastagner	Drench	'Purple Splendour'	C	1/8/2007 5/8/2007
<i>Trial Results: No significant reduction in disease with 4 oz per 100 gal.</i>											
25680 N	Phytophthora cinnamomi <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Hymexazol 30L <i>Hymexazol</i>	Field Container	2005	NC	Benson	Drench	R. obtusum 'Hinodegiri'	C	10/20/2005 6/27/2006
<i>Trial Results: Poor efficacy with drench applications at all tested rates.</i>											
24911 N	Phytophthora cinnamomi <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Insignia <i>Pyraclostrobin</i>	Field Container	2005	NC	Benson	Drench	R. obtusum 'Hinodegiri'	C	10/20/2005 6/27/2006
<i>Trial Results: Good efficacy with drench application of 16 and 40 oz per 100 gal.</i>											
					2005	NH	Pennucci	Foliar	'Parade'	C	9/6/2006 5/8/2007
<i>Trial Results: No statistical differences among treatments.</i>											
					2005	NH	Pennucci	Drench	'Popcorn'	C	9/6/2006 5/8/2007
<i>Trial Results: No statistical differences among treatments.</i>											
					2005	NH	Pennucci	Drench	'Lollipop'	C	9/6/2006 5/8/2007
<i>Trial Results: No statistical differences among treatments.</i>											
					2005	NH	Pennucci	Drench	'Ribbon Candy'	C	9/6/2006 5/8/2007
<i>Trial Results: No statistical differences among treatments.</i>											
					2005	NY	Becker	Foliar	'Lees Dark Purple'	C	11/18/2005 6/27/2006
<i>Trial Results: No statistical difference among treatments</i>											
					2005	NY	Becker	Foliar	R. catawbiensis 'boursault'	C	11/18/2005 6/27/2006
<i>Trial Results: No statistical difference among treatments</i>											
					2005	NY	Becker	Foliar	'Nova zembla'	C	11/18/2005 6/27/2006
<i>Trial Results: No statistical difference among treatments</i>											
					2005	NY	Becker	Foliar	R. catawbiensis 'alba'	C	11/18/2005 6/27/2006
<i>Trial Results: No statistical difference among treatments</i>											
					2005	NY	Becker	Foliar	R. maximum 'roseum'	C	11/18/2005 6/27/2006
<i>Trial Results: No statistical difference among treatments</i>											
					2006	NC	Benson	Drench	R. obtusum 'Hinodegiri'	C	11/17/2006 5/8/2007
<i>Trial Results: Excellent efficacy with 16 and 40 oz per 100 gal drench application.</i>											
					2006	NH	Pennucci	Drench		C	8/31/2007
25835 N	Phytophthora cinnamomi <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Insignia <i>Pyraclostrobin</i>	Greenhouse	2005	WA	Chastagner	Drench	'Nova Zembla'	C	10/5/2006 4/3/2007
<i>Trial Results: Good efficacy at 16 and 40 oz per 100 gal, but inoculated and non-inoculated checks had no disease.</i>											
					2006	NJ	Gould			O	
					2006	WA	Chastagner	Drench	'Purple Splendour'	C	1/8/2007 5/8/2007
<i>Trial Results: No significant reduction in disease with 8 oz per 100 gal.</i>											
25489 B	Phytophthora cinnamomi <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	K-Phite <i>Phosphorus acid salts</i>	Field Container	2006	NC	Benson	Foliar	R. obtusum 'Hinodegiri'	C	11/17/2006 5/8/2007
<i>Trial Results: Excellent efficacy with 48 fl oz per 100 gal foliar spray.</i>											

Key: Priorities A, B, and C are researchable; N is not researchable - these may be completed studies or those with Standards. Trial Status: P = Planned, O = Ongoing, C = Complete, X = Cancelled, ? = Unknown

Phytophthora Efficacy

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
24914	N <i>Phytophthora cinnamomi</i> <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Magellan <i>Mono- and Dibasic Sodium, Potassium and Ammonium Phosphites</i>	Field Container	2005	NH	Pennucci	Drench	'Parade'	C	9/6/2006 5/8/2007
					<i>Trial Results: No statistical differences among treatments.</i>						
					2005	NH	Pennucci	Drench	'Popcorn'	C	9/6/2006 5/8/2007
					<i>Trial Results: No statistical differences among treatments.</i>						
					2005	NH	Pennucci	Drench	'Lollipop'	C	9/6/2006 5/8/2007
					<i>Trial Results: No statistical differences among treatments.</i>						
					2005	NH	Pennucci	Drench	'Ribbon Candy'	C	9/6/2006 5/8/2007
					<i>Trial Results: No statistical differences among treatments.</i>						
					2005	NY	Becker	Foliar	'Lees Dark Purple'	C	11/18/2005 6/27/2006
					<i>Trial Results: No statistical difference among treatments</i>						
					2005	NY	Becker	Foliar	R. catabwiensis 'boursault'	C	11/18/2005 6/27/2006
					<i>Trial Results: No statistical difference among treatments</i>						
					2005	NY	Becker	Foliar	'Nova zembla'	C	11/18/2005 6/27/2006
					<i>Trial Results: No statistical difference among treatments</i>						
2005	NY	Becker	Foliar	R. catabwiensis 'alba'	C	11/18/2005 6/27/2006					
<i>Trial Results: No statistical difference among treatments</i>											
2005	NY	Becker	Foliar	R. maximum 'roseum'	C	11/18/2005 6/27/2006					
<i>Trial Results: No statistical difference among treatments</i>											
2006	NC	Benson	Foliar	R. obtusum 'Hinodegiri'	C	11/17/2006 5/8/2007					
<i>Trial Results: Excellent efficacy with 12 fl oz per 100 gal foliar spray.</i>											
25838	N <i>Phytophthora cinnamomi</i> <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Magellan <i>Mono- and Dibasic Sodium, Potassium and Ammonium Phosphites</i>	Greenhouse	2005	WA	Chastagner	Drench	'Nova Zembla'	C	10/5/2006 4/3/2007
					<i>Trial Results: Mediocre efficacy at 12 fl oz per 100 gal, but inoculated and non-inoculated checks had no disease.</i>						
					2006	WA	Chastagner	Drench	'Purple Splendour'	C	1/8/2007 5/8/2007
					<i>Trial Results: Significant reduction in disease with 12 fl oz per 100 gal.</i>						
2006	WA	Chastagner	Foliar	'Purple Splendour'	C	1/8/2007 5/8/2007					
<i>Trial Results: Significant reduction in disease with 5 pints per 100 gal.</i>											
25675	N <i>Phytophthora cinnamomi</i> <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Medallion <i>Fludioxonil</i>	Field Container	2004	NC	Benson	Foliar	R. catabwiense 'Roseum Elegans'	C	1/13/2006 6/27/2006
					<i>Trial Results: No efficacy at 2, 4, and 8 oz per 100 gal.</i>						
25484	N <i>Phytophthora cinnamomi</i> <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	MultiGuard <i>Furfural</i>	Field Container	2006	NC	Benson	Drench	R. obtusum 'Hinodegiri'	C	11/17/2006 5/8/2007
					<i>Trial Results: Poor control with drench applications of 500 or 1000 ppm.</i>						
26536	N <i>Phytophthora cinnamomi</i> <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	MultiGuard <i>Furfural</i>	Greenhouse	2006	WA	Chastagner	Drench	'Purple Splendour'	C	1/8/2007 5/8/2007
					<i>Trial Results: No efficacy at 500 or 1000 ppm.</i>						
25682	C <i>Phytophthora cinnamomi</i> <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Muscodor albus <i>Muscodor albus</i>	Field Container	2006	NC	Benson	Soil Incorporation	R. obtusum 'Hinodegiri'	C	11/17/2006 5/8/2007
					<i>Trial Results: Poor efficacy with soil incorporation (3.75 g/L soil).</i>						
25491	C <i>Phytophthora cinnamomi</i> <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Muscodor albus <i>Muscodor albus</i>	Greenhouse	2006	WA	Chastagner	Soil incorporation	'Purple Splendour'	C	1/8/2007 5/8/2007
					<i>Trial Results: No significant reduction in disease with 7.5 g/L soil volume.</i>						

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG		
24915 N	Phytophthora cinnamomi <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	NOA 446510 <i>Mandipropamid</i>	Field Container	2005	NC	Benson	Drench	R. obtusum 'Hinodegiri'	C	10/20/2005 6/27/2006		
					<i>Trial Results: Excellent efficacy with drench application at 8 oz per 100 gal</i>							2006	NC
<i>Trial Results: Excellent efficacy with 4 and 8 fl oz per 100 gal drench application.</i>													
25839 N	Phytophthora cinnamomi <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	NOA 446510 <i>Mandipropamid</i>	Greenhouse	2006	WA	Chastagner	Drench	'Purple Splendour'	C	1/8/2007 5/8/2007		
					<i>Trial Results: Good to excellent efficacy at 2 and 8 fl oz per 100 gal.</i>								
24909 N	Phytophthora cinnamomi <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Segway <i>Cyazofamid</i>	Field Container	2004	NC	Benson	Foliar	R. catawbiense 'Roseum Elegans'	C	1/13/2006 6/27/2006		
					<i>Trial Results: Mediocre efficacy with foliar application at 1.5 and 3.0 fl oz per 100 gal; only the highest rate of 6.0 oz per 100 gal provided good control.</i>								
					2004	NC	Benson	Drench	R. obtusum 'Hinodegiri'	C	1/13/2006 6/27/2006		
					<i>Trial Results: Good efficacy with drench application of 1.5 fl oz per 100 gal.</i>								
					2005	NC	Benson	Drench	R. obtusum 'Hinodegiri'	C	10/20/2005 6/27/2006		
					<i>Trial Results: Excellent efficacy with drench application of 1.5 and 3.0 fl oz per 100 gal</i>								
					2005	NH	Pennucci		'Parade'	C	9/6/2006 5/8/2007		
					2005	NH	Pennucci	Drench	'Popcorn'	C	9/6/2006 5/8/2007		
					2005	NH	Pennucci	Drench	'Lollipop'	C	9/6/2006 5/8/2007		
					2005	NH	Pennucci	Drench	'Ribbon Candy'	C	9/6/2006 5/8/2007		
					2005	NY	Becker	Foliar	'Lees Dark Purple'	C	11/18/2005 6/27/2006		
					<i>Trial Results: No statistical difference among treatments</i>								
					2005	NY	Becker	Foliar	R. catawbiensis 'boursault'	C	11/18/2005 6/27/2006		
					<i>Trial Results: No statistical difference among treatments</i>								
2005	NY	Becker	Foliar	R. catawbiensis 'alba'	C	11/18/2005 6/27/2006							
<i>Trial Results: No statistical difference among treatments</i>													
2005	NY	Becker	Foliar	R. maximum 'roseum'	C	11/18/2005 6/27/2006							
<i>Trial Results: No statistical difference among treatments</i>													
2006	NC	Benson	Drench	R. obtusum 'Hinodegiri'	C	11/17/2006 5/8/2007							
<i>Trial Results: Excellent efficacy with 3.0 and 6.0 fl oz per 100 gal drench application.</i>													
2006	NH	Pennucci	Drench		C	8/31/2007							
25833 N	Phytophthora cinnamomi <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Segway <i>Cyazofamid</i>	Greenhouse	2005	WA	Chastagner	Drench	'Nova Zembla'	C	10/5/2006 4/3/2007		
					<i>Trial Results: Good efficacy at 1.5 and 3.0 oz per 100 gal, but inoculated and non-inoculated checks had no disease.</i>								
					2006	NJ	Gould			O			
2006	WA	Chastagner	Drench	'Purple Splendour'	C	1/8/2007 5/8/2007							
<i>Trial Results: Significant disease reduction at 6 oz per 100 gal.</i>													

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG							
24912	N	Phytophthora cinnamomi	Azalea, & Rhododendron	Stature DM	Field Container	NC	Warfield	Drench	R. obtusum 'Hinodegiri'	C	11/7/2006 4/3/2007							
		<i>Phytophthora cinnamomi</i>	<i>Rhododendron sp.</i>	<i>Dimethomorph</i>														
	<i>Trial Results: Excellent efficacy.</i>																	
									2004				Benson	Foliar	R. catawbiense 'Roseum Elegans'		1/13/2006 6/27/2006	
	<i>Trial Results: Poor efficacy with foliar application at 12.8, 25.6, and 51.2 oz per 100 gal.</i>																	
									2004				Benson	Drench	R. obtusum 'Hinodegiri'		1/13/2006 6/27/2006	
	<i>Trial Results: Excellent efficacy with drench application of 6.4 oz per 100 gal.</i>																	
									2005				Benson	Drench	R. obtusum 'Hinodegiri'		10/20/2005 6/27/2006	
	<i>Trial Results: Excellent efficacy with drench application of 6.2 and 12.8 oz per 100 gal.</i>																	
									2005				Pennucci	Drench	'Parade'		9/6/2006 5/8/2007	
	<i>Trial Results: No statistical differences among treatments.</i>																	
									2005				Pennucci	Drench	'Popcorn'		9/6/2006 5/8/2007	
	<i>Trial Results: No statistical differences among treatments.</i>																	
									2005				Pennucci	Drench	'Lollipop'		9/6/2006 5/8/2007	
	<i>Trial Results: No statistical differences among treatments.</i>																	
									2005				Pennucci	Drench	'Ribbon Candy'		9/6/2006 5/8/2007	
	<i>Trial Results: No statistical differences among treatments.</i>																	
				2005		Becker	Foliar	'Lees Dark Purple'		11/18/2005 6/27/2006								
<i>Trial Results: No statistical difference among treatments</i>																		
				2005		Becker	Foliar	R. catawbiensis 'boursault'		11/18/2005 6/27/2006								
<i>Trial Results: No statistical difference among treatments</i>																		
				2005		Becker	Foliar	'Nova zembla'		11/18/2005 6/27/2006								
<i>Trial Results: No statistical difference among treatments</i>																		
				2005		Becker	Foliar	R. catawbiensis 'alba'		11/18/2005 6/27/2006								
<i>Trial Results: No statistical difference among treatments</i>																		
				2005		Becker	Foliar	R. maximum 'roseum'		11/18/2005 6/27/2006								
<i>Trial Results: No statistical difference among treatments</i>																		
25836	N	Phytophthora cinnamomi	Azalea, & Rhododendron	Stature DM	Greenhouse	WA	Chastagner	Drench	'Nova Zembla'	C	10/5/2006 4/3/2007							
		<i>Phytophthora cinnamomi</i>	<i>Rhododendron sp.</i>	<i>Dimethomorph</i>														
<i>Trial Results: Mediocre to good efficacy at 1.5 and 3.0 oz per 100 gal, but inoculated and non-inoculated checks had no disease.</i>																		
				2006		Chastagner	Drench	'Purple Splendour'		1/8/2007 5/8/2007								
<i>Trial Results: No significant reduction in disease with 12.8 oz per 100 gal.</i>																		

Phytophthora Efficacy

Printed: 9/20/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG													
25681	N	Phytophthora cinnamomi	Azalea, & Rhododendron	Subdue MAXX	Field Container	2004	NC	Benson	Foliar	R. catawbiense 'Roseum Elegans'	C	1/13/2006 6/27/2006												
		Phytophthora cinnamomi	Rhododendron sp.	Mefenoxam																				
	<i>Trial Results: Poor efficacy with foliar application of 1.0 fl oz per 100 gal.</i>																							
	2004 NC Benson Drench R. obtusum 'Hinodegiri' C 1/13/2006 6/27/2006																							
	<i>Trial Results: Poor efficacy with drench application of 1.0 fl oz per 100 gal.</i>																							
	2005 NC Benson Drench R. obtusum 'Hinodegiri' C 10/20/2005 6/27/2006																							
	<i>Trial Results: Poor efficacy with drench application</i>																							
	2005 NH Pennucci Drench 'Parade' C 9/6/2006 5/8/2007																							
	<i>Trial Results: No statistical differences among treatments.</i>																							
	2005 NH Pennucci Drench 'Popcorn' C 9/6/2006 5/8/2007																							
<i>Trial Results: No statistical differences among treatments.</i>																								
2005 NH Pennucci Drench 'Lollipop' C 9/6/2006 5/8/2007																								
<i>Trial Results: No statistical differences among treatments.</i>																								
2005 NH Pennucci Drench 'Ribbon Candy' C 9/6/2006 5/8/2007																								
<i>Trial Results: No statistical differences among treatments.</i>																								
2006 NC Benson Drench R. obtusum 'Hinodegiri' C 11/17/2006 5/8/2007																								
<i>Trial Results: Excellent efficacy with 16.0 fl oz per 100 gal drench application.</i>																								
25799	C	Phytophthora cinnamomi	Azalea, & Rhododendron	Subdue MAXX	Greenhouse	2005	WA	Chastagner	Drench	'Nova Zembla'	C	10/5/2006 4/3/2007												
		Phytophthora cinnamomi	Rhododendron sp.	Mefenoxam																				
		<i>Trial Results: Good efficacy at 1 fl oz per 100 gal, but inoculated and non-inoculated checks had no disease.</i>																						
2006 WA Chastagner Drench 'Purple Splendour' C 1/8/2007 5/8/2007																								
<i>Trial Results: Significant disease reduction at 2 fl oz per 100 gal.</i>																								
26428	N	Phytophthora cinnamomi	Azalea, & Rhododendron	T382	Field Container																			
<i>Phytophthora cinnamomi Rhododendron sp. T382</i>																								
26177	N	Phytophthora cinnamomi	Azalea, & Rhododendron	Tank Mix: Cyazofami	Field Container	2005	NH	Pennucci	Drench	'Parade'	C	9/6/2006 5/8/2007												
													Phytophthora cinnamomi	Rhododendron sp.	Cyazofamid + Fosetyl Al									
													<i>Trial Results: No statistical differences among treatments.</i>											
													2005 NH Pennucci Drench 'Popcorn' C 9/6/2006 5/8/2007											
													<i>Trial Results: No statistical differences among treatments.</i>											
2005 NH Pennucci Drench 'Lollipop' C 9/6/2006 5/8/2007																								
<i>Trial Results: No statistical differences among treatments.</i>																								
2005 NH Pennucci Drench 'Ribbon Candy' C 9/6/2006 5/8/2007																								
<i>Trial Results: No statistical differences among treatments.</i>																								
26178	N	Phytophthora cinnamomi	Azalea, & Rhododendron	Tank Mix: Cyazofami	Field Container	2005	NH	Pennucci	Drench	'Parade'	C	9/6/2006 5/8/2007												
													Phytophthora cinnamomi	Rhododendron sp.	Cyazofamid + Potassium phosphite									
													<i>Trial Results: No statistical differences among treatments.</i>											
													2005 NH Pennucci Drench 'Popcorn' C 9/6/2006 5/8/2007											
<i>Trial Results: No statistical differences among treatments.</i>																								
2005 NH Pennucci Drench 'Lollipop' C 9/6/2006 5/8/2007																								
<i>Trial Results: No statistical differences among treatments.</i>																								
2005 NH Pennucci Drench 'Ribbon Candy' C 9/6/2006 5/8/2007																								
<i>Trial Results: No statistical differences among treatments.</i>																								

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Phytophthora Efficacy

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26176 N	Phytophthora cinnamomi <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Terramec SP <i>Chloroneb</i>	Field Container	2005	NH	Pennucci	Drench	'Parade'	C	9/6/2006 5/8/2007
					<i>Trial Results: No statistical differences among treatments.</i>						
					2005	NH	Pennucci	Drench	'Popcorn'	C	9/6/2006 5/8/2007
					<i>Trial Results: No statistical differences among treatments.</i>						
					2005	NH	Pennucci	Drench	'Lollipop'	C	9/6/2006 5/8/2007
<i>Trial Results: No statistical differences among treatments.</i>											
25750 N	Phytophthora cinnamomi <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Terrazole 35% WP <i>Etridiazole</i>	Field Container	2005	NH	Pennucci	Drench	'Parade'	C	9/6/2006 5/8/2007
					<i>Trial Results: No statistical differences among treatments.</i>						
					2005	NH	Pennucci	Drench	'Popcorn'	C	9/6/2006 5/8/2007
					<i>Trial Results: No statistical differences among treatments.</i>						
					2005	NH	Pennucci	Drench	'Lollipop'	C	9/6/2006 5/8/2007
					<i>Trial Results: No statistical differences among treatments.</i>						
					2005	NH	Pennucci	Drench	'Ribbon Candy'	C	9/6/2006 5/8/2007
					<i>Trial Results: No statistical differences among treatments.</i>						
					2005	NY	Becker	Foliar	'Lees Dark Purple'	C	11/18/2005 6/27/2006
					<i>Trial Results: No statistical difference among treatments</i>						
2005	NY	Becker	Foliar	R. catawbiensis 'boursault'	C	11/18/2005 6/27/2006					
<i>Trial Results: No statistical difference among treatments</i>											
2005	NY	Becker	Foliar	'Nova zembla'	C	11/18/2005 6/27/2006					
<i>Trial Results: No statistical difference among treatments</i>											
2005	NY	Becker	Foliar	R. catawbiensis 'alba'	C	11/18/2005 6/27/2006					
<i>Trial Results: No statistical difference among treatments</i>											
2005	NY	Becker	Foliar	R. maximum 'roseum'	C	11/18/2005 6/27/2006					
<i>Trial Results: No statistical difference among treatments</i>											
25800 C	Phytophthora cinnamomi <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Terrazole 35% WP <i>Etridiazole</i>	Greenhouse	2005	WA	Chastagner	Drench	'Nova Zembla'	C	10/5/2006 4/3/2007
					<i>Trial Results: Good efficacy at 10 oz per 100 gal, but inoculated and non-inoculated checks had no disease.</i>						
					2006	WA	Chastagner	Drench	'Purple Splendour'	C	1/8/2007 5/8/2007
<i>Trial Results: No significant reduction in disease with 8 oz per 100 gal.</i>											

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG					
24916	N <i>Phytophthora cinnamomi</i> <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	TM-459 <i>TM-459</i>	Field Container	2005	NY	Becker	Foliar	'Lees Dark Purple'	C	11/18/2005 6/27/2006					
					<i>Trial Results: No statistical difference among treatments</i>											
					2005	NY	Becker	Foliar	R. catawbiensis 'boursault'	C	11/18/2005 6/27/2006					
					<i>Trial Results: No statistical difference among treatments</i>											
					2005	NY	Becker	Foliar	'Nova Zembla'	C	11/18/2005 6/27/2006					
					<i>Trial Results: No statistical difference among treatments</i>											
25780	N <i>Phytophthora cinnamomi</i> <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Truban <i>Etridiazole</i>	Field Container	2004	NC	Benson	Drench	R. obtusum 'Hinodegiri'	C	1/13/2006 6/27/2006					
					<i>Trial Results: Poor efficacy with drench application of 8.0 fl oz per 100 gal.</i>											
					2005	NH	Pennucci	Drench	'Parade'	C	9/6/2006 5/8/2007					
					<i>Trial Results: No statistical differences among treatments.</i>											
					2005	NH	Pennucci	Drench	'Popcorn'	C	9/6/2006 5/8/2007					
					<i>Trial Results: No statistical differences among treatments.</i>											
24917	N <i>Phytophthora cinnamomi</i> <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	V-10161 <i>V-10161</i>	Field Container	2005	NC	Benson	Foliar	R. obtusum 'Hinodegiri'	C	10/20/2005 6/27/2006					
					<i>Trial Results: Good efficacy with foliar application of 10 g ai per 100 gal.</i>											
					2006	NC	Benson	Drench	R. obtusum 'Hinodegiri'	C	11/17/2006 5/8/2007					
					<i>Trial Results: Excellent efficacy with 30 and 60 ml per 100 gal drench application.</i>											
					25841	N <i>Phytophthora cinnamomi</i> <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	V-10161 <i>V-10161</i>	Greenhouse	2005	WA	Chastagner	Drench	'Nova Zembla'	C	10/5/2006 4/3/2007
										<i>Trial Results: Mediocre efficacy at 1.5 and 3.0 oz per 100 gal, but inoculated and non-inoculated checks had no disease.</i>						
					2006	WA	Chastagner	Drench	'Purple Splendour'	C	1/8/2007 5/8/2007					
<i>Trial Results: No significant reduction in disease with 30 and 60 ml per 100 gal.</i>																

Phytophthora Efficacy

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG					
25490	N <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Vital 4L <i>Potassium phosphite</i>	Field Container	2004	NC	Benson	Foliar	R. obtusum 'Hinodegiri'	C	1/13/2006 6/27/2006					
					<i>Trial Results: Excellent efficacy with foliar application of 4 pints per 100 gal.</i>											
					2005	NC	Benson	Foliar	R. obtusum 'Hinodegiri'	C	10/20/2005 6/27/2006					
					<i>Trial Results: Excellent efficacy with foliar application f 4 pints per 100 gal.</i>											
					2005	NY	Becker	Foliar	'Lees Dark Purple'	C	11/18/2005 6/27/2006					
					<i>Trial Results: No statistical difference among treatments.</i>											
					2005	NY	Becker	Foliar	R. catawbiensis 'boursault'	C	11/18/2005 6/27/2006					
					<i>Trial Results: No statistical difference among treatments.</i>											
					2005	NY	Becker	Foliar	'Nova zembla'	C	11/18/2005 6/27/2006					
					<i>Trial Results: No statistical difference among treatments.</i>											
25490	N <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Vital 4L <i>Potassium phosphite</i>	Field Container	2005	NY	Becker	Foliar	R. catawbiensis 'alba'	C	11/18/2005 6/27/2006					
					<i>Trial Results: No statistical difference among treatments.</i>											
					2005	NY	Becker	Foliar	R. maximum 'roseum'	C	11/18/2005 6/27/2006					
					<i>Trial Results: No statistical difference among treatments.</i>											
					2006	NC	Benson	Foliar	R. obtusum 'Hinodegiri'	C	11/17/2006 5/8/2007					
					<i>Trial Results: Excellent efficacy with 64 fl oz per 100 gal foliar spray.</i>											
					25803	N <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Vital 4L <i>Potassium phosphite</i>	Greenhouse	2005	WA	Chastagner	Drench	'Nova Zembla'	C	10/5/2006 4/3/2007
										<i>Trial Results: Good efficacy at 4 pints per 100 gal, but inoculated and non-inoculated checks had no disease.</i>						
										2006	WA	Chastagner	Drench	'Purple Splendour'	C	1/8/2007 5/8/2007
										<i>Trial Results: Significant disease reduction at 4 pints per 100 gal.</i>						
25803	N <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Vital 4L <i>Potassium phosphite</i>	Greenhouse	2006	WA	Chastagner	Foliar	'Purple Splendour'	C	1/8/2007 5/8/2007					
					<i>Trial Results: No significant reduction in disease with 4 pints per 100 gal.</i>											
26427	N <i>Phytophthora cinnamomi</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	ZeroTol <i>Hydrogen peroxide</i>	Field Container												
24941	N <i>Phytophthora citricola</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Aliette WDG <i>Fosetyl Al</i>	Field Container	2005	OR	Regan	Foliar	'Nova Zembla'	C	2/3/2006 6/27/2006					
					<i>Trial Results: Good efficacy with foliar application</i>											
					2006	OR	Regan			O						
24941	N <i>Phytophthora citricola</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Aliette WDG <i>Fosetyl Al</i>	Field Container	2007	OR	Regan			P						
					<i>Trial Results: No significant reduction in disease with 4 pints per 100 gal.</i>											
24935	B <i>Phytophthora citricola</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Alude <i>Potassium phosphite</i>	Field Container	2006	OR	Regan			P						
25679	B <i>Phytophthora citricola</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	BioPhos 43L <i>Dipotassium phosphonate + Dipotassium phosphate</i>	Field Container	2005	NC	Benson	Foliar	R. obtusum 'Hinodegiri'	C	10/22/2005 6/27/2006					
					2005	OR	Regan	Foliar	'Nova Zembla'	C	2/3/2006 6/27/2006					
<i>Trial Results: Good efficacy with foliar application</i>																
25825	C <i>Phytophthora citricola</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Disarm <i>Fluoxastrobin</i>	Field Container	2006	OR	Regan			P						

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
24920	B <i>Phytophthora citricola</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Fenstop <i>Fenamidon</i>	Field Container	2005	OR	Regan	Foliar	'Nova Zembla'	C	2/3/2006 6/27/2006
					2006	OR	Regan			P	
					<i>Trial Results: Poor efficacy with foliar application</i>						
25676	N <i>Phytophthora citricola</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Fore 80WP <i>Manganese + Zinc + Ethylene bis-dithiocarbamate Ion</i>	Field Container	2005	OR	Regan	Foliar	'Nova Zembla'	C	2/3/2006 6/27/2006
					<i>Trial Results: Poor efficacy with foliar application</i>						
26466	A <i>Phytophthora citricola</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Heritage <i>Azoxystrobin</i>	Field Container	2007	OR	Regan	Foliar		P	
24921	B <i>Phytophthora citricola</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Insignia <i>Pyraclostrobin</i>	Field Container	2005	OR	Regan		'Nova Zembla'	C	2/3/2006 6/27/2006
					2006	OR	Regan			P	
					<i>Trial Results: Poor efficacy with foliar application</i>						
24936	B <i>Phytophthora citricola</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Magellan <i>Mono- and Dibasic Sodium, Potassium and Ammonium Phosphites</i>	Field Container	2005	OR	Regan		'Nova Zembla'	C	2/3/2006 6/27/2006
					2006	OR	Regan			P	
					<i>Trial Results: Good efficacy with foliar application</i>						
25619	C <i>Phytophthora citricola</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	MultiGuard <i>Furfural</i>	Field Container	2006	OR	Regan			P	
24937	A <i>Phytophthora citricola</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	NOA 446510 <i>Mandipropamid</i>	Field Container	2006	OR	Regan			P	
					2007	OR	Regan			P	
24919	A <i>Phytophthora citricola</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Segway <i>Cyazofamid</i>	Field Container	2005	OR	Regan	Foliar	'Nova Zembla'	C	2/3/2006 6/27/2006
					2006	OR	Regan			P	
					2007	OR	Regan			P	
					<i>Trial Results: Poor efficacy with foliar application</i>						
24922	N <i>Phytophthora citricola</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Stature DM <i>Dimethomorph</i>	Field Container	2005	OR	Regan	Foliar	'Nova Zembla'	C	2/3/2006 6/27/2006
					2007	OR	Regan			P	
					<i>Trial Results: Poor efficacy with foliar application</i>						
26890	C <i>Phytophthora citricola</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Subdue MAXX <i>Mefenoxam</i>	Field Container	2007	OR	Regan			P	
26891	C <i>Phytophthora citricola</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Tank Mix: Heritage + <i>azoxystrobin + mefenoxam</i>	Field Container	2007	OR	Regan			P	
26749	B <i>Phytophthora citricola</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Tanos <i>Famoxadone + Cymoxanil</i>	TBD	2007	OR	Regan			P	

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
24939	N <i>Phytophthora citricola</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	TM-459 <i>TM-459</i>	Field Container	2005	OR	Regan		'Nova Zembla'	C	2/3/2006 6/27/2006
<i>Trial Results: Poor efficacy with foliar application</i>											
24940	A <i>Phytophthora citricola</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	V-10161 <i>V-10161</i>	Field Container	2006	OR	Regan			P	
					2007	OR	Regan			P	
26987	N <i>Phytophthora cryptogea</i>	Transvaal Daisy <i>Gerbera sp.</i>	Aliette WDG <i>Fosetyl Al</i>	Greenhouse	2007	NC	Benson			P	
26988	B <i>Phytophthora cryptogea</i>	Transvaal Daisy <i>Gerbera sp.</i>	Alude <i>Potassium phosphite</i>	Greenhouse	2007	NC	Benson			P	
26989	B <i>Phytophthora cryptogea</i>	Transvaal Daisy <i>Gerbera sp.</i>	BioPhos 43L <i>Dipotassium phosphonate + Dipotassium phosphate</i>	Greenhouse	2007	NC	Benson			P	
26897	B <i>Phytophthora cryptogea</i>	Transvaal Daisy <i>Gerbera sp.</i>	Disarm <i>Fluoxastrobin</i>	TBD	2007	NC	Benson			P	
26997	C <i>Phytophthora cryptogea</i>	Transvaal Daisy <i>Gerbera sp.</i>	Fenstop <i>Fenamidone</i>	Greenhouse	2007	NC	Benson			P	
26383	A <i>Phytophthora cryptogea</i>	Transvaal Daisy <i>Gerbera sp.</i>	Heritage <i>Azoxystrobin</i>	TBD	2007	NC	Benson			P	
26992	B <i>Phytophthora cryptogea</i>	Transvaal Daisy <i>Gerbera sp.</i>	Insignia <i>Pyraclostrobin</i>	Greenhouse	2007	NC	Benson			P	
26991	B <i>Phytophthora cryptogea</i>	Transvaal Daisy <i>Gerbera sp.</i>	Magellan <i>Mono- and Dibasic Sodium, Potassium and Ammonium Phosphites</i>	Greenhouse	2007	NC	Benson			P	
26995	N <i>Phytophthora cryptogea</i>	Transvaal Daisy <i>Gerbera sp.</i>	Medallion <i>Fludioxonil</i>	Greenhouse	2007	NC	Benson			P	
26993	C <i>Phytophthora cryptogea</i>	Transvaal Daisy <i>Gerbera sp.</i>	MultiGuard <i>Furfural</i>	Greenhouse	2007	NC	Benson			P	
26994	C <i>Phytophthora cryptogea</i>	Transvaal Daisy <i>Gerbera sp.</i>	Muscodor albus <i>Muscodor albus</i>	Greenhouse	2007	NC	Benson			P	
26898	B <i>Phytophthora cryptogea</i>	Transvaal Daisy <i>Gerbera sp.</i>	NOA 446510 <i>Mandipropamid</i>	TBD	2007	NC	Benson			P	
26382	A <i>Phytophthora cryptogea</i>	Transvaal Daisy <i>Gerbera sp.</i>	Segway <i>Cyazofamid</i>	TBD	2007	NC	Benson			P	

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
20322 N	Phytophthora cryptogea <i>Phytophthora cryptogea</i>	Transvaal Daisy <i>Gerbera sp.</i>	Stature DM <i>Dimethomorph</i>	Greenhouse	2004	NC	Benson	Drench	G. jamesonii	C	12/1/2004 1/1/2005
<i>Trial Results: All rates significantly reduced disease ratings and increased top dry weights (6.4, 12.4, 25.6 oz per 100 gal).</i>											
26996 N	Phytophthora cryptogea <i>Phytophthora cryptogea</i>	Transvaal Daisy <i>Gerbera sp.</i>	Subdue MAXX <i>Mefenoxam</i>	Greenhouse	2007	NC	Benson			P	
26899 C	Phytophthora cryptogea <i>Phytophthora cryptogea</i>	Transvaal Daisy <i>Gerbera sp.</i>	Tank Mix: Heritage + <i>azoxystrobin + mefenoxam</i>	TBD	2007	NC	Benson			P	
26384 A	Phytophthora cryptogea <i>Phytophthora cryptogea</i>	Transvaal Daisy <i>Gerbera sp.</i>	V-10161 <i>V-10161</i>	TBD	2007	NC	Benson			P	
26990 N	Phytophthora cryptogea <i>Phytophthora cryptogea</i>	Transvaal Daisy <i>Gerbera sp.</i>	Vital 4L <i>Potassium phosphite</i>	Greenhouse	2007	NC	Benson			P	
25756 N	Phytophthora drechsleri <i>Phytophthora drechsleri</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Aliette WDG <i>Fosetyl Al</i>	Greenhouse	2005	MI	Hausbeck	Drench	'Freedom Red'	C	10/13/2005 5/8/2007
<i>Trial Results: Mediocre control at 12.8 oz per 100 gal.</i>											
25752 B	Phytophthora drechsleri <i>Phytophthora drechsleri</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Alude <i>Potassium phosphite</i>	Greenhouse	2005	MI	Hausbeck	Drench	'Freedom Red'	C	10/13/2005 5/8/2007
<i>Trial Results: Some efficacy at 12.7 fl oz per 100 gal.</i>											
25753 B	Phytophthora drechsleri <i>Phytophthora drechsleri</i>	Poinsettia <i>Euphorbia pulcherrima</i>	BioPhos 43L <i>Dipotassium phosphonate + Dipotassium phosphate</i>	Greenhouse	2005	MI	Hausbeck	Drench	'Freedom Red'	C	10/13/2005 5/8/2007
<i>Trial Results: Good plant health and no plant death at 128 fl oz per 100 gal.</i>											
25754 N	Phytophthora drechsleri <i>Phytophthora drechsleri</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Insignia <i>Pyraclostrobin</i>	Greenhouse	2005	MI	Hausbeck	Drench	'Freedom Red'	C	10/13/2005 5/8/2007
<i>Trial Results: Poor efficacy with drench application at 8 and 16 oz per 100 gal.</i>											
25751 A	Phytophthora drechsleri <i>Phytophthora drechsleri</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Segway <i>Cyazofamid</i>	Greenhouse	2005	MI	Hausbeck	Drench	'Freedom Red'	C	10/13/2005 6/27/2006
<i>Trial Results: Good plant health and no plant death at 3 oz per 100 gal, but the 6 oz rate provided somewhat less efficacy.</i>											
25755 N	Phytophthora drechsleri <i>Phytophthora drechsleri</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Stature DM <i>Dimethomorph</i>	Greenhouse	2005	MI	Hausbeck	Drench	'Freedom Red'	C	10/13/2005 5/8/2007
<i>Trial Results: Good plant health and no plant death at 6.4 oz per 100 gal, but the 3.2 oz rate provided somewhat less efficacy.</i>											
25757 N	Phytophthora drechsleri <i>Phytophthora drechsleri</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Terrazole 35% WP <i>Etridiazole</i>	Greenhouse	2005	MI	Hausbeck	Drench	'Freedom Red'	C	10/13/2005 5/8/2007
<i>Trial Results: Excellent efficacy equivalent to uninoculated control at a rate of 10 oz per 100 gal.</i>											
25763 N	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Snapdragon <i>Antirrhinum majus</i>	Aliette WDG <i>Fosetyl Al</i>	Greenhouse	2005	MI	Hausbeck	Drench	'White'	C	1/24/2006 6/27/2006
<i>Trial Results: Poor efficacy with drench application</i>											
25759 B	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Snapdragon <i>Antirrhinum majus</i>	Alude <i>Potassium phosphite</i>	Greenhouse	2005	MI	Hausbeck	Drench	'White'	C	1/24/2006 6/27/2006
<i>Trial Results: Poor efficacy with drench application</i>											

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
25760 B	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Snapdragon <i>Antirrhinum majus</i>	BioPhos 43L <i>Dipotassium phosphonate + Dipotassium phosphate</i>	Greenhouse	2005	MI	Hausbeck	Drench	'White'	C	1/24/2006 6/27/2006
<i>Trial Results: Good efficacy with drench application</i>											
26715 B	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Snapdragon <i>Antirrhinum majus</i>	Fenstop <i>Fenamidone</i>	Greenhouse	2006	MI	Hausbeck	Drench	'Montego Mix'	C	2/28/2007 5/8/2007
<i>Trial Results: Excellent efficacy at 7 and 14 fl oz per 100 gal.</i>											
25761 C	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Snapdragon <i>Antirrhinum majus</i>	Insignia <i>Pyraclostrobin</i>	Greenhouse	2005	MI	Hausbeck	Drench	'White'	C	1/24/2006 6/27/2006
<i>Trial Results: Excellent efficacy at 16oz per 100 gal drench application; ineffective at lower rate</i>											
26717 B	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Snapdragon <i>Antirrhinum majus</i>	MultiGuard <i>Furfural</i>	Greenhouse	2006	MI	Hausbeck	Drench	'Montego Mix'	C	2/28/2007 5/8/2007
<i>Trial Results: Poor efficacy with drenches of 500 and 1000 ppm.</i>											
26719 B	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Snapdragon <i>Antirrhinum majus</i>	NOA 446510 <i>Mandipropamid</i>	Greenhouse	2006	MI	Hausbeck	Drench	'Montego Mix'	C	2/28/2007 5/8/2007
<i>Trial Results: Excellent efficacy with 4.1 and 8.2 oz per 100 gal.</i>											
25758 A	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Snapdragon <i>Antirrhinum majus</i>	Segway <i>Cyazofamid</i>	Greenhouse	2004	MI	Hausbeck	Drench	'Floral Showers White'	C	4/3/2007
<i>Trial Results: Excellent efficacy at 3 fl oz per 100 gal</i>											
					2005	MI	Hausbeck	Drench	'White'	C	1/24/2006 6/27/2006
<i>Trial Results: Good efficacy with drench application</i>											
					2006	MI	Hausbeck	Drench	'Montego Mix'	C	2/28/2007 5/8/2007
<i>Trial Results: Good efficacy at 3 and 6 fl oz per 100 gal</i>											
25762 N	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Snapdragon <i>Antirrhinum majus</i>	Stature DM <i>Dimethomorph</i>	Greenhouse	2004	MI	Hausbeck	Drench	'Floral Showers White'	C	4/3/2007
<i>Trial Results: Good efficacy</i>											
					2005	MI	Hausbeck	Drench	'White'	C	1/24/2006 6/27/2006
<i>Trial Results: Good efficacy with drench application</i>											
					2006	MI	Hausbeck	Drench	'Montego Mix'	C	2/28/2007 5/8/2007
<i>Trial Results: Great efficacy with 12.8 oz per 100 gal.</i>											
25764 N	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Snapdragon <i>Antirrhinum majus</i>	Terrazole 35% WP <i>Etridiazole</i>	Greenhouse	2004	MI	Hausbeck	Drench	'Floral Showers White'	C	4/3/2007
<i>Trial Results: Poor efficacy</i>											
					2005	MI	Hausbeck	Drench	'White'	C	1/24/2006 6/27/2006
<i>Trial Results: Virtually no efficacy with drench application</i>											
26718 N	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Snapdragon <i>Antirrhinum majus</i>	Truban <i>Etridiazole</i>	Greenhouse	2006	MI	Hausbeck	Drench	'Montego Mix'	C	2/28/2007 5/8/2007
<i>Trial Results: Poor efficacy with 6 oz per 100 gal.</i>											
26716 A	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Snapdragon <i>Antirrhinum majus</i>	V-10161 <i>V-10161</i>	Greenhouse	2006	MI	Hausbeck	Drench	'Montego Mix'	C	2/28/2007 5/8/2007
<i>Trial Results: Excellent efficacy with 1.02, 2.04, and 4 fl oz per 100 gal.</i>											
24980 N	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Mexican cliff rose <i>Purshia mexica</i>	Aliette WDG <i>Fosetyl Al</i>	Greenhouse	2005	UT	Evans	Drench		C	10/3/2006 5/8/2007
<i>Trial Results: Some efficacy at 10 oz per 100 gal, but not significantly different from both untreated non-inoculated and untreated inoculated controls.</i>											

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Phytophthora Efficacy

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
24972	N <i>Phytophthora nicotianae</i>	Mexican cliff rose <i>Purshia mexicana</i>	Fenstop <i>Fenamidone</i>	Greenhouse	2005	UT	Evans	Drench		C	10/3/2006 5/8/2007
<p><i>Trial Results: No efficacy at 14 fl oz per 100 gal, and some efficacy at 28 fl oz per 100 gal, but this was not significantly different from both untreated non-inoculated and untreated inoculated controls.</i></p>											
24973	B <i>Phytophthora nicotianae</i>	Mexican cliff rose <i>Purshia mexicana</i>	Insignia <i>Pyraclostrobin</i>	Greenhouse	2005	UT	Evans	Drench		C	10/3/2006 5/8/2007
<p><i>Trial Results: Some efficacy at 16 and 40 oz per 100 gal, but not significantly different from both untreated non-inoculated and untreated inoculated controls.</i></p>											
24976	B <i>Phytophthora nicotianae</i>	Mexican cliff rose <i>Purshia mexicana</i>	Magellan <i>Mono- and Dibasic Sodium, Potassium and Ammonium Phosphites</i>	Greenhouse	2005	UT	Evans	Drench		C	10/3/2006 5/8/2007
<p><i>Trial Results: Some efficacy at 8 fl oz per 100 gal, but not significantly different from both untreated non-inoculated and untreated inoculated controls.</i></p>											
24971	A <i>Phytophthora nicotianae</i>	Mexican cliff rose <i>Purshia mexicana</i>	Segway <i>Cyazofamid</i>	Greenhouse	2005	UT	Evans	Drench		C	10/3/2006 5/8/2007
<p><i>Trial Results: Some efficacy at 1.5 and 3 fl oz per 100 gal, but not significantly different from both untreated non-inoculated and untreated inoculated controls.</i></p>											
24974	N <i>Phytophthora nicotianae</i>	Mexican cliff rose <i>Purshia mexicana</i>	Stature DM <i>Dimethomorph</i>	Greenhouse	2005	UT	Evans	Drench		C	10/3/2006 5/8/2007
<p><i>Trial Results: No efficacy at 12.8 oz per 100 gal, and some efficacy at 6.4 fl oz per 100 gal, but this was not significantly different from both untreated non-inoculated and untreated inoculated controls.</i></p>											
26171	N <i>Phytophthora nicotianae</i>	Mexican cliff rose <i>Purshia mexicana</i>	Terrazole 35% WP <i>Etridiazole</i>	Greenhouse	2005	UT	Evans	Drench		C	10/3/2006 5/8/2007
<p><i>Trial Results: No efficacy at 10 oz per 100 gal.</i></p>											
26172	B <i>Phytophthora nicotianae</i>	Mexican cliff rose <i>Purshia mexicana</i>	Vital 4L <i>Potassium phosphite</i>	Greenhouse	2005	UT	Evans			C	10/3/2006 5/8/2007
<p><i>Trial Results: Some efficacy at 4 pints per 100 gal, but not significantly different from both untreated non-inoculated and untreated inoculated controls.</i></p>											
25814	B <i>Phytophthora nicotianae</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Alude <i>Potassium phosphite</i>	Field Container	2006	NY	Becker			P	
25816	C <i>Phytophthora nicotianae</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Disarm <i>Fluoxastrobin</i>	Field Container	2006	NY	Becker			P	
					2007	NY	Becker			P	
25810	B <i>Phytophthora nicotianae</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Fenstop <i>Fenamidone</i>	Field Container	2006	NY	Becker			P	
26381	A <i>Phytophthora nicotianae</i>	Rhododendron <i>Rhododendron sp.</i>	Heritage <i>Azoxystrobin</i>	Field Container	2007	NY	Becker			P	
25815	B <i>Phytophthora nicotianae</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Insignia <i>Pyraclostrobin</i>	Field Container	2006	NY	Becker			P	
25811	C <i>Phytophthora nicotianae</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	MultiGuard <i>Furfural</i>	Field Container	2006	NY	Becker			P	
25812	N <i>Phytophthora nicotianae</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	NOA 446510 <i>Mandipropamid</i>	Field Container	2006	NY	Becker			P	
					2007	NY	Becker			P	

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Phytophthora Efficacy

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
25678 A	Phytophthora nicotianae	Azalea, & Rhododendron	Segway	Field Container	2005	NC	Benson		R. obtusum 'Hinodegiri'	C	10/22/2005 6/27/2006
	<i>Phytophthora nicotianae</i>	<i>Rhododendron sp.</i>	<i>Cyazofamid</i>		2006	NY	Becker			P	
					2007	NY	Becker			P	
26884 C	Phytophthora nicotianae	Azalea, & Rhododendron	Tank Mix: Heritage + <i>azoxystrobin + mefonaxam</i>	TBD	2007	NY	Becker			P	
25813 A	Phytophthora nicotianae	Azalea, & Rhododendron	V-10161	Field Container	2006	NY	Becker			P	
	<i>Phytophthora nicotianae</i>	<i>Rhododendron sp.</i>	<i>V-10161</i>		2007	NY	Becker			P	
20323 N	Phytophthora nicotianae	African Violet	Stature DM	Greenhouse	2004	NC	Benson	Drench	S. ionantha	C	12/1/2004 1/1/2005
	<i>Phytophthora nicotianae</i>	<i>Saintpaulia sp.</i>	<i>Dimethomorph</i>		2004	NC	Benson	Drench	S. ionantha	C	12/1/2004 1/1/2005
					<i>Trial Results: Trial 1: No efficacy at any tested rate (6.4, 12.4, 25.6 oz per 100 gal). Trial 2: No efficacy at any tested rate (6.4, 12.4, 25.6 oz per 100 gal).</i>						
26192 N	Phytophthora nicotianae	Sage, common	Aliette WDG	Greenhouse	2005	WA	Walsh	Drench		C	3/7/2007 5/8/2007
	<i>Phytophthora nicotianae</i>	<i>Salvia officinalis</i>	<i>Fosetyl Al</i>		<i>Trial Results: No statistical difference among treatments on P. parasitica</i>						
26188 B	Phytophthora nicotianae	Sage, common	Alude	Greenhouse	2005	WA	Walsh	Drench		C	3/7/2007 5/8/2007
	<i>Phytophthora nicotianae</i>	<i>Salvia officinalis</i>	<i>Potassium phosphite</i>		<i>Trial Results: No statistical difference among treatments on P. parasitica</i>						
26193 N	Phytophthora nicotianae	Sage, common	Captan	Greenhouse	2005	WA	Walsh	Drench		C	3/7/2007 5/8/2007
	<i>Phytophthora nicotianae</i>	<i>Salvia officinalis</i>	<i>Captan</i>		<i>Trial Results: No statistical difference among treatments on P. parasitica</i>						
26190 B	Phytophthora nicotianae	Sage, common	Insignia	Greenhouse	2005	WA	Walsh	Drench		C	3/7/2007 5/8/2007
	<i>Phytophthora nicotianae</i>	<i>Salvia officinalis</i>	<i>Pyraclostrobin</i>		<i>Trial Results: No statistical difference among treatments on P. parasitica</i>						
26187 A	Phytophthora nicotianae	Sage, common	Segway	Greenhouse	2005	WA	Walsh	Drench		C	3/7/2007 5/8/2007
	<i>Phytophthora nicotianae</i>	<i>Salvia officinalis</i>	<i>Cyazofamid</i>		<i>Trial Results: No statistical difference among treatments on P. parasitica</i>						
26191 N	Phytophthora nicotianae	Sage, common	Stature DM	Greenhouse	2005	WA	Walsh	Drench		C	3/7/2007 5/8/2007
	<i>Phytophthora nicotianae</i>	<i>Salvia officinalis</i>	<i>Dimethomorph</i>		<i>Trial Results: No statistical difference among treatments on P. parasitica</i>						
26189 B	Phytophthora nicotianae	Sage, common	Vital 4L	Greenhouse	2005	WA	Walsh	Drench		C	3/7/2007 5/8/2007
	<i>Phytophthora nicotianae</i>	<i>Salvia officinalis</i>	<i>Potassium phosphite</i>		<i>Trial Results: No statistical difference among treatments on P. parasitica.</i>						
25174 N	Phytophthora nicotianae	Spathe Flower, Spathiphyll	Aliette WDG	Greenhouse	2005	FL	Norman	Drench	'Petite'	C	9/2/2005 6/27/2006
	<i>Phytophthora nicotianae</i>	<i>Spathiphyllum sp.</i>	<i>Fosetyl Al</i>		<i>Trial Results: Great control with 12.8 oz per 100 gal with some break through starting to occur.</i>						
					2006	FL	Norman	Drench	'Patrice'	C	11/8/2006 5/8/2007
				<i>Trial Results: Excellent efficacy with 12.8 fl oz per 100 gal.</i>							
25291 B	Phytophthora nicotianae	Spathe Flower, Spathiphyll	Alude	Greenhouse	2005	FL	Norman	Drench	'Petite'	C	9/2/2005 6/27/2006
	<i>Phytophthora nicotianae</i>	<i>Spathiphyllum sp.</i>	<i>Potassium phosphite</i>		<i>Trial Results: Excellent control with 2 quarts per 100 gal.</i>						

Phytophthora Efficacy

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
25172 B	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Spathe Flower, Spathiphyll <i>Spathiphyllum sp.</i>	BioPhos 43L <i>Dipotassium phosphonate + Dipotassium phosphate</i>	Greenhouse	2005	FL	Norman	Drench	'Petite'	C	9/2/2005 6/27/2006 <i>Trial Results: Excellent control at 2%.</i>
25169 N	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Spathe Flower, Spathiphyll <i>Spathiphyllum sp.</i>	Fenstop <i>Fenamidone</i>	Greenhouse	2005	FL	Norman	Drench	'Petite'	C	9/2/2005 6/27/2006 <i>Trial Results: Excellent control at 14 and 28 oz per 100 gal.</i>
25170 B	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Spathe Flower, Spathiphyll <i>Spathiphyllum sp.</i>	Insignia <i>Pyraclostrobin</i>	Greenhouse	2005	FL	Norman	Drench	'Petite'	C	9/2/2005 6/27/2006 <i>Trial Results: Excellent control at 16 and 40 oz per 100 gal.</i>
25292 B	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Spathe Flower, Spathiphyll <i>Spathiphyllum sp.</i>	K-Phite <i>Phosphorus acid salts</i>	Greenhouse	2005	FL	Norman	Drench	'Petite'	C	9/2/2005 6/27/2006 <i>Trial Results: Excellent control with 1%.</i>
25168 A	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Spathe Flower, Spathiphyll <i>Spathiphyllum sp.</i>	Segway <i>Cyazofamid</i>	Greenhouse	2005 2006	FL FL	Norman Norman	Drench Drench	'Petite' 'Patrice'	C C	9/2/2005 6/27/2006 11/8/2006 5/8/2007 <i>Trial Results: Excellent control at high rate of 3.0 oz per 100 gal. Less control with 1.5 oz per 100 gal rate.</i> <i>Trial Results: Excellent efficacy with 3 and 6 fl oz per 100 gal.</i>
25171 N	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Spathe Flower, Spathiphyll <i>Spathiphyllum sp.</i>	Stature DM <i>Dimethomorph</i>	Greenhouse	2005	FL	Norman	Drench	'Petite'	C	9/2/2005 6/27/2006 <i>Trial Results: Excellent control at 6.4 and 12.8 oz per 100 gal.</i>
25175 N	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Spathe Flower, Spathiphyll <i>Spathiphyllum sp.</i>	Subdue MAXX <i>Mefenoxam</i>	Greenhouse	2005 2006	FL FL	Norman Norman	Drench Drench	'Petite' 'Patrice'	C C	9/2/2005 4/3/2007 11/8/2006 5/8/2007 <i>Trial Results: Great control with 1 oz per 100 gal with some break through starting to occur.</i> <i>Trial Results: Excellent efficacy with 0.6 fl oz per 100 gal</i>
25173 B	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Spathe Flower, Spathiphyll <i>Spathiphyllum sp.</i>	Vital 4L <i>Potassium phosphite</i>	Greenhouse	2005	FL	Norman	Drench	'Petite'	C	9/2/2005 6/27/2006 <i>Trial Results: Excellent control at 4 pints per 100 gal.</i>
25229 N	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Periwinkle <i>Vinca sp.</i>	Aliette WDG <i>Fosetyl Al</i>	Greenhouse	2005	MI	Hausbeck	Foliar	'Polka Dot Pacific'	C	10/13/2005 5/8/2007 <i>Trial Results: Good efficacy</i>
25183 B	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Periwinkle <i>Vinca sp.</i>	Alude <i>Potassium phosphite</i>	Greenhouse	2005	MI	Hausbeck	Foliar	'Polka Dot Pacific'	C	10/13/2005 5/8/2007 <i>Trial Results: Poor efficacy</i>
25184 B	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Periwinkle <i>Vinca sp.</i>	BioPhos 43L <i>Dipotassium phosphonate + Dipotassium phosphate</i>	Greenhouse	2005	MI	Hausbeck	Foliar	'Polka Dot Pacific'	C	10/13/2005 5/8/2007 <i>Trial Results: Poor efficacy</i>
26714 N	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Periwinkle <i>Vinca sp.</i>	Captan <i>Captan</i>	Greenhouse	2006	MI	Hausbeck	Foliar		C	2/28/2007 5/8/2007 <i>Trial Results: Great efficacy at 1.5 lb per 100 gal.</i>
25230 N	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Periwinkle <i>Vinca sp.</i>	Daconil Weather Stik <i>Chlorothalonil</i>	Greenhouse	2005	MI	Hausbeck	Foliar	'Polka Dot Pacific'	C	10/13/2005 5/8/2007 <i>Trial Results: Poor efficacy</i>

Key: Priorities A, B, and C are researchable; N is not researchable - these may be completed studies or those with Standards. Trial Status: P = Planned, O = Ongoing, C = Complete, X = Cancelled, ? = Unknown

Phytophthora Efficacy

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG	
25804	C	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Periwinkle <i>Vinca sp.</i>	Fenstop <i>Fenamidon</i>	Greenhouse	2006	FL	Norman	Drench	'Patrice'	C	11/8/2006 5/8/2007
						2006	MI	Hausbeck	Drench		C	5/8/2007
<i>Trial Results: Excellent efficacy with 7 and 14 fl oz per 100 gal.</i> <i>Trial Results: Excellent efficacy at 7 and 14 fl oz per 100 gal.</i>												
25185	C	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Periwinkle <i>Vinca sp.</i>	Insignia <i>Pyraclostrobin</i>	Greenhouse	2005	MI	Hausbeck	Foliar	'Polka Dot Pacific'	C	10/13/2005 5/8/2007
<i>Trial Results: Significant but poor efficacy</i>												
25805	C	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Periwinkle <i>Vinca sp.</i>	MultiGuard <i>Furfural</i>	Greenhouse	2006	FL	Norman	Drench	'Patrice'	C	11/8/2006 5/8/2007
						2006	MI	Hausbeck	Foliar		C	5/8/2007
<i>Trial Results: Poor efficacy with drenches of 500 and 1000 ppm.</i> <i>Trial Results: Good efficacy with foliar applications of 500 and 1000 ppm.</i>												
25806	N	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Periwinkle <i>Vinca sp.</i>	NOA 446510 <i>Mandipropamid</i>	Greenhouse	2006	MI	Hausbeck	Foliar		C	5/8/2007
<i>Trial Results: Excellent efficacy with 4.1 and 8.2 oz per 100 gal.</i>												
25182	A	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Periwinkle <i>Vinca sp.</i>	Segway <i>Cyazofamid</i>	Greenhouse	2005	MI	Hausbeck	Foliar	'Polka Dot Pacific'	C	4/3/2007
						2006	MI	Hausbeck	Foliar		C	2/28/2007 5/8/2007
<i>Trial Results: Poor efficacy</i> <i>Trial Results: Excellent efficacy with 3 and 6 fl oz per 100 gal.</i>												
25213	N	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Periwinkle <i>Vinca sp.</i>	Stature DM <i>Dimethomorph</i>	Greenhouse	2005	MI	Hausbeck	Foliar	'Polka Dot Pacific'	C	10/13/2005 5/8/2007
						2006	MI	Hausbeck	Foliar		C	2/28/2007 5/8/2007
<i>Trial Results: Good efficacy</i> <i>Trial Results: Great efficacy with 12.8 oz per 100 gal.</i>												
25807	A	Phytophthora nicotianae <i>Phytophthora nicotianae</i>	Periwinkle <i>Vinca sp.</i>	V-10161 <i>V-10161</i>	Greenhouse	2006	FL	Norman	Drench	'Patrice'	C	11/8/2006 5/8/2007
						2006	MI	Hausbeck	Foliar		C	5/8/2007
<i>Trial Results: Excellent efficacy with 3 and 6 fl oz per 100 gal.</i> <i>Trial Results: Good to excellent efficacy with 60 and 120 ml per 100 gal.</i>												
23945	C	Phytophthora palmivora <i>Phytophthora palmivora</i>	Poinsettia <i>Euphorbia pulcherrima</i>	EcoGuard <i>Bacillus licheniformis</i> <i>SB3086 + Indole-3-butyric Acid</i>	Field Container	2004	AL	Reddy			P	
23944	C	Phytophthora palmivora <i>Phytophthora palmivora</i>	Poinsettia <i>Euphorbia pulcherrima</i>	EcoGuard <i>Bacillus licheniformis</i> <i>SB3086 + Indole-3-butyric Acid</i>	Greenhouse	2004	AL	Reddy			P	
25180	B	Phytophthora palmivora <i>Phytophthora palmivora</i>	Lilyturf, Big Blue;Giant <i>Liriope muscari</i>	BioPhos 43L <i>Dipotassium phosphonate + Dipotassium phosphate</i>	Greenhouse	2005	FL	Strandberg			O	

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
25177 B	Phytophthora palmivora <i>Phytophthora palmivora</i>	Lilyturf, Big Blue;Giant <i>Liriope muscari</i>	Fenstop <i>Fenamidone</i>	Greenhouse	2005	FL	Strandberg			O	
25178 B	Phytophthora palmivora <i>Phytophthora palmivora</i>	Lilyturf, Big Blue;Giant <i>Liriope muscari</i>	Insignia <i>Pyraclostrobin</i>	Greenhouse	2005	FL	Strandberg	Foliar		O	
25176 A	Phytophthora palmivora <i>Phytophthora palmivora</i>	Lilyturf, Big Blue;Giant <i>Liriope muscari</i>	Segway <i>Cyazofamid</i>	Greenhouse	2005	FL	Strandberg			O	
25179 N	Phytophthora palmivora <i>Phytophthora palmivora</i>	Lilyturf, Big Blue;Giant <i>Liriope muscari</i>	Stature DM <i>Dimethomorph</i>	Greenhouse	2005	FL	Strandberg			O	
25181 N	Phytophthora palmivora <i>Phytophthora palmivora</i>	Lilyturf, Big Blue;Giant <i>Liriope muscari</i>	Subdue MAXX <i>Mefenoxam</i>	Greenhouse	2005	FL	Strandberg			O	
26386 A	Phytophthora palmivora <i>Phytophthora palmivora</i>	TBD <i>TBD</i>	Heritage <i>Azoxystrobin</i>	TBD	2007	FL	Palmeteer			P	
26385 A	Phytophthora palmivora <i>Phytophthora palmivora</i>	TBD <i>TBD</i>	Segway <i>Cyazofamid</i>	TBD	2007	FL	Palmeteer			P	
26387 A	Phytophthora palmivora <i>Phytophthora palmivora</i>	TBD <i>TBD</i>	V-10161 <i>V-10161</i>	TBD	2007	FL	Palmeteer			P	
25698 C	Phytophthora ramorum <i>Phytophthora ramorum</i>	Fir, Grand; Giant Fir <i>Abies grandis</i>	Aliette WDG <i>Fosetyl Al</i>	Greenhouse							
25699 B	Phytophthora ramorum <i>Phytophthora ramorum</i>	Fir, Grand; Giant Fir <i>Abies grandis</i>	Alude <i>Potassium phosphite</i>	Greenhouse							
25700 B	Phytophthora ramorum <i>Phytophthora ramorum</i>	Fir, Grand; Giant Fir <i>Abies grandis</i>	BioPhos 43L <i>Dipotassium phosphonate + Dipotassium phosphate</i>	Greenhouse							
25701 C	Phytophthora ramorum <i>Phytophthora ramorum</i>	Fir, Grand; Giant Fir <i>Abies grandis</i>	Champ Formula 2F	Greenhouse							
25702 N	Phytophthora ramorum <i>Phytophthora ramorum</i>	Fir, Grand; Giant Fir <i>Abies grandis</i>	Daconil Ultrex <i>Chlorothalonil</i>	Greenhouse							
25714 C	Phytophthora ramorum <i>Phytophthora ramorum</i>	Fir, Grand; Giant Fir <i>Abies grandis</i>	Disarm <i>Fluoxastrobin</i>	Greenhouse							
25703 N	Phytophthora ramorum <i>Phytophthora ramorum</i>	Fir, Grand; Giant Fir <i>Abies grandis</i>	Dithane 75 DF <i>Mancozeb</i>	Greenhouse							
25704 N	Phytophthora ramorum <i>Phytophthora ramorum</i>	Fir, Grand; Giant Fir <i>Abies grandis</i>	Fenstop <i>Fenamidone</i>	Greenhouse							

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
25706 B	Phytophthora ramorum <i>Phytophthora ramorum</i>	Fir, Grand; Giant Fir <i>Abies grandis</i>	Insignia <i>Pyraclostrobin</i>	Greenhouse							
25707 B	Phytophthora ramorum <i>Phytophthora ramorum</i>	Fir, Grand; Giant Fir <i>Abies grandis</i>	Magellan <i>Mono- and Dibasic Sodium, Potassium and Ammonium Phosphites</i>	Greenhouse	2005	WA	Chastagner	Drench		C	12/19/2005 6/27/2006 <i>Trial Results: Virtually no efficacy with drench application</i>
25705 C	Phytophthora ramorum <i>Phytophthora ramorum</i>	Fir, Grand; Giant Fir <i>Abies grandis</i>	Mancozeb + Zoxamid <i>Mancozeb + Zoxamide</i>	Greenhouse							
25708 N	Phytophthora ramorum <i>Phytophthora ramorum</i>	Fir, Grand; Giant Fir <i>Abies grandis</i>	Maneb <i>Maneb</i>	Greenhouse							
25709 N	Phytophthora ramorum <i>Phytophthora ramorum</i>	Fir, Grand; Giant Fir <i>Abies grandis</i>	Polyram <i>Polyram</i>	Greenhouse							
25711 C	Phytophthora ramorum <i>Phytophthora ramorum</i>	Fir, Grand; Giant Fir <i>Abies grandis</i>	Rhapsody Biofungicid <i>Bacillus subtilis</i>	Greenhouse							
25710 N	Phytophthora ramorum <i>Phytophthora ramorum</i>	Fir, Grand; Giant Fir <i>Abies grandis</i>	Segway <i>Cyazofamid</i>	Greenhouse							
25712 N	Phytophthora ramorum <i>Phytophthora ramorum</i>	Fir, Grand; Giant Fir <i>Abies grandis</i>	Stature DM <i>Dimethomorph</i>	Greenhouse							
25713 N	Phytophthora ramorum <i>Phytophthora ramorum</i>	Fir, Grand; Giant Fir <i>Abies grandis</i>	Subdue MAXX <i>Mefenoxam</i>	Greenhouse							
25715 A	Phytophthora ramorum <i>Phytophthora ramorum</i>	Fir, Grand; Giant Fir <i>Abies grandis</i>	V-10161 <i>V-10161</i>	Greenhouse							
25716 B	Phytophthora ramorum <i>Phytophthora ramorum</i>	Fir, Grand; Giant Fir <i>Abies grandis</i>	Vital 4L <i>Potassium phosphite</i>	Greenhouse							
26791 C	Phytophthora ramorum <i>Phytophthora ramorum</i>	Camellia <i>Camellia sp.</i>	Actinovate <i>Actinovate</i>	TBD	2007	OR	Grunwald			P	
26792 B	Phytophthora ramorum <i>Phytophthora ramorum</i>	Camellia <i>Camellia sp.</i>	Alude <i>Potassium phosphite</i>	TBD	2007	OR	Grunwald			P	
26793 B	Phytophthora ramorum <i>Phytophthora ramorum</i>	Camellia <i>Camellia sp.</i>	BioPhos 43L <i>Dipotassium phosphonate + Dipotassium phosphate</i>	TBD	2007	OR	Grunwald			P	
26820 C	Phytophthora ramorum <i>Phytophthora ramorum</i>	Camellia <i>Camellia sp.</i>	Companion <i>Bacillus subtilis GB03</i>	TBD	2007	OR	Grunwald			P	

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26803	B <i>Phytophthora ramorum</i>	Camellia <i>Camellia sp.</i>	Disarm <i>Fluoxastrobin</i>	TBD	2007	OR	Grunwald			P	
26794	B <i>Phytophthora ramorum</i>	Camellia <i>Camellia sp.</i>	Fenstop <i>Fenamidone</i>	TBD	2007	OR	Grunwald			P	
26798	C <i>Phytophthora ramorum</i>	Camellia <i>Camellia sp.</i>	Heritage <i>Azoxystrobin</i>	TBD	2007	OR	Grunwald			P	
26795	B <i>Phytophthora ramorum</i>	Camellia <i>Camellia sp.</i>	Insignia <i>Pyraclostrobin</i>	TBD	2007	OR	Grunwald			P	
26799	B <i>Phytophthora ramorum</i>	Camellia <i>Camellia sp.</i>	K-Phite <i>Phosphorus acid salts</i>	TBD	2007	OR	Grunwald			P	
26796	B <i>Phytophthora ramorum</i>	Camellia <i>Camellia sp.</i>	Magellan <i>Mono- and Dibasic Sodium, Potassium and Ammonium Phosphites</i>	TBD	2007	OR	Grunwald			P	
26800	C <i>Phytophthora ramorum</i>	Camellia <i>Camellia sp.</i>	Medallion <i>Fludioxonil</i>	TBD	2007	OR	Grunwald			P	
26797	B <i>Phytophthora ramorum</i>	Camellia <i>Camellia sp.</i>	MultiGuard <i>Furfural</i>	TBD	2007	OR	Grunwald			P	
26801	B <i>Phytophthora ramorum</i>	Camellia <i>Camellia sp.</i>	Muscodor albus <i>Muscodor albus</i>	TBD	2007	OR	Grunwald			P	
26389	A <i>Phytophthora ramorum</i>	Camellia <i>Camellia sp.</i>	NOA 446510 <i>Mandipropamid</i>	TBD	2007	OR	Grunwald			P	
26802	C <i>Phytophthora ramorum</i>	Camellia <i>Camellia sp.</i>	SA 11210 <i>SA 11210</i>	TBD	2007	OR	Grunwald			P	
26388	A <i>Phytophthora ramorum</i>	Camellia <i>Camellia sp.</i>	Segway <i>Cyazofamid</i>	TBD	2007	OR	Grunwald			P	
26819	B <i>Phytophthora ramorum</i>	Camellia <i>Camellia sp.</i>	Tanos <i>Famoxadone + Cymoxanil</i>	TBD	2007	OR	Grunwald			P	
26818	C <i>Phytophthora ramorum</i>	Camellia <i>Camellia sp.</i>	Trichoderma harzianu <i>Trichoderma harzianum</i>	TBD	2007	OR	Grunwald			P	
26390	A <i>Phytophthora ramorum</i>	Camellia <i>Camellia sp.</i>	V-10161 <i>V-10161</i>	TBD	2007	OR	Grunwald			P	
26804	B <i>Phytophthora ramorum</i>	Camellia <i>Camellia sp.</i>	Vital 4L <i>Potassium phosphite</i>	TBD	2007	OR	Grunwald			P	

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Phytophthora Efficacy

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG	
24570 B	Phytophthora ramorum <i>Phytophthora ramorum</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	Magellan <i>Mono- and Dibasic Sodium, Potassium and Ammonium Phosphites</i>	Field Container	2005	OR	Linderman			?		
26506 C	Phytophthora ramorum <i>Phytophthora ramorum</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Actinovate <i>Actinovate</i>	Field Container	2006	OR	Linderman	Foliar	'Catawbiense Boursault'	C	1/10/2007	5/8/2007
					2006	WA	Chastagner	Sprenc	'Nova Zembla'	C	1/5/2007	5/8/2007
24908 N	Phytophthora ramorum <i>Phytophthora ramorum</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Aliette WDG <i>Fosetyl Al</i>	Field Container	2005	OR	Linderman		'Nova Zembia'	C	3/22/2006	6/27/2006
					2005	WA	Chastagner	Foliar	'Nova Zembla'	C	1/3/2006	6/27/2006
					2006	OR	Linderman	Foliar	'Catawbiense Boursault'	C	1/10/2007	5/8/2007
					2006	WA	Chastagner	Foliar	'Nova Zembla'	C	1/5/2007	5/8/2007
24903 N	Phytophthora ramorum <i>Phytophthora ramorum</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Alude <i>Potassium phosphite</i>	Field Container	2005	WA	Chastagner	Drench	'Nova Zembla'	C	1/3/2006	6/27/2006
					2006	OR	Linderman	Foliar	'Catawbiense Boursault'	C	1/10/2007	5/8/2007
					2006	WA	Chastagner	Foliar	'Nova Zembla'	C	1/5/2007	5/8/2007
25695 B	Phytophthora ramorum <i>Phytophthora ramorum</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	BioPhos 43L <i>Dipotassium phosphonate + Dipotassium phosphate</i>	Field Container	2005	OR	Linderman	Foliar	'Nova Zembla'	C	3/22/2006	6/27/2006
					2005	WA	Chastagner	Drench	'Nova Zembla'	C	1/3/2006	6/27/2006
					2006	OR	Linderman	Foliar	'Catawbiense Boursault'	C	1/10/2007	5/8/2007
					2006	WA	Chastagner	Foliar	'Nova Zembla'	C	1/5/2007	5/8/2007
26504 N	Phytophthora ramorum <i>Phytophthora ramorum</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Captan <i>Captan</i>	Field Container	2006	OR	Linderman	Foliar	'Catawbiense Boursault'	C	1/10/2007	5/8/2007
					2006	WA	Chastagner	Foliar	'Nova Zembla'	C	1/5/2007	5/8/2007
25717 C	Phytophthora ramorum <i>Phytophthora ramorum</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Champ Formula 2F	Field Container	2005	WA	Chastagner			C	1/3/2006	6/27/2006

Key: Priorities A, B, and C are researchable; N is not researchable - these may be completed studies or those with Standards. Trial Status: P = Planned, O = Ongoing, C = Complete, X = Cancelled, ? = Unknown

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
25718	N	Phytophthora ramorum <i>Phytophthora ramorum</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Daconil Ultrex <i>Chlorothalonil</i>	Field Container	2005	WA	Chastagner	Foliar	C	1/3/2006 6/27/2006
<i>Trial Results: Poor to good efficacy with foliar application</i>											
25724	C	Phytophthora ramorum <i>Phytophthora ramorum</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Disarm <i>Fluoxastrobin</i>	Field Container	2005	WA	Chastagner	Foliar	C	1/3/2006 6/27/2006
<i>Trial Results: Poor efficacy with foliar application</i>											
						2006	OR	Linderman	Foliar	C	1/10/2007 5/8/2007
<i>Trial Results: No efficacy</i>											
						2006	WA	Chastagner	Foliar	C	1/5/2007 5/8/2007
<i>Trial Results: No efficacy</i>											
25719	N	Phytophthora ramorum <i>Phytophthora ramorum</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Dithane 75 DF <i>Mancozeb</i>	Field Container	2005	OR	Linderman	Foliar	C	3/22/2006 6/27/2006
<i>Trial Results: Poor efficacy in four trials</i>											
						2005	WA	Chastagner	Foliar	C	1/3/2006 6/27/2006
<i>Trial Results: Good efficacy with foliar application</i>											
24900	N	Phytophthora ramorum <i>Phytophthora ramorum</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Fenstop <i>Fenamidone</i>	Field Container	2005	OR	Linderman	Foliar	C	3/22/2006 6/27/2006
<i>Trial Results: Mixed results: only good efficacy in 1 out of 4 trials.</i>											
						2005	WA	Chastagner	Foliar	C	1/3/2006 6/27/2006
<i>Trial Results: Good efficacy with foliar application</i>											
						2006	OR	Linderman	Foliar	C	1/10/2007 5/8/2007
<i>Trial Results: Significantly suppressed lesion development at high rate</i>											
						2006	WA	Chastagner	Foliar	C	1/5/2007 5/8/2007
<i>Trial Results: Significantly reduced lesion size at high rate</i>											
26505	A	Phytophthora ramorum <i>Phytophthora ramorum</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Heritage <i>Azoxystrobin</i>	Field Container	2006	OR	Linderman	Foliar	C	1/10/2007 5/8/2007
<i>Trial Results: No efficacy</i>											
						2006	WA	Chastagner	Foliar	C	1/5/2007 5/8/2007
<i>Trial Results: No efficacy</i>											
						2007	WA	Chastagner	Foliar	P	
24901	N	Phytophthora ramorum <i>Phytophthora ramorum</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Insignia <i>Pyraclostrobin</i>	Field Container	2005	OR	Linderman	Foliar	C	3/22/2006 6/27/2006
<i>Trial Results: No to poor efficacy with foliar application in 4 trials</i>											
						2005	WA	Chastagner	Foliar	C	1/3/2006 6/27/2006
<i>Trial Results: Variable efficacy with foliar application</i>											
						2006	OR	Linderman	Foliar	C	1/10/2007 5/8/2007
<i>Trial Results: No efficacy</i>											
						2006	WA	Chastagner	Foliar	C	1/5/2007 5/8/2007
<i>Trial Results: No efficacy</i>											

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24904 B	Phytophthora ramorum	Azalea, & Rhododendron	Magellan	Field Container	2005	OR	Linderman		'Nova Zembla'	C	3/22/2006 6/27/2006
	<i>Phytophthora ramorum</i>	<i>Rhododendron sp.</i>	<i>Mono- and Dibasic Sodium, Potassium and Ammonium Phosphites</i>		2005	WA	Chastagner		'Nova Zembla'	C	1/3/2006 6/27/2006
					2006	OR	Linderman	Foliar	'Catawbiense Boursault'	C	1/10/2007 5/8/2007
					2006	WA	Chastagner	Foliar or Drench	'Nova Zembla'	C	1/5/2007 5/8/2007
25720 C	Phytophthora ramorum	Azalea, & Rhododendron	Mancozeb + Zoxamid	Field Container	2005	WA	Chastagner			C	1/3/2006 6/27/2006
	<i>Phytophthora ramorum</i>	<i>Rhododendron sp.</i>	<i>Mancozeb + Zoxamide</i>								
25697 N	Phytophthora ramorum	Azalea, & Rhododendron	Maneb	Field Container	2005	WA	Chastagner	Foliar	'Nova Zembla'	C	1/3/2006 6/27/2006
	<i>Phytophthora ramorum</i>	<i>Rhododendron sp.</i>	<i>Maneb</i>								
25686 C	Phytophthora ramorum	Azalea, & Rhododendron	MultiGuard	Field Container	2006	OR	Linderman	Foliar	'Catawbiense Boursault'	C	1/10/2007 5/8/2007
	<i>Phytophthora ramorum</i>	<i>Rhododendron sp.</i>	<i>Furfural</i>		2006	WA	Chastagner	Foliar	'Nova Zembla'	C	1/5/2007 5/8/2007
24905 A	Phytophthora ramorum	Azalea, & Rhododendron	NOA 446510	Field Container	2006	WA	Chastagner	Foliar	'Nova Zembla'	C	1/5/2007 5/8/2007
	<i>Phytophthora ramorum</i>	<i>Rhododendron sp.</i>	<i>Mandipropamid</i>		2007	WA	Chastagner			P	
25721 N	Phytophthora ramorum	Azalea, & Rhododendron	Polyram	Field Container	2005	WA	Chastagner	Foliar		C	1/3/2006 6/27/2006
	<i>Phytophthora ramorum</i>	<i>Rhododendron sp.</i>	<i>Polyram</i>								
25722 C	Phytophthora ramorum	Azalea, & Rhododendron	Rhapsody Biofungicid	Field Container	2005	WA	Chastagner		'Nova Zembla'	C	1/3/2006 6/27/2006
	<i>Phytophthora ramorum</i>	<i>Rhododendron sp.</i>	<i>Bacillus subtilis</i>								
25951 C	Phytophthora ramorum	Azalea, & Rhododendron	SA 11210	Field Container	2005	OR	Linderman		'Nova Zembai'	C	3/22/2006 6/27/2006
	<i>Phytophthora ramorum</i>	<i>Rhododendron sp.</i>	<i>SA 11210</i>								
24899 A	Phytophthora ramorum	Azalea, & Rhododendron	Segway	Field Container	2005	OR	Linderman	Foliar	'Nova Zembla'	C	3/22/2006 6/27/2006
	<i>Phytophthora ramorum</i>	<i>Rhododendron sp.</i>	<i>Cyazofamid</i>		2005	WA	Chastagner	Foliar	'Nova Zembla'	C	1/3/2006 6/27/2006
					2006	OR	Linderman	Foliar	'Catawbiense Boursault'	C	1/10/2007 5/8/2007
					2006	WA	Chastagner	Foliar	'Nova Zembla'	C	1/5/2007 5/8/2007
					2007	WA	Chastagner			P	

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24902	N	Phytophthora ramorum	Azalea, & Rhododendron	Stature DM	Field Container	2005	OR	Linderman		'Nova Zembla'	C	3/22/2006 6/27/2006
		<i>Phytophthora ramorum</i>	<i>Rhododendron sp.</i>	<i>Dimethomorph</i>								
						2005	WA	Chastagner		'Nova Zembla'	C	1/3/2006 6/27/2006
												<i>Trial Results: Good efficacy with foliar application</i>
						2006	OR	Linderman	Foliar	'Catawbiense Boursault'	C	1/10/2007 5/8/2007
25723	N	Phytophthora ramorum	Azalea, & Rhododendron	Subdue MAXX	Field Container	2005	OR	Linderman	Drench	'Nova Zembla'	C	3/22/2006 6/27/2006
		<i>Phytophthora ramorum</i>	<i>Rhododendron sp.</i>	<i>Mefenoxam</i>								
						2005	WA	Chastagner	Drench	'Nova Zembla'	C	1/3/2006 6/27/2006
												<i>Trial Results: Excellent efficacy with drench application</i>
						2006	OR	Linderman	Foliar	'Catawbiense Boursault'	C	1/10/2007 5/8/2007
26889	C	Phytophthora ramorum	Azalea, & Rhododendron	Tank Mix: Heritage +	Field Container	2007	WA	Chastagner			P	
		<i>Phytophthora ramorum</i>	<i>Rhododendron sp.</i>	<i>azoxystrobin + mefenoxam</i>								
						2007	WA	Chastagner			P	
26748	B	Phytophthora ramorum	Azalea, & Rhododendron	Tanos	TBD	2007	WA	Chastagner			P	
		<i>Phytophthora ramorum</i>	<i>Rhododendron sp.</i>	<i>Famoxadone + Cymoxanil</i>								
26507	C	Phytophthora ramorum	Azalea, & Rhododendron	Terrazole 35% WP	Field Container	2006	OR	Linderman	Foliar	'Catawbiense Boursault'	C	1/10/2007 5/8/2007
		<i>Phytophthora ramorum</i>	<i>Rhododendron sp.</i>	<i>Etridiazole</i>								
24907	A	Phytophthora ramorum	Azalea, & Rhododendron	V-10161	Field Container	2005	OR	Linderman	Foliar	'Nova Zembla'	C	3/22/2006 6/27/2006
		<i>Phytophthora ramorum</i>	<i>Rhododendron sp.</i>	<i>V-10161</i>								
						2005	WA	Chastagner	Foliar	'Nova Zembla'	C	1/3/2006 6/27/2006
												<i>Trial Results: Good efficacy with foliar application.</i>
						2006	OR	Linderman	Foliar	'Catawbiense Boursault'	C	1/10/2007 5/8/2007

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25696 B	Phytophthora ramorum	Azalea, & Rhododendron	Vital 4L	Field Container	2005	WA	Chastagner	Drench	'Nova Zembla'	C	1/3/2006 6/27/2006
	<i>Phytophthora ramorum</i>	<i>Rhododendron sp.</i>	<i>Potassium phosphite</i>								<i>Trial Results: Poor efficacy with drench application.</i>
					2006	OR	Linderman	Foliar	'Catawbiense Boursault'	C	1/10/2007 5/8/2007
					2006	WA	Chastagner	Foliar or Drench	'Nova Zembla'	C	1/5/2007 5/8/2007
											<i>Trial Results: Significantly suppressed lesion development.</i>
											<i>Trial Results: No efficacy applied foliar or drench.</i>
23938 B	Phytophthora root rot	Pothos	BioPhos 43L	Field Container							
	<i>Phytophthora sp.</i>	<i>Epipremnum aureum</i>	<i>Dipotassium phosphonate + Dipotassium phosphate</i>								
23941 B	Phytophthora root rot	Pothos	BioPhos 43L	Greenhouse							
	<i>Phytophthora sp.</i>	<i>Epipremnum aureum</i>	<i>Dipotassium phosphonate + Dipotassium phosphate</i>								
24642 N	Phytophthora root rot	Pothos	Fenstop	Greenhouse							
	<i>Phytophthora sp.</i>	<i>Epipremnum aureum</i>	<i>Fenamidone</i>								
23935 A	Phytophthora root rot	Pothos	Segway	Field Container							
	<i>Phytophthora sp.</i>	<i>Epipremnum aureum</i>	<i>Cyazofamid</i>								
24639 N	Phytophthora root rot	Pothos	Stature DM	Greenhouse							
	<i>Phytophthora sp.</i>	<i>Epipremnum aureum</i>	<i>Dimethomorph</i>								
23940 B	Phytophthora root rot	Poinsettia	BioPhos 43L	Field Container							
	<i>Phytophthora sp.</i>	<i>Euphorbia pulcherrima</i>	<i>Dipotassium phosphonate + Dipotassium phosphate</i>								
23943 B	Phytophthora root rot	Poinsettia	BioPhos 43L	Greenhouse							
	<i>Phytophthora sp.</i>	<i>Euphorbia pulcherrima</i>	<i>Dipotassium phosphonate + Dipotassium phosphate</i>								
25233 C	Phytophthora root rot	Poinsettia	Companion	Greenhouse	2005	AL	Reddy			P	
	<i>Phytophthora sp.</i>	<i>Euphorbia pulcherrima</i>	<i>Bacillus subtilis GB03</i>								
25232 C	Phytophthora root rot	Poinsettia	EcoGuard	Greenhouse	2005	AL	Reddy			P	
	<i>Phytophthora sp.</i>	<i>Euphorbia pulcherrima</i>	<i>Bacillus licheniformis SB3086 + Indole-3-butyric Acid</i>								

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25231 C	Phytophthora root rot <i>Phytophthora sp.</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Endorse <i>Polyoxin D</i>	Greenhouse	2005	AL	Reddy			P	
23939 B	Phytophthora root rot <i>Phytophthora sp.</i>	Spathe Flower, Spathiphyll <i>Spathiphyllum sp.</i>	BioPhos 43L <i>Dipotassium phosphonate + Dipotassium phosphate</i>	Field Container							
23942 B	Phytophthora root rot <i>Phytophthora sp.</i>	Spathe Flower, Spathiphyll <i>Spathiphyllum sp.</i>	BioPhos 43L <i>Dipotassium phosphonate + Dipotassium phosphate</i>	Greenhouse							
23936 N	Phytophthora root rot <i>Phytophthora sp.</i>	Spathe Flower, Spathiphyll <i>Spathiphyllum sp.</i>	Stature DM <i>Dimethomorph</i>	Field Container							
23937 N	Phytophthora root rot <i>Phytophthora sp.</i>	Spathe Flower, Spathiphyll <i>Spathiphyllum sp.</i>	Subdue MAXX <i>Mefenoxam</i>	Greenhouse							
26772 C	Phytophthora root rot <i>Phytophthora sp.</i>	Marigold <i>Tagetes sp.</i>	Actinovate <i>Actinovate</i>	Greenhouse	2006	AL	Reddy	Drench		C	2/12/2007 5/8/2007
26778	Phytophthora root rot <i>Phytophthora sp.</i>	Marigold <i>Tagetes sp.</i>	BioPhos 43L <i>Dipotassium phosphonate + Dipotassium phosphate</i>	Greenhouse	2006	AL	Reddy	Drench		C	2/12/2007 5/8/2007
26777	Phytophthora root rot <i>Phytophthora sp.</i>	Marigold <i>Tagetes sp.</i>	Disarm <i>Fluoxastrobin</i>	Greenhouse	2006	AL	Reddy	Drench		C	2/12/2007 5/8/2007
26774	Phytophthora root rot <i>Phytophthora sp.</i>	Marigold <i>Tagetes sp.</i>	Fenstop <i>Fenamidone</i>	Greenhouse	2006	AL	Reddy	Drench		C	2/12/2007 5/8/2007
26770	Phytophthora root rot <i>Phytophthora sp.</i>	Marigold <i>Tagetes sp.</i>	MultiGuard <i>Furfural</i>	Greenhouse	2006	AL	Reddy	Drench		C	2/12/2007 5/8/2007
26776	Phytophthora root rot <i>Phytophthora sp.</i>	Marigold <i>Tagetes sp.</i>	NOA 446510 <i>Mandipropamid</i>	Greenhouse	2006	AL	Reddy	Drench		C	2/12/2007 5/8/2007
26773	Phytophthora root rot <i>Phytophthora sp.</i>	Marigold <i>Tagetes sp.</i>	Segway <i>Cyazofamid</i>	Greenhouse	2006	AL	Reddy	Drench		C	2/12/2007 5/8/2007
26771	Phytophthora root rot <i>Phytophthora sp.</i>	Marigold <i>Tagetes sp.</i>	V-10161 <i>V-10161</i>	Greenhouse	2006	AL	Reddy	Drench		C	2/12/2007 5/8/2007
26775	Phytophthora root rot <i>Phytophthora sp.</i>	Marigold <i>Tagetes sp.</i>	Vital 4L <i>Potassium phosphite</i>	Greenhouse	2006	AL	Reddy	Drench		C	2/12/2007 5/8/2007

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26805	C	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>	Actinovate <i>Actinovate</i>	Field Container	2007	OR	Grunwald		P	
26475	N	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>	Aliette WDG <i>Fosetyl Al</i>	Field Container	2006 2007 2007	OR OR OR	Regan Grunwald Regan	'Spring Snow'	C P P	3/19/2007 5/8/2007
25828	B	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>	Alude <i>Potassium phosphite</i>	Field Container	2006 2007	OR OR	Regan Grunwald	'Spring Snow'	C P	3/19/2007 5/8/2007
26806	B	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>	BioPhos 43L <i>Dipotassium phosphonate + Dipotassium phosphate</i>	Field Container	2007	OR	Grunwald		P	
26807	C	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>	Captan <i>Captan</i>	Field Container	2007	OR	Grunwald		P	
26808	C	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>	Companion <i>Bacillus subtilis GB03</i>	Field Container	2007	OR	Grunwald		P	
25827	C	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>	Disarm <i>Fluoxastrobin</i>	Field Container	2006 2007	OR OR	Regan Grunwald	'Spring Snow'	C P	3/19/2007 5/8/2007
25621	B	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>	Fenstop <i>Fenamidone</i>	Field Container	2007	OR	Grunwald		P	
26465	A	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>	Heritage <i>Azoxystrobin</i>	Field Container	2007 2007	OR OR	Grunwald Regan		P P	
25826	B	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>	Insignia <i>Pyraclostrobin</i>	Field Container	2006 2007	OR OR	Regan Grunwald	'Spring Snow'	C P	3/19/2007 5/8/2007
26810	B	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>	K-Phite <i>Phosphorus acid salts</i>	Field Container	2007	OR	Grunwald		P	
26524	B	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>	Magellan <i>Mono- and Dibasic Sodium, Potassium and Ammonium Phosphites</i>	Field Container	2006 2007	OR OR	Regan Grunwald	'Spring Snow'	C P	3/19/2007 5/8/2007

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26811	C	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>)	Medallion <i>Fludioxonil</i>	Field Container	2007	OR	Grunwald		P	
25622	C	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>)	MultiGuard <i>Furfural</i>	Field Container	2007	OR	Grunwald		P	
26812	B	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>)	Muscodor albus <i>Muscodor albus</i>	Field Container	2007	OR	Grunwald		P	
25623	A	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>)	NOA 446510 <i>Mandipropamid</i>	Field Container	2007 2007	OR OR	Grunwald Regan		P P	
26813	C	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>)	SA 11210 <i>SA 11210</i>	Field Container	2007	OR	Grunwald		P	
25620	A	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>)	Segway <i>Cyazofamid</i>	Field Container	2006 2007 2007	OR OR OR	Regan Grunwald Regan	'Spring Snow'	C P P	3/19/2007 5/8/2007
26476	N	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>)	Stature DM <i>Dimethomorph</i>	Field Container	2006 2007	OR OR	Regan Regan	'Spring Snow'	C P	3/19/2007 5/8/2007
26892	C	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>)	Subdue MAXX <i>Mefenoxam</i>	Field Container	2007	OR	Regan		P	
26893	C	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>)	Tank Mix: Heritage + <i>azoxystrobin + mefonoxam</i>	Field Container	2007	OR	Regan		P	
26809	B	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>)	Tanos <i>Famoxadone + Cymoxanil</i>	Field Container	2007 2007	OR OR	Grunwald Regan		P P	
26814	C	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>)	Trichoderma harzianu <i>Trichoderma harzianum</i>	Field Container	2007	OR	Grunwald		P	
25624	A	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>)	V-10161 <i>V-10161</i>	Field Container	2006 2007 2007	OR OR OR	Regan Grunwald Regan	'Spring Snow'	C P P	3/19/2007 5/8/2007
26815	B	Phytophthora syringae <i>Phytophthora syringae</i>	Apple & Crabapple (Non- <i>Malus sp.</i>)	Vital 4L <i>Potassium phosphite</i>	Field Container	2007	OR	Grunwald		P	
26895	B	Phytophthora tropicalis <i>Phytophthora tropicalis</i>	English Ivy <i>Hedera helix L. ssp. Helix</i>	NOA 446510 <i>Mandipropamid</i>	Greenhouse	2007	LA	Ferrin		P	

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26607	A <i>Phytophthora tropicalis</i>	English Ivy <i>Hedera helix L. ssp. Helix</i>	Segway <i>Cyazofamid</i>	Greenhouse	2007	LA	Ferrin			P	
26896	C <i>Phytophthora tropicalis</i>	English Ivy <i>Hedera helix L. ssp. Helix</i>	Tank Mix: Heritage + <i>azoxystrobin + mefonaxam</i>	Greenhouse	2007	LA	Ferrin			P	
0	A <i>Phytophthora tropicalis</i>	TBD <i>TBD</i>	Heritage <i>Azoxystrobin</i>	TBD	2007	FL	Norman			P	
25817	A <i>Phytophthora tropicalis</i>	TBD <i>TBD</i>	Segway <i>Cyazofamid</i>	TBD	2007	FL	Norman			P	
25821	A <i>Phytophthora tropicalis</i>	TBD <i>TBD</i>	V-10161 <i>V-10161</i>	TBD	2007	FL	Norman			P	
24571	B <i>TBD</i>	Fir <i>Abies sp.</i>	Magellan <i>Mono- and Dibasic Sodium, Potassium and Ammonium Phosphites</i>	Field Container	2005	OR	Linderman			?	
24572	B <i>TBD</i>	Cedar, Red <i>Juniperus virginiana</i>	Magellan <i>Mono- and Dibasic Sodium, Potassium and Ammonium Phosphites</i>	Field Container	2005	OR	Linderman			?	
0	C <i>TBD</i>	TBD <i>TBD</i>	Disarm <i>Fluoxastrobin</i>	TBD	2006	MS	Henn			P	
					2007	FL	Norman			P	
					2007	MI	Hausbeck			P	
0	A <i>TBD</i>	TBD <i>TBD</i>	Heritage <i>Azoxystrobin</i>	TBD	2007	AL	Reddy			P	
					2007	MI	Hausbeck			P	
					2007	MI	Hausbeck			P	
0	B <i>TBD</i>	TBD <i>TBD</i>	Insignia <i>Pyraclostrobin</i>	TBD	2006	MS	Henn			P	
0	A <i>TBD</i>	TBD <i>TBD</i>	Segway <i>Cyazofamid</i>	TBD	2006	MS	Henn			P	
					2007	AL	Reddy			P	
					2007	MI	Hausbeck			P	
					2007	MI	Hausbeck			P	
					2007	MS	Gu			P	

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0	A	TBD	TBD	V-10161	TBD	2007	AL	Reddy		P	
		<i>TBD</i>	<i>TBD</i>	<i>V-10161</i>		2007	MI	Hausbeck		P	
						2007	MI	Hausbeck		P	
						2007	MS	Gu		P	
24573	B	TBD	Hemlock	Magellan	Field Container	2005	OR	Linderman		?	
		<i>TBD</i>	<i>Tsuga sp.</i>	<i>Mono- and Dibasic Sodium, Potassium and Ammonium Phosphites</i>							

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26693 N	Pythium aphanadermatu <i>Pythium aphanadermatu</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Aliette WDG <i>Fosetyl Al</i>	Greenhouse	2006	NC	Benson	Foliar	'Angelica White'	C	2/15/2007 <i>Trial Results: Low disease pressure; root rating and plant size equal to uninoculated and inoculated Checks at 5 lb per 100 gal</i>
25496 B	Pythium aphanadermatu <i>Pythium aphanadermatu</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Alude <i>Potassium phosphite</i>	Greenhouse	2006	NC	Benson	Foliar	'Angelica White'	C	2/15/2007 <i>Trial Results: Low disease pressure; root rating and plant size equal to uninoculated and inoculated Checks at 12.7 fl oz per 100 gal</i>
25497 B	Pythium aphanadermatu <i>Pythium aphanadermatu</i>	Poinsettia <i>Euphorbia pulcherrima</i>	BioPhos 43L <i>Dipotassium phosphonate + Dipotassium phosphate</i>	Greenhouse	2006	NC	Benson	Foliar	'Angelica White'	C	2/15/2007 <i>Trial Results: Low disease pressure; root rating higher and plant growth lower than inoculated and uninoculated Checks at 64 fl oz per 100 gal</i>
26695 B	Pythium aphanadermatu <i>Pythium aphanadermatu</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Calirus (PMA300) <i>Dikegulac sodium</i>	Greenhouse	2006	NC	Benson	Foliar	'Angelica White'	C	2/15/2007 <i>Trial Results: Low disease pressure; root rating and plant size equal to uninoculated and inoculated Checks at 64 fl oz per 100 gal</i>
26696 C	Pythium aphanadermatu <i>Pythium aphanadermatu</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Disarm <i>Fluoxastrobin</i>	Greenhouse	2006	NC	Benson	Drench	'Angelica White'	C	2/15/2007 <i>Trial Results: Low disease pressure; root rating equal to and plant growth lower than inoculated Check at 3 fl oz per 100 gal</i>
25493 B	Pythium aphanadermatu <i>Pythium aphanadermatu</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Fenstop <i>Fenamidone</i>	Greenhouse	2006	NC	Benson	Drench	'Angelica White'	C	2/15/2007 <i>Trial Results: Low disease pressure; root rating and plant size equal to uninoculated and inoculated Checks at 7 and 14 fl oz per 100 gal</i>
26887 B	Pythium aphanadermatu <i>Pythium aphanadermatu</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Heritage <i>Azoxystrobin</i>	Greenhouse	2007	MS	Gu	Drench		P	
25501 B	Pythium aphanadermatu <i>Pythium aphanadermatu</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Insignia <i>Pyraclostrobin</i>	Greenhouse	2006	NC	Benson	Drench	'Angelica White'	C	2/15/2007 <i>Trial Results: Low disease pressure; root rating and plant size equal to uninoculated and inoculated Checks at 16 and 40 oz per 100 gal</i>
25499 C	Pythium aphanadermatu <i>Pythium aphanadermatu</i>	Poinsettia <i>Euphorbia pulcherrima</i>	K-Phite <i>Phosphorus acid salts</i>	Greenhouse	2006	NC	Benson	Foliar	'Angelica White'	C	2/15/2007 <i>Trial Results: Low disease pressure; root rating and plant size equal to uninoculated and inoculated Checks at 48 fl oz per 100 gal</i>
25502 B	Pythium aphanadermatu <i>Pythium aphanadermatu</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Magellan <i>Mono- and Dibasic Sodium, Potassium and Ammonium Phosphites</i>	Greenhouse	2006	NC	Benson	Foliar	'Angelica White'	C	2/15/2007 <i>Trial Results: Low disease pressure; root rating and plant size equal to uninoculated and inoculated Checks at 12 fl oz per 100 gal</i>
25494 B	Pythium aphanadermatu <i>Pythium aphanadermatu</i>	Poinsettia <i>Euphorbia pulcherrima</i>	MultiGuard <i>Furfural</i>	Greenhouse	2006	NC	Benson	Drench	'Angelica White'	C	2/15/2007 <i>Trial Results: Low disease pressure; root rating and plant size equal to uninoculated and inoculated Checks at 500 ppm; inferior at 1000 ppm</i>

Pythium Efficacy

Printed: 9/20/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
25503	C <i>Pythium aphanadermatu</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Muscodor albus <i>Muscodor albus</i>	Greenhouse	2006	NC	Benson	Soil Incorporation	'Angelica White'	C	2/15/2007
<i>Trial Results: Low disease pressure; root rating higher and plant growth lower than inoculated and uninoculated Checks at 1.8 and 3.8 g/L</i>											
25986	A <i>Pythium aphanadermatu</i>	Poinsettia <i>Euphorbia pulcherrima</i>	NOA 446510 <i>Mandipropamid</i>	Greenhouse	2006	NC	Benson	Drench	'Angelica White'	C	2/15/2007
<i>Trial Results: Low disease pressure; root rating and plant size equal to uninoculated and inoculated Checks at 4 and 8 fl oz per 100 gal</i>											
					2007	MS	Gu	Drench		P	
25492	B <i>Pythium aphanadermatu</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Segway <i>Cyazofamid</i>	Greenhouse	2006	NC	Benson	Drench	'Angelica White'	C	2/15/2007
<i>Trial Results: Low disease pressure; root rating and plant size equal to uninoculated and inoculated Checks at 3 and 6 fl oz per 100 gal</i>											
					2007	MS	Gu			P	
26694	N <i>Pythium aphanadermatu</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Subdue MAXX <i>Mefenoxam</i>	Greenhouse	2006	NC	Benson	Drench	'Angelica White'	C	2/15/2007
<i>Trial Results: Low disease pressure; root rating and plant size equal to uninoculated and inoculated Checks at 1 oz per 100 gal</i>											
26888	B <i>Pythium aphanadermatu</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Tank Mix: Heritage + <i>azoxystrobin + mefenoxam</i>	Greenhouse	2007	MS	Gu	Drench		P	
25495	A <i>Pythium aphanadermatu</i>	Poinsettia <i>Euphorbia pulcherrima</i>	V-10161 <i>V-10161</i>	Greenhouse	2006	NC	Benson	Drench	'Angelica White'	C	2/15/2007
<i>Trial Results: Low disease pressure; root rating and plant size equal to uninoculated and inoculated Checks at 30 ml per 100 gal; inferior at 60 ml</i>											
25498	B <i>Pythium aphanadermatu</i>	Poinsettia <i>Euphorbia pulcherrima</i>	Vital 4L <i>Potassium phosphite</i>	Greenhouse	2006	NC	Benson	Foliar	'Angelica White'	C	2/15/2007
<i>Trial Results: Low disease pressure; root rating and plant size equal to uninoculated and inoculated Checks at 64 fl oz per 100 gal</i>											
26394	A <i>Pythium aphanadermatu</i>	Petunia <i>Petunia sp.</i>	Heritage <i>Azoxystrobin</i>	Greenhouse	2007	MA	Wick			P	
26395	A <i>Pythium aphanadermatu</i>	Petunia <i>Petunia sp.</i>	Hymexazol 30L <i>Hymexazol</i>	Greenhouse	2007	MA	Wick			P	
26396	A <i>Pythium aphanadermatu</i>	Petunia <i>Petunia sp.</i>	NOA 446510 <i>Mandipropamid</i>	Greenhouse	2007	MA	Wick			P	
26397	A <i>Pythium aphanadermatu</i>	Petunia <i>Petunia sp.</i>	V-10161 <i>V-10161</i>	Greenhouse	2007	MA	Wick			P	
25829	C <i>Pythium irregulare</i>	New Guinea Impatiens <i>Impatiens New Guinea hyb</i>	Disarm <i>Fluoxastrobin</i>	TBD	2006	NY	Becker			P	
25529	B <i>Pythium irregulare</i>	New Guinea Impatiens <i>Impatiens New Guinea hyb</i>	Fenstop <i>Fenamidone</i>	TBD	2006	NY	Becker			P	
25830	B <i>Pythium irregulare</i>	New Guinea Impatiens <i>Impatiens New Guinea hyb</i>	Insignia <i>Pyraclostrobin</i>	TBD	2006	NY	Becker			P	

Key: Priorities A, B, and C are researchable; N is not researchable - these may be completed studies or those with Standards. Trial Status: P = Planned, O = Ongoing, C = Complete, X = Cancelled, ? = Unknown

Pythium Efficacy

Printed: 9/20/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
25530 B	Pythium irregulare <i>Pythium irregulare</i>	New Guinea Impatiens <i>Impatiens New Guinea hyb</i>	MultiGuard <i>Furfural</i>	TBD	2006	NY	Becker			P	
25531 C	Pythium irregulare <i>Pythium irregulare</i>	New Guinea Impatiens <i>Impatiens New Guinea hyb</i>	Muscodor albus <i>Muscodor albus</i>	TBD	2006	NY	Becker			P	
25528 B	Pythium irregulare <i>Pythium irregulare</i>	New Guinea Impatiens <i>Impatiens New Guinea hyb</i>	Segway <i>Cyazofamid</i>	Greenhouse	2006	NY	Becker			P	
25532 A	Pythium irregulare <i>Pythium irregulare</i>	New Guinea Impatiens <i>Impatiens New Guinea hyb</i>	V-10161 <i>V-10161</i>	TBD	2006	NY	Becker			P	
26398 A	Pythium irregulare <i>Pythium irregulare</i>	Geranium <i>Pelargonium sp.</i>	Heritage <i>Azoxystrobin</i>	Greenhouse	2007	CA	Chase			C	8/13/2007
26399 A	Pythium irregulare <i>Pythium irregulare</i>	Geranium <i>Pelargonium sp.</i>	Hymexazol 30L <i>Hymexazol</i>	Greenhouse	2007	CA	Chase			C	8/13/2007
26400 A	Pythium irregulare <i>Pythium irregulare</i>	Geranium <i>Pelargonium sp.</i>	NOA 446510 <i>Mandipropamid</i>	Greenhouse	2007	CA	Chase			C	8/13/2007
26460 N	Pythium irregulare <i>Pythium irregulare</i>	Geranium <i>Pelargonium sp.</i>	Subdue MAXX <i>Mefenoxam</i>	Greenhouse	2007	CA	Chase			P	8/13/2007
26894 C	Pythium irregulare <i>Pythium irregulare</i>	Geranium <i>Pelargonium sp.</i>	Tank Mix: Heritage + <i>azoxystrobin + mefonaxam</i>	Greenhouse	2007	CA	Chase			C	8/13/2007
26461 N	Pythium irregulare <i>Pythium irregulare</i>	Geranium <i>Pelargonium sp.</i>	Terrazole 35% WP <i>Etridiazole</i>	Greenhouse	2007	CA	Chase			C	8/13/2007
26401 A	Pythium irregulare <i>Pythium irregulare</i>	Geranium <i>Pelargonium sp.</i>	V-10161 <i>V-10161</i>	Greenhouse	2007	CA	Chase			C	8/13/2007
26523 C	Pythium irregulare <i>Pythium irregulare</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	Actinovate <i>Actinovate</i>	Greenhouse	2006	OR	Linderman	Drench		C	1/8/2007
26512 N	Pythium irregulare <i>Pythium irregulare</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	Aliette WDG <i>Fosetyl Al</i>	Greenhouse	2006	OR	Linderman	Drench		C	1/10/2007
26516 B	Pythium irregulare <i>Pythium irregulare</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	Alude <i>Potassium phosphite</i>	Greenhouse	2006	OR	Linderman	Drench		C	1/10/2007
26517 B	Pythium irregulare <i>Pythium irregulare</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	BioPhos 43L <i>Dipotassium phosphonate + Dipotassium phosphate</i>	Greenhouse	2006	OR	Linderman	Drench		C	1/10/2007

Pythium Efficacy

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26513	N Pythium irregulare <i>Pythium irregulare</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	Captan <i>Captan</i>	Greenhouse	2006	OR	Linderman	Drench		C	1/10/2007
26521	C Pythium irregulare <i>Pythium irregulare</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	Disarm <i>Fluoxastrobin</i>	Greenhouse	2006	OR	Linderman			C	1/10/2007
26509	B Pythium irregulare <i>Pythium irregulare</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	Fenstop <i>Fenamidone</i>	Greenhouse	2006	OR	Linderman	Drench		C	1/10/2007
26518	A Pythium irregulare <i>Pythium irregulare</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	Heritage <i>Azoxystrobin</i>	Greenhouse	2006	OR	Linderman			P	
26519	B Pythium irregulare <i>Pythium irregulare</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	Insignia <i>Pyraclostrobin</i>	Greenhouse	2006	OR	Linderman			C	1/10/2007
26520	B Pythium irregulare <i>Pythium irregulare</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	Magellan <i>Mono- and Dibasic Sodium, Potassium and Ammonium Phosphites</i>	Greenhouse	2006	OR	Linderman			C	1/10/2007
26510	B Pythium irregulare <i>Pythium irregulare</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	MultiGuard <i>Furfural</i>	Greenhouse	2006	OR	Linderman			C	1/10/2007
26508	B Pythium irregulare <i>Pythium irregulare</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	Segway <i>Cyazofamid</i>	Greenhouse	2006	OR	Linderman			C	1/10/2007
26514	N Pythium irregulare <i>Pythium irregulare</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	Subdue MAXX <i>Mefenoxam</i>	Greenhouse	2006	OR	Linderman			C	1/10/2007
26515	N Pythium irregulare <i>Pythium irregulare</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	Terrazole 35% WP <i>Etridiazole</i>	Greenhouse	2006	OR	Linderman			C	1/10/2007
26511	A Pythium irregulare <i>Pythium irregulare</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	V-10161 <i>V-10161</i>	Greenhouse	2006	OR	Linderman			C	1/10/2007
26522	B Pythium irregulare <i>Pythium irregulare</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	Vital 4L <i>Potassium phosphite</i>	Greenhouse	2006	OR	Linderman			C	1/10/2007
26731	C Pythium sp. <i>Pythium sp.</i>	Geranium <i>Geranium sp.</i>	Actinovate <i>Actinovate</i>	Greenhouse	2006	AL	Reddy	Drench <i>Trial Results: Fair efficacy at 10 oz per 100 gal</i>		C	2/12/2007
26732	B Pythium sp. <i>Pythium sp.</i>	Geranium <i>Geranium sp.</i>	BioPhos 43L <i>Dipotassium phosphonate + Dipotassium phosphate</i>	Greenhouse	2006	AL	Reddy	Drench <i>Trial Results: Poor and good efficacy at 1 and 2 gal per 100 gal</i>		C	2/12/2007
26767	C Pythium sp. <i>Pythium sp.</i>	Geranium <i>Geranium sp.</i>	Disarm <i>Fluoxastrobin</i>	Greenhouse	2006	AL	Reddy	Drench <i>Trial Results: Good efficacy at 3 oz per 100 gal</i>		C	2/12/2007

Pythium Efficacy

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26763 B	Pythium sp. <i>Pythium sp.</i>	Geranium <i>Geranium sp.</i>	Fenstop <i>Fenamidon</i>	Greenhouse	2006	AL	Reddy	Drench		C	2/12/2007
<i>Trial Results: Poor and good efficacy at 7 and 14 oz per 100 gal</i>											
26764 A	Pythium sp. <i>Pythium sp.</i>	Geranium <i>Geranium sp.</i>	Hymexazol 30L <i>Hymexazol</i>	Greenhouse	2006	AL	Reddy	Drench		C	2/12/2007
<i>Trial Results: Poor and good efficacy at 6 and 12 oz per 100 gal</i>											
26766 B	Pythium sp. <i>Pythium sp.</i>	Geranium <i>Geranium sp.</i>	MultiGuard <i>Furfural</i>	Greenhouse	2006	AL	Reddy	Drench		C	2/12/2007
<i>Trial Results: Poor and good efficacy at 250 and 500 ppm</i>											
26765 A	Pythium sp. <i>Pythium sp.</i>	Geranium <i>Geranium sp.</i>	NOA 446510 <i>Mandipropamid</i>	Greenhouse	2006	AL	Reddy	Drench		C	2/12/2007
<i>Trial Results: Poor and good efficacy at 2 and 8 oz per 100 gal</i>											
26762 B	Pythium sp. <i>Pythium sp.</i>	Geranium <i>Geranium sp.</i>	Segway <i>Cyazofamid</i>	Greenhouse	2006	AL	Reddy	Drench		C	2/12/2007
<i>Trial Results: Poor and good efficacy at 1.5 and 3 oz per 100 gal</i>											
26768 A	Pythium sp. <i>Pythium sp.</i>	Geranium <i>Geranium sp.</i>	V-10161 <i>V-10161</i>	Greenhouse	2006	AL	Reddy	Drench		C	2/12/2007
<i>Trial Results: Poor and good efficacy at 30 and 60 ml per 100 gal</i>											
26769 B	Pythium sp. <i>Pythium sp.</i>	Geranium <i>Geranium sp.</i>	Vital 4L <i>Potassium phosphite</i>	Greenhouse	2006	AL	Reddy	Drench		C	2/12/2007
<i>Trial Results: Poor and excellent efficacy at 2 and 4 pt per 100 gal</i>											
26885 C	Pythium sp. <i>Pythium sp.</i>	Petunia <i>Petunia sp.</i>	Tank Mix: Heritage + <i>azoxystrobin + mefonaxam</i>	Greenhouse	2007	MA	Wick			P	
26527 C	Pythium ultimum <i>Pythium ultimum</i>	Geranium <i>Pelargonium sp.</i>	Actinovate <i>Actinovate</i>	Greenhouse	2006	WA	Chastagner	Drench	P. x hortorum 'Elite White'	C	1/8/2007
<i>Trial Results: No efficacy</i>											
26528 N	Pythium ultimum <i>Pythium ultimum</i>	Geranium <i>Pelargonium sp.</i>	Aliette WDG <i>Fosetyl Al</i>	Greenhouse	2006	WA	Chastagner	Drench	P. x hortorum 'Elite White'	C	1/8/2007
<i>Trial Results: No efficacy</i>											
26008 B	Pythium ultimum <i>Pythium ultimum</i>	Geranium <i>Pelargonium sp.</i>	Alude <i>Potassium phosphite</i>	Greenhouse	2006	WA	Chastagner	Drench	P. x hortorum 'Elite White'	C	1/8/2007
<i>Trial Results: No efficacy applied drench.</i>											
					2006	WA	Chastagner	Foliar	P. x hortorum 'Elite White'	C	1/8/2007
<i>Trial Results: No efficacy with foliar application.</i>											
26529 B	Pythium ultimum <i>Pythium ultimum</i>	Geranium <i>Pelargonium sp.</i>	BioPhos 43L <i>Dipotassium phosphonate + Dipotassium phosphate</i>	Greenhouse	2006	WA	Chastagner	Drench	P. x hortorum 'Elite White'	C	1/8/2007
<i>Trial Results: No efficacy applied as a drench.</i>											
					2006	WA	Chastagner	Foliar	P. x hortorum 'Elite White'	C	1/8/2007
<i>Trial Results: No efficacy with foliar application.</i>											

Pythium Efficacy

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26526	C Pythium ultimum <i>Pythium ultimum</i>	Geranium <i>Pelargonium sp.</i>	Captan <i>Captan</i>	Greenhouse	2006	WA	Chastagner	Drench	P. x hortorum 'Elite White'	C	1/8/2007
<i>Trial Results: No efficacy</i>											
26011	C Pythium ultimum <i>Pythium ultimum</i>	Geranium <i>Pelargonium sp.</i>	Disarm <i>Fluoxastrobin</i>	Greenhouse	2006	WA	Chastagner	Drench	P. x hortorum 'Elite White'	C	1/8/2007
<i>Trial Results: Significant reduction of disease severity</i>											
26004	B Pythium ultimum <i>Pythium ultimum</i>	Geranium <i>Pelargonium sp.</i>	Fenstop <i>Fenamidon</i>	Greenhouse	2006	WA	Chastagner	Drench	P. x hortorum 'Elite White'	C	1/8/2007
<i>Trial Results: Significant reduction of disease severity</i>											
26531	A Pythium ultimum <i>Pythium ultimum</i>	Geranium <i>Pelargonium sp.</i>	Heritage <i>Azoxystrobin</i>	Greenhouse	2006	WA	Chastagner	Drench	P. x hortorum 'Elite White'	C	1/8/2007
<i>Trial Results: No efficacy</i>											
26009	A Pythium ultimum <i>Pythium ultimum</i>	Geranium <i>Pelargonium sp.</i>	Hymexazol 30L <i>Hymexazol</i>	Greenhouse	2006	WA	Chastagner	Drench	P. x hortorum 'Elite White'	C	1/8/2007
<i>Trial Results: No efficacy at both rates</i>											
26010	B Pythium ultimum <i>Pythium ultimum</i>	Geranium <i>Pelargonium sp.</i>	Insignia <i>Pyraclostrobin</i>	Greenhouse	2006	WA	Chastagner	Drench	P. x hortorum 'Elite White'	C	1/8/2007
<i>Trial Results: No efficacy</i>											
26005	B Pythium ultimum <i>Pythium ultimum</i>	Geranium <i>Pelargonium sp.</i>	MultiGuard <i>Furfural</i>	Greenhouse	2006	WA	Chastagner	Drench	P. x hortorum 'Elite White'	C	1/8/2007
<i>Trial Results: No efficacy at both rates</i>											
26003	B Pythium ultimum <i>Pythium ultimum</i>	Geranium <i>Pelargonium sp.</i>	Segway <i>Cyazofamid</i>	Greenhouse	2006	WA	Chastagner	Drench	P. x hortorum 'Elite White'	C	1/8/2007
<i>Trial Results: Significant reduction of disease severity at both rates</i>											
26532	N Pythium ultimum <i>Pythium ultimum</i>	Geranium <i>Pelargonium sp.</i>	Subdue MAXX <i>Mefenoxam</i>	Greenhouse	2006	WA	Chastagner	Drench	P. x hortorum 'Elite White'	C	1/8/2007
<i>Trial Results: Excellent efficacy</i>											
26533	N Pythium ultimum <i>Pythium ultimum</i>	Geranium <i>Pelargonium sp.</i>	Terrazole 35% WP <i>Etridiazole</i>	Greenhouse	2006	WA	Chastagner	Drench	P. x hortorum 'Elite White'	C	1/8/2007
<i>Trial Results: Excellent efficacy</i>											
26007	A Pythium ultimum <i>Pythium ultimum</i>	Geranium <i>Pelargonium sp.</i>	V-10161 <i>V-10161</i>	Greenhouse	2006	WA	Chastagner	Drench	P. x hortorum 'Elite White'	C	1/8/2007
<i>Trial Results: No efficacy</i>											

Pythium Efficacy

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26530 B	Pythium ultimum <i>Pythium ultimum</i>	Geranium <i>Pelargonium sp.</i>	Vital 4L <i>Potassium phosphite</i>	Greenhouse	2006	WA	Chastagner	Drench	P. x hortorum 'Elite White'	C	1/8/2007
					2006	WA	Chastagner	Foliar	P. x hortorum 'Elite White'	C	1/8/2007
					<i>Trial Results: No efficacy</i>						
					<i>Trial Results: No efficacy</i>						
0 A	TBD <i>TBD</i>	TBD <i>TBD</i>	Heritage <i>Azoxystrobin</i>	TBD	2007	MS	Gu			P	
0 B	TBD <i>TBD</i>	TBD <i>TBD</i>	Segway <i>Cyazofamid</i>	TBD	2007	AL	Reddy			P	
					2007	FL	Palmeteer			P	

Seed Treatment - Downy Mildew

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26739 C	Downy Mildew of Mint, <i>Peronospora lamii</i>	Coleus, Flamenettle <i>Coleus sp.</i>	Heritage <i>Azoxystrobin</i>	Greenhouse	2007	MI	Hausbeck			P	
26744 C	Downy Mildew of Mint, <i>Peronospora lamii</i>	Coleus, Flamenettle <i>Coleus sp.</i>	Insignia <i>Pyraclostrobin</i>	Greenhouse	2007	MI	Hausbeck			P	
26741 C	Downy Mildew of Mint, <i>Peronospora lamii</i>	Coleus, Flamenettle <i>Coleus sp.</i>	Medallion <i>Fludioxonil</i>	Greenhouse	2007	MI	Hausbeck			P	
26742 C	Downy Mildew of Mint, <i>Peronospora lamii</i>	Coleus, Flamenettle <i>Coleus sp.</i>	NOA 446510 <i>Mandipropamid</i>	Greenhouse	2007	MI	Hausbeck			P	
26740 C	Downy Mildew of Mint, <i>Peronospora lamii</i>	Coleus, Flamenettle <i>Coleus sp.</i>	Segway <i>Cyazofamid</i>	Greenhouse	2007	MI	Hausbeck			P	
26745 C	Downy Mildew of Mint, <i>Peronospora lamii</i>	Coleus, Flamenettle <i>Coleus sp.</i>	Stature <i>Dimethomorph + Mancozeb</i>	Greenhouse	2007	MI	Hausbeck			P	
26743 C	Downy Mildew of Mint, <i>Peronospora lamii</i>	Coleus, Flamenettle <i>Coleus sp.</i>	Subdue MAXX <i>Mefenoxam</i>	Greenhouse	2007	MI	Hausbeck			P	

Xanthemonas Efficacy

Printed: 9/20/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26721 C	TBD	Geranium	Kasugamycin	Greenhouse	2007	FL	Norman			P	
	TBD	<i>Pelargonium sp.</i>	<i>Kasugamycin</i>		2007	FL	Strandberg			P	
26722 C	TBD	Geranium	Tanos + Kocide Tank	Greenhouse	2007	FL	Norman			P	
	TBD	<i>Pelargonium sp.</i>	<i>Famoxadone + Cymoxanil + Copper</i>		2007	FL	Strandberg			P	

Top 10 Disease Groups for Herbaceous Plant Materials Separated by Geography.

	Disease/Pathogen (Weighted Ranking)			
Region	North Central	Northeast	Southern	Western
Survey Count	83	33	183	77
1	Powdery Mildew (68)	Powdery Mildew (34)	Leaf Spots & Anthracnose (100)	Powdery Mildew (56)
2	Botrytis (48)	Botrytis (20)	Powdery Mildew (71)	Leaf Spots & Anthracnose (49)
3	Phytophthora (29)	Leaf Spots & Anthracnose (14)	Botrytis (69)	Botrytis (44)
4	Pythium (29)	Crown & Root Rot (13)	Crown & Root Rot (66)	Phytophthora (39)
5	Crown & Root Rot (26)	Phytophthora (12)	Phytophthora (66)	Crown & Root Rot (34)
6	Downy Mildew (26)	Other (11)	Other (57)	Bacterial Diseases (31)
7	Other (20)	Pythium (9)	Pythium (44)	Downy Mildew (22)
8	Bacterial Diseases (19)	Rusts (5)	Bacterial Diseases (37)	Pythium (16)
9	Leaf Spots & Anthracnose (11)	Bacterial Diseases (5)	Turf Diseases (36)	Virus (9)
10	Rusts (8)	Virus (3)	Downy Mildew (33)	Rusts (9)

Top 10 Disease Groups for Woody Plant Materials Separated by Geography.

	Disease/Pathogen (Weighted Ranking)			
Region	North Central	Northeast	Southern	Western
Survey Count	55	31	184	82
1	Powdery Mildew (40)	Powdery Mildew (33)	Leaf Spots & Anthracnose (127)	Phytophthora (79)
2	Bacterial Diseases (22)	Leaf Spots & Anthracnose (19)	Other (89)	Powdery Mildew (64)
3	Other (20)	Phytophthora (18)	Powdery Mildew (73)	Leaf Spots & Anthracnose (58)
4	Downy Mildew (19)	Rusts (14)	Phytophthora (70)	Crown & Root Rot (31)
5	Phytophthora (19)	Botrytis (12)	Crown & Root Rot (50)	Botrytis (30)
6	Botrytis (18)	Crown & Root Rot (10)	Botrytis (45)	Bacterial Diseases (27)
7	Leaf Spots & Anthracnose (14)	Other (9)	Turf Diseases (40)	Other (18)
8	Crown & Root Rot (13)	Turf Diseases (5)	Downy Mildew (36)	Downy Mildew (16)
9	Pythium (11)	Pythium (3)	Bacterial Diseases (32)	Rusts (13)
10	Foliar Blights (7)	--	Pythium (26)	Pythium (10)

New Products / Solutions List - Fungi and Bacteria

Printed: 9/24/2007

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
Acibenzolar-S-methyl	Actigard, Blockade			Syngenta	Benzothiadiazole, (Systemic Acquired Resistance Inducer)	Induces resistance to tomato spotted wilt virus, Blue mold, Bacterial Diseases, Downy Mildew, Sclerotinia	Crop-pathosystem specific	Yes	No
<i>Agrobacterium radiobacter</i>	Galltrol-A			AgBioChem	Bacteria	Control of hairy root and root mat, crown gall	Biopesticide.	No	No
<i>Ampelomyces quisqualis</i> isolate M-10	AQ 10			Ecogen	Fungus	Hyperparasite of Powdery mildew	Biopesticide.	Yes	No
Azoxystrobin	Amistar, Quadris, Abound	Heritage	100-1093	Syngenta	Strobilurin	Broad spectrum preventative fungicide with systemic & curative properties for control of many plant diseases including Cladosporium, Colletotrichum, Cercospora, Entomosporium, Venturia, Botryosphaeria, Mycosphaerella, Puccinia, Pyricularia, Peronospora, Plasmopara, Guignardia, Pseudopeziza, Alternaria, Sphaerotheca, Erysiphe, Leveillula, Septoria, Pythium, Phytophthora, Fusarium, Uncinula, Rhizoctonia etc.	For the control of certain diseases of bed or field grown ornamentals in greenhouses, shade-houses, outdoor nurseries, retail nurseries, production nurseries, gardens, and other residential and commercial landscape areas. For use on golf courses, lawns, and landscaped areas around residential, institutional, public, commercial and industrial buildings, parks, recreational areas and athletic fields. Also for use on conifers in production and landscape situations. Registrant endorses adding new plants and pests to label.	Yes	Yes
<i>Bacillus licheniformis</i> Strain SB 3086	Green-Release, EcoGuard			Novozymes Biologicals	Microbial	Controls dollar spot.	Biopesticide. Pending use on turf, ornamental plants, conifers, tree seedlings. Registrant endorses adding new plants and pests to label.	Yes	No
<i>Bacillus pumilus</i> _GB 34				Gustafson	Microbial	Suppression of Rhizoctonia & Fusarium	Biopesticide.	No	No
<i>Bacillus pumilus</i> Strain 2808	Sonata AS			AgraQuest	Microbial	Botrytis downy and powdery mildews, rusts, Sclerotinia blight, and rots	Biopesticide.	No	No
<i>Bacillus subtilis</i> strain MB 1600	Subtilex			Becker Underwood	Microbial	Seed treatment use	Biopesticide.	No	No
<i>Bacillus subtilis</i> strain GB03				Growth Products Ltd	Microbial	Broad spectrum fungicide that controls Anthracnose, Alternaria, Cercospora, Helminthosporium, etc.	Biopesticide.	No	No
<i>Bacillus subtilis</i> strain QST 713	Rhapsody			AgraQuest	Microbial	Broad spectrum fungicide that controls Anthracnose, Alternaria, Cercospora, Helminthosporium, etc.	Biopesticide. Registered for use on greenhouse ornamentals. Registrant endorses adding new plants to label.	Yes	No

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
<i>Bacillus subtilis</i> var. <i>amyloliquifaciens</i> strain FZB24	Taegro			Taensa	Microbial	Broad spectrum fungicide that controls Anthracnose, Alternaria, Cercospora, Helminthosporium, etc.	Biopesticide.	No	No
Bacteriophages	Agriphage			Agriophi	Microbial	Manages bacteria spot and bacteria speck	Biopesticide.	No	No
Benthiavalicarb	KIF-230			Kumiai	Carbamate	Controls downy mildew and oomycete fungi	Development is on "hold".	No	No
Boscalid	Endura	Emerald		BASF	Nicotinamide	Manages powdery mildew, Alternaria, Botrytis, Sclerotinia and Monillia	Interested in developing for ornamental uses. Efficacy and crop safety needed.	Yes	Yes
Boscalid & Pyraclostrobin	Pristine	BAS 516		BASF	Multi active ingredients nicotinamide and strobiluron	Broad-spectrum activity on Anthracnose, Alternaria, downy mildew, powdery mildew, Botrytis, Sclerotinia and Monilinia.	Interested in developing for ornamental uses. Efficacy and crop safety needed.	Yes	Yes
<i>Candida oleophila</i>				Ecogen	Biofungicide	Post-harvest diseases.	Biopesticide.	No	No
<i>Candida saitoana</i>	Biocure			Micro Flo	Biofungicide	Post-harvest disease control in fruits, both preventative and curative activity.	Biopesticide.	No	No
Chitosan	Elexa-4			SafeScience	Carbohydrate-Chitin based product, plant defensive booster	Downy and powdery mildew, gray mold and Botrytis.	Biopesticide.	No	No
Cinnamaldehyde	Cinnacure, Cinnamite			Proguard	Natural Product	Downy mildew, powdery mildew, botrytis, brown rots, aphids and mites.	Biopesticide.	No	No
<i>Coninthyrium minitans</i>	Contans WG			Prophyta / Encore Technologies	Fungus	Controls Sclerotinia sclerotium and S. minor.	Biopesticide.	No	No
Copper Octanoate	NEU 1140F			W. Neudorff	Copper Octanoate	Downy mildew, powdery mildew, blue mold, white rust, anthracnose.		No	No
Cyazofamid	Ranman	tbd		ISK Biosciences	Cyanoimidazole – Inhibitor of mitochondrial electronic transport.	Oomycete and Plasmodiophoromycetes (late blight & downy mildew).	Interested in further development for ornamentals. Registrant endorses adding new plants and pests to the label.	Yes	Yes
Cyflufenamid	NF-149, Pancho			Nippon Soda	Phenylacetamid	Excellent activity on various powdery mildews and brown rots.		No	No
Cyproconazole	Alto			Syngenta	Triazole	Coffee rust.			
Cyprodinil	Vanguard			Syngenta	Anilinopyrimidine	Ascomycetes and Deuteromycetes such as: Botrytis, Alternaria, Monilinia, Venturia, Pseudocerosporella, Pyrenophora, Septoria, Erysiphe, Erysiphe, Rhynchosporium Glomerella, Coccomyces, and Colletotrichum.		No	Yes

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
Cyprodinil/Fludioxonil	Switch	Palladium	100-953	Syngenta	Anilinoimidazole and Phenylpyrrole	Controls Botrytis, Alternaria and brown rot.	Registration pending, expected in 2007. Registrant endorses adding new plants and uses to label.	Yes	Yes
Diallyl Sulfide	Alli-UP			UAP/Platt	Diallyl sulfide, classified as biochemical.	White rot.	Biopesticide.	No	No
Difenoconazole	Dividend			Syngenta	Triazole	Seed treatment for Smuts, Bunts, Aspergillus, Fusarium, Penicillium, Septoria, Cochliobolus, Pyrenophora, Pseudocercospora, and Gaeumannomyces. Submission foliar use for leafspots and powdery mildew in 2006.	Registrant endorsed adding ornamental uses.	Yes	No
Dimethomorph	Acrobat Forum	Stature DM		BASF / SePro	Cinnamic acid derivative	Downy mildew, late blight, Phytophthora, Plasmopara, Pseudoperonospora Bremia, and Peronospora. Should be mixed with other fungicides for resistance management.			
Dimethomorph/ Pyraclostrobin (BAS 536)				BASF	Combination of cinnamic acid derivative and strobilurin	Dimethomorph spectrum (see above) plus <i>Alternaria</i> , <i>Anthracoze</i> , <i>Septoria</i> , <i>Cercospora</i>			
Dimoxystrobin	BAS 505F			BASF	Strobilurin	Sclerotinia and Rhizoctonia		No	No
Dithianon	Delan			BASF	Quinone	Scab, downy mildew, rust, leaf spot.			
Epoxiconazole	Opus			BASF	Triazole	Leaf spots, powdery mildew, black spots.			
Ethaboxam	Guardian			L G Chemicals / Sumitomo	Thiazole carboxamide	Useful for grape downy mildew, potato and tomato late blight, pepper blight and cucumber downy mildew. Preventive and curative activity			
Extract of Neem Oil				OHP, Inc	Extract of Neem oil,	Useful for control of powdery mildew and rust.			
Famoxadone + Cymoxanil	Tanos	SP2015		DuPont	Quinone outside Inhibitors (QoI) + Cyanoacetamide-oxime	Broad spectrum foliar fungicide with activity against: Downy Mildew, Alternaria, Anthracnose, Aerial Phytophthora, Xanthomonas, Pseudomonas			
Fenamidone	Reason	FenStop		Bayer Environmental Sciences, OHP, Inc.	Imidazolinone (Respiration Inhibitor)	Foliar protectant and curative activity against Oomycete fungi. Also effective against ascomycete and Alternaria. Inhibits electronic transport.		Yes	Yes

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
Fenbuconazole	Indar Enable			Dow AgroSciences	Triazole	Powdery mildew, rusts, apple scab, brown rot, cotton ball, mummy berry (Monilinia spp.), smuts, bunts, Cladosporium, Mycosphaerella, Cercospora, Septoria, Rhizoctonia, Pyrenophora, Helminthosporium & related genera, and Colletotrichum sp.		No	No
Fenhexamid	Elevate	Decree		Arysta Lifesciences	Hydroxylanilide	Non-systemic protectant fungicide that is effective against Botrytis cinerea, Monilina, Sclerotinia sclerotiorum of lettuce.	Registered on ornamentals. Registrant endorses adding new plants to label.	Yes	Yes
Fenpropimorph	BAS-421			BASF	Morpholine	Controls powdery mildew, rust, Helminthosporium, Rhynchosporium, Septoria, etc.			
Fluazinam	Omega			Syngenta & ISK	Pyridinamine	Broad spectrum disease control: Alternaria, Botrytis, Cladosporium, Colletotrichum, Phytophthora, Plasmopara, Rhizoctonia, Sclerotinia, Venturia, Streptomyces, and some mites.		No	Yes
Fludioxonil	Scholar, Graduate (Post harvest)	Medallion	100-769	Syngenta	Phenylpyrrole	A protectant fungicide for the control of certain diseases such as Botrytis, Cythrodcladium, Fusarium, Rhizoctonia, Myrothecium, Cercospora, Pythium, Phytophthora, Alternaria, Sclerotium, Septoria, and Thielaviopsis.	For use in turfgrass including golf courses, institutional, commercial and residential lawns, sod farms, sports fields, parks, municipal grounds and cemeteries, and on ornamentals grown in interiorscapes, field nursery plantings, (ash, non-bearing cherry, non-bearing peach, crabapple, magnolia, maple and oak) container nurseries, forest nurseries, residential and commercial landscapes, green houses, lath and shade houses, or other enclosed structures. Registrant endorses adding new plants to the label.	Yes	Yes
Fluopicolide (V-10161)	Infinito	V-10161		Valent USA	New chemical class. Acylpicolide	Control of oomycetes including, pythium, phytophthora and downy mildew	Interested in developing for ornamental uses. Efficacy and crop safety needed. Pending EPA registration on turf and ornamentals.	Yes	Yes
Fluoxastrobin	Evito	Disarm		Arysta Lifesciences	Strobilurin	Alternaria, Early Blight and Sclerotinia, Rust, Powdery Mildew, Rhizoctonia, Sclerotium rolfsii, Anthracnose and others.	Registered for use on turf and pome fruit	Yes	No

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Flutolanil	Moncut Vintage	Prostar		Bayer Environmental Sciences Gowan/ Nichino America	Benzamide	Rusts, sheath blight, and other diseases caused by Rhizoctonia,	Registered for use on turf and ornamentals. Registrant endorses adding new plants to the label.	Yes	No
Fosetyl-AL	Aliette	Aliette, Chipco Signature		Bayer Environmental Sciences	Aluminum phosphate	ALIETTE: Controls Phytophthora, Pythium and Alternaria diseases, fire blight and Downy mildew, and bacterial blight suppression. CHIPCO SIGNATURE: Controls Pythium and yellow tuft.	ALIETTE: For use on ornamentals and bedding plants grown in field nurseries, greenhouse, landscaping, and conifer nurseries. CHIPCO SIGNATURE: For use on common turfgrasses on golf courses, sod farms, and other commercial turf areas. Registrant endorses adding new plants to label.	Yes	No
Furfural		Multiguard Protect		Agriguard Company LLC	Contact Fungicide, Aldehyde Chemistry	Active against Pythium, Phytophthora, Fusarium	Classified as a methyl bromide replacement. Furfural is registered for use in South Africa	Yes	No
<i>Gliocladium catenulatum</i> Strain J1446	PreStop	PreStop		Verdera Oy (AgBio, Inc.)	Fungus	Recommended for control of Botrytis, Didymella, Pythium and Rhizoctonia	Biopesticide. Registered on ornamentals. Registrant endorses adding new plants to label.	Yes	No
Glutamic Acid	Auxi Gro			Emerald Bioagriculture	Glutamic acid	Controls brown rot and suppresses shot hole		No	No
Harpin Protein	Messenger	Messenger		Eden BioSciences		Bacterial leaf spot wilt, blight, and fungal diseases such as botrytis, bunch rot, and powdery mildew.	Biopesticide and Methyl Bromide Replacement.	No	No
Hexaconazole	Proseed			Syngenta	Triazole	Controls loose smut and common root rot via seed treatment		No	No
Hydrogen peroxide	Oxidate			Bio Safe Systems	Hydrogen peroxide	Broad spectrum bactericide and fungicide			No
Hymexazol	Tachigaren			Sankyo / Cleary Chemical	Azole	Pythium, Aphanomyces, Fusarium	Interested in developing for ornamental uses. Efficacy and crop safety needed.	Yes	No
Iponazole	Vortex			Chemtura / Gustafson	Triazole	Protects against seed borne and soil borne fungi, which causes seed decay, damping off, and seedling blight.	Pending seed treatment use on conifers and ornamental flowers. Registrant endorses adding new plants to label.	Yes	No
Iprovalicarb	Melody			Bayer Environmental Sciences	Amino-acid amide carbamate	Activity on oomycete fungi, downy mildew, and Phytophthora		No	No
Kresoxim-methyl	Sovran	Cygnus		BASF / Scotts	Strobilurin	Mildews, Septoria, Rusts, Scab, Phomopsis, Black Rot. Provides protectant, curative and eradicant control of powdery mildew.			No
Kasugamycin	Kasumin			Arysta Lifesciences		Controls bacteria	Interested in developing for ornamental use, Need crop safety and efficacy	Yes	

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
Laminarine	Iodus 40			Goemar	Oligosaccharide	It acts as a disease resistance activator on a wide range of pathogens including Septoria spp.	Biopesticide.	No	No
Mandipropamid	NOA 446510	NOA 446510		Syngenta	Carboxylic Acid Amides (CAA) or Mandelic Acid Amides	Activity on oomycete fungi, downy mildew, and Phytophthora	No soil activity	Yes	
Mefenoxam	Ridomil Gold	Subdue Maxx	100-796	Syngenta	Active isomer of metalaxyl	Same spectrum as metalaxyl	Registered on ornamentals. Registrant endorses adding new plants to label.	Yes	Yes
Mepanipyrim	Frupica, Cockpit, Japica			Kumiai, Sipcam, Certis	Anilinopyrimidine	Controls Botrytis, scab (Venturia spp.) and Powdery Mildew. Mostly a preventive material but has curative properties. Unique mode of action/no cross-resistance.		No	No
Metconazole	Caramba, Operetta			BASF, Valent and Kureha	Triazole	Locally systemic control of various leafspots, rhizoctonia, rusts and powdery mildews.	Interested in developing for ornamental uses. Efficacy and crop safety needed. Pending EPA registration on turf and ornamentals.	Yes	No
Metrafenone	Flexity	BAS 560		BASF	Dimethylbenzophenone	Controls powdery and downy mildew.	Plans to develop for food uses.	No	No
MILSANA Bioprotectant	Milsana			KHH Bioscience	Extract from giant knotweed	Induces phytoalexins that confer resistance to powdery mildew and other diseases such as Botrytis.	Biopesticide.	No	No
Mono- and dibasic sodium, potassium, and ammonium phosphites	Phostrol	Magellan		Nufarm Americas	sodium, potassium, and ammonium phosphites	Systemic via root or foliar for control of Phytophthora, Pythium, Downy/Powdery mildew.	Registered on turf and ornamentals. Registrant endorses adding new plants to label.	Yes	No
Muscodor albus	Arabesque, Pirouette, Gilssade			AgraQuest	Biofungicide	Fungus produces volatile compounds that are effective against plant pathogenic and bacteria.	Biopesticide and potential Methyl Bromide Alternative.	No	No
Myclobutanil	Laredo Rally Nova	Eagle, Systhane		Dow AgroSciences	Triazole	A systemic, protectant and curative fungicide for the control of powdery mildews, rusts, anthracnose, red thread, various leaf spots, various blights, brown patch, melting out, crown rot, summer patch, Zoysia large patch, apple scab, brown rot (Monilinia spp.), shothole (Stimina spp.), cherry leaf spot (Coccoomyces spp.) grape black rot (Guignardia spp.)	EAGLE: For use in turfgrass, landscape ornamentals and ornamental tree fruits. Not for use in commercial greenhouses or nurseries. Registrant endorses adding new plants to label. SYSTHANE: For greenhouse or field grown ornamental plants. Registrant endorses adding new plants to label.	Yes	No
Orysastrobilin				BASF	Strobiluron	Mildews, Rusts, and Scab.		No	No

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Oxolinic Acid	Starner			Valent USA	Quinoline	Controls gram-negative bacteria and fireblight	Not registered.	No	No
<i>Pantoea agglomerans</i> C9-1				Nufarm Americas	Bacteria	Fireblight	Biopesticide. Registrant endorses adding new plants to label.	No	No
Peroxyacetic Acid				Ecolab Inc.	Peroxyacetic acid	Post harvest decay and rot			
Phosphonic Acid		Alude		Cleary Chemical Co.	Phosphorus acid	Downy mildew, scab, pythium, phytophthora, and root rot	Registered in turf and ornamentals. Requests ornamental crop safety data.	Yes	No
Physpe	Vacciplant			Agrimar	Glucan from brown alage.	Bacterial diseases	Biopesticide.	No	No
Picoxystrobin	Acanto			Syngenta	Second generation strobilurin	Wide spectrum of diseases	Registered in Europe- Not interested in registering in US	No	No
Piperalin		Pipron		SePRO	Sterol Biosynthesis	Powdery Mildew	Registered in US - greenhouse/impermeable roof only	Yes	No
Polyoxin D		Endorse		Cleary Chemical Co.	Fungal antibiotic derived from Streptomyces.	Broad spectrum control as a translaminar penetrant. New mode of action. Rhizoctonia, Fursarium, Colletotrichum, Dreschlera, Microdochium, Typhula, Pycularia, Laetisaria, Botrytis, Alternaria, Erysiphe.	Reduced Risk Product and EPA Biopesticide classification. Registered in turf.	Yes	Yes
Polyoxin D		Veranda		Arysta Lifesciences	Fungal antibiotic derived from Streptomyces.	Controls leaf spots and powdery mildew	Labelled for use but not marketed need crop safety and efficacy data	Yes	
Potassium Bicarbonate	Kaligreen, Armicarb			Toagosei, Church & Dwight	Inorganic salt	Powdery mildew	Biopesticide.	No	No
Potassium Dihydrogen Phosphate	eKsPunge			Lido Chemical	Potassium dihydrogen phosphate	Powdery mildew			
Potassium Phosphate	Pro-Phyte			Pamol	Potassium Phosphate	Downy mildew, late blight and root rots		No	No
Potassium Phosphite/Phosphate	BioPhos			Foliar Nutients, Inc. / (AgBio, Inc.)	Potassium Phosphite/Phosphate	Systemic via root or foliar for control of Phytophthora, Pythium, Downy/Powdery mildew, Thielaviopsis	Biopesticide. Registered on turf and ornamentals. Registrant endorses adding new plants to label.	Yes	No
Prochloraz + Propiconazole	Bumper P			Makhteshim-Agan	Carboxamide + Triazole	Powdery mildew, Fusarium spp, leaf blotch, Botrytis, Alternaria, and others.		No	No
Propamocarb Hydrochloride	Previcur Flex	Banol		Bayer Environmental Sciences	Carbamate – Systemic root uptake & acropetal distribution throughout the plant.	Pythium and Phytophthora. Should be mixed with other fungicides for resistance management.	For use on turfgrass and certain ornamentals (not for field grown), including woody ornamentals. No plans to develop further for ornamental uses.	No	Yes
Propiconazole	Tilt Orbit	Banner Maxx	100-741	Syngenta	Triazole	A systemic fungicide for the control of various blights, leafspots, powdery mildew, rusts, and smuts.	For use on turfgrasses, ornamentals and other landscape and nursery plantings. Registrant endorses adding new plants to the label.	Yes	No

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Propiconazole	Bumper	Bumper 14.3		Makhteshim-Agan	Triazole	A systemic fungicide for the control of various blights, leafspots, powdery mildew, rusts, and smuts.		Yes	No
Proquinazid	NA	NA		DuPont	Inhibition of the development of the appressorial germ tube	Powdery Mildew			
Prothioconazole	JAU 6476 Proline Provost			Bayer Environmental Sciences	Triazolinthone-Demethylation inhibitor	Effective against Septoria spp, Fusarium spp, Rhynchosporium secalis, and Rhizoctonia. It has protectant, curative and eradicant activity. Can be applied as seed treatment or as foliar spray		No	No
<i>Pseudomonas chloroaphis</i> Strain 63-28	AtEze			EcoSoil Systems	Bacteria	Target pest include soil borne diseases Rhizoctonia solani and Pythium spp. Outcompetes phytopathogenic species.	Biopesticide.	No	No
<i>Pseudomonas fluorescens</i> A506				Nufarm Americas	Bacteria	Fireblight, frost protection, Acetobacter bacteria, Aspergillus niger, and Botrytis cinerea	Biopesticide. Registrant endorses adding new plants to label.	No	No
<i>Pseudomonas fluorescens</i> PRA-25				Good Bugs, Inc.	Bacteria	Controls Pythium seed rot and damping off.	Biopesticide.	No	No
<i>Pseudomonas syringae</i>	BioSave			EcoScience	Bacteria	Controls Fusarium and post harvest storage rots.	Biopesticide.	No	No
<i>Pseudozyma flocculosa</i> Strain PF-A22	Sporodex WP			Plant Products Ltd.	Bacteria	The product antagonizes a number of powdery mildew species	Biopesticide. Registered on greenhouse roses.		No
Pyraclostrobin	Cabrio, Headline	Insignia		BASF	Strobilurin-Mitochondrial electron transport Inhibitor	Broad spectrum activity on Anthracnose, Alternaria, downy mildew, Cercospora leaf spot, rust, powdery mildew, Septoria, Phytophthora, Pythium, and Rhizoctonia.	Registered on golf course turf. Supplemental label submitted for use on ornamentals, conifers, Christmas trees, bulb production, commercial/retail greenhouses/nurseries, commercial and residential turf. Registrant endorses adding new plants to label.	Yes	Yes
Pyrimethanil	Scala, PH-066			Bayer Environmental Sciences	Anilinopyrimidine	Active against Botrytis spp., Venturia spp., Alternaria solani, Alternaria mali, Sphaerotheca macularis and Monilinia spp.		No	Yes
Quinoxifen	Arius, Quintec			Dow AgroSciences	Quinoline-Disrupts early cell signaling activities	Has shown activity against powdery mildew in a wide range of crops.		No	Yes
Silthiophan	Latitude			Monsanto	Carboxamide	Control of Take-All via seed treatment.			
Simeconazole	Sanlit, Mongarit			Sankyo	Triazole	Effective as seed treatment against Basidiomycetes			

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
Spiroxamine	KWG 4168			Bayer Environmental Sciences	Morpholine	Powdery mildew, most rusts, Rhynchosporium leaf blotch. Chemical shows protective, curative and eradivative effects.			
<i>Streptomyces griesoviridis</i>	Mycostop			Verdera Oy /AgBio Inc.	Bacteria.	Damping off/root rots caused by Fusarium, Pythium, Alternaria and other pathogens.	Biopesticide. WP standard formulation for hydroponic and pot crops. New registration of Mycostop Mix for greenhouse/field/seed treatment applications.		No
<i>Streptomyces lydicus</i> WYEC 108	Actino-Iron	Actino-Iron		Natural Industries	Bacteria.	Control of soil borne plant root and damping off fungi	Biopesticide.	No	No
SYP-L190				Shenyang Research	Cinnamic acid derivative (analog of Dimethomorph)	Effective against oomycete fungi, including downy mildew.			
T-22		Rootshield G Plantshield HC		Bioworks					
Tebuconazole	Folicur Elite Raxil	Lynx		Bayer Environmental Sciences	Triazole	Powdery mildew, rusts, smuts, bunts, apple scab, Pyrenophora, Septoria, Coccoomyces, Monilinia, Cercospora, Cercosporidium, Ceratocystis, Guignardia, Sclerotium Rhizoctonia Coccoomyces, Rhynchosporium, Colletotrichum, and Botrytis			
Tetraconazole	Eminent Mettle Domark			Isagro Sipcam Valent	Triazole	Powdery mildew, rusts, smuts, bunts, apple scab, Pyrenophora, Septoria, Coccoomyces, Monilinia, Cercospora, Cercosporidium, Ceratocystis, Guignardia, Sclerotium Rhizoctonia Coccoomyces, Rhynchosporium, Colletotrichum, and Botrytis	Registered on soybean	Yes	No
Thifluzamide	RH - 0753			Dow AgroScience	Thiazole-carbomanilide - Inhibits succinic acid metabolism in fungi.	Sclerotina and Rhizoctonia.			
Thiophanate-methyl	Topsin-M	3336 Fungo		UPI /Cleary Chemical /Scotts	Benzimidazole	Broad spectrum fungicide which controls a wide variety of foliar stem and root diseases	Registered on turf and unspecified annual and perennial flowers, bedding plants, foliage plants, ground covers, deciduous and evergreen trees and shrubs except except Swish ivy, Boston fern and Easter cactus.		No
<i>Trichoderma harzianum</i> and viride	Remedier			Isagro, USA	Fungi	Controls Botrytis foliar. Controls Fusarium, Pythium, Rhizoctonia with soil applications.	Biopesticide. Interested in developing for ornamental uses.	Yes	Yes

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
<i>Trichoderma harzianum</i> T-39	Trichodex			Makhteshim-Agan	Fungi	Controls Botrytis foliar. Controls Fusarium, Pythium, Rhizoctonia with soil applications.	Biopesticide. Registration has been dropped	No	No
Trifloxystrobin	Flint	Compass Compass-O		Bayer Environmental Sciences, OHP	Strobilurin	Broad spectrum fungicide with protective and curative activity against Rhizoctonia, anthracnose, Corticium, Limonomyces, leaf spots, rust, pink snowmold, Fusarium, summer patch	For use on turfgrass including golf courses, institutional, commercial and residential lawns, sod farms, sports fields, parks, municipal grounds and cemeteries, and of ornamentals grown in interiorscapes, forest nurseries and residential and commercial landscapes. Interested in developing for ornamental uses. Need crop safety data.	Yes	Yes
Triflumizole	Terraguard			Chemtura	Imidazole	Powdery mildew, rusts, apple scab, Rhizoctonia, Cyindrocladium, Thielaviopsis, Myrothecium, Alternaria, Helminthosporium and related genera.	Interested in developing for ornamental uses.	Yes	No
Triticonazole	Charter	Triton		BASF Bayer Environmental Sciences	Triazole	Used as a seed treatment	Interested in developing for ornamental uses. Need crop safety data.	Yes	No
Zoxamide	Zoxium			Dow AgroScience	Amide (Inhibits mitosis by binding to fungal tubulin proteins)	Control of foliar phycamycetes and albugo. Also protectant against Oomycete fungi. Will be mixed with mancozeb for broader activity.		No	No

New Products / Solutions List - Nematodes

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Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
1,3-dichloropropene + chloropicrin	Telone	(Inline Formulation)		Dow AgroSciences	Fumigant nematocide, chlorinated hydrocarbon	Many soil insects, nematodes and plant diseases	Partial Methyl Bromide Alternative.	No	No
alkyl(poly)glycosides	Terrapy			Cognis Deutschland	Fatty acid preparation in alkyl(poly)glycoside.	Shown to significantly reduce Meloidogyne infestations	Biopesticide.	No	No
<i>Bacillus firmus</i>	Bionem, Biosafe			Minrav Infrastructurer	Bacterial nematocide.	Controls root knot and other nematodes including <i>Heterodera avenae</i>		No	No
Benclorhiaz	CGA 235860			Syngenta	Benzisothiazole.	Controls several key soil nematodes.		No	No
Dazomet	Basamid			BASF	Thiadiazine (carbon disulfide generator)	Similar to metam sodium	Partial Methyl Bromide Alternative.	No	No
DMDP				BTG	Derived from Lonchocarpus felipei	DMDP is phloem mobile, making it suitable for foliar applications	Biopesticide.	No	No
Duramycin C				AgraQuest	Actinomycetes	Controls various nematode spp.	Biopesticide.	No	No
Fosthiazate	Nemathorin			Syngenta & ISK	Lower risk Organophosphate	Controls various nematode spp.	Partial Methyl Bromide Alternative.	No	No
Furfural		Multiguard Protect		Agriguard Company LLC	Contact Nematocide, Aldehyde Chemistry	Active against root knot, ring, spiral, and sting nematodes	Classified as a methyl bromide replacement. Furfural is registered for use in South Africa	Yes	No
<i>Heterohabditis megidis</i>	Nemasys H			Emerald BioAgriculture	Biopesticide	Controls various nematode spp.	Biopesticide.	No	No
Iodomethane	Midas			Arysta Life Sciences	Methyl Iodide	Similar to Methyl Bromide	Potential Methyl Bromide Alternative.	No	No
<i>Myrothecium verrucaria</i> strain AARC-0255	Ditera			Valent USA	Biopesticide	Controls root knot, cyst, lesion, citrus, stubby root, pin, reniform, dagger, sting, ring, stunt, lance, spiral, burrowing and other plant parasitic nematodes.	Partial Methyl Bromide Alternative.	No	No
Oxamyl	Vydate	SP3011/ SP3012		DuPont	Acetylcholine esterase inhibitor	Nematode activity: root knot, sting, lesion, burrowing, and stunt nematodes	Investigate as a drench or soil incorporation.		
<i>Paecilomyces lilacinus</i>	Bio Act			Prophyta & Gustafson	Bio-nematocide	Controls root knot and cyst nematodes	Biopesticide.	No	No
Propylene oxide	Propoxide			Aberco	Propylene oxide	Fumigant for stored nuts and spices. Potential for soil uses	Potential Methyl Bromide Alternative.	No	No
Sodium Azide				American Pacific	Sodium Azide	Many pests that are currently controlled by methyl bromide	Potential Methyl Bromide Alternative.	No	No
Sodium Tetrathiocarbonate	Enzone			DuPont Corporation & Helena	Sodium Tetrathiocarbonate (carbon disulfide generator)	Water-soluble soil fumigant for management of, plant parasitic nematodes, various soil borne pathogens and other soil pests.	Potential Methyl Bromide Alternative.	No	No
<i>Steinernema carpocapsae</i>	Nematac C			Emerald BioAgriculture	Biopesticide	Controls various nematode spp.	Biopesticide.	No	No
<i>Steinernema feltiae</i>	Nemasys			Emerald BioAgriculture	Biopesticide	Controls various nematode spp.	Biopesticide.	No	No

Section 6

2007 High Priority Projects – Weed Science

The following pages contain details on the high priority projects for weed science, 2007 Sedge Materials Crop Safety, as well as some research on a couple non-high priority projects. The Ornamental Horticulture Research Database was queried to pull all studies and all pending or completed trials related to the 2007 high priority projects. In some cases, studies will not have any researchers listed; this happens where trials were cancelled or where studies were discussed for that project and researchers did not choose to research them. The database was also queried to pull any pending trials for 2007 in non-high priority projects but only to print project information relevant to those trials. For example, research was conducted on sulfentrazone crop safety, but only information for the relevant studies appear – not all the studies related to the Broadleaf Weeds and Sedge Management Crop Safety project.

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26320 B	Phytotoxicity <i>Phytotoxicity</i>	Fir, Fraser <i>Abies fraseri</i>	BAS 656h EC (dimeth <i>Dimethenamid-p</i>	Field Container	2007	CT	Ahrens/Mervosh			P	
					2007	MI	Marshall			P	
					2007	NJ	Freiberger			P	
					2007	WA	Boydston			P	
26537 B	Phytotoxicity <i>Phytotoxicity</i>	Fir, Fraser <i>Abies fraseri</i>	BAS 656h EC (dimeth <i>Dimethenamid-p</i>	Field In-Ground	2007	MD	Beste/Frank			P	
26321 B	Phytotoxicity <i>Phytotoxicity</i>	Fir, Fraser <i>Abies fraseri</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container	2007	CT	Ahrens/Mervosh			P	
					2007	MI	Marshall			P	
					2007	NJ	Freiberger			P	
					2007	WA	Boydston			P	
26538 B	Phytotoxicity <i>Phytotoxicity</i>	Fir, Fraser <i>Abies fraseri</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field In-Ground	2007	MD	Beste/Frank			P	
26322 B	Phytotoxicity <i>Phytotoxicity</i>	Fir, Fraser <i>Abies fraseri</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container	2007	CA	Lieth			P	
					2007	CT	Ahrens/Mervosh			P	
					2007	MI	Marshall			P	
					2007	NJ	Freiberger			P	
					2007	WA	Boydston			P	
26539 B	Phytotoxicity <i>Phytotoxicity</i>	Fir, Fraser <i>Abies fraseri</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field In-Ground	2007	MD	Beste/Frank			P	
26323 C	Phytotoxicity <i>Phytotoxicity</i>	Fir, Fraser <i>Abies fraseri</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container	2007	CT	Ahrens/Mervosh			P	
					2007	MI	Marshall			P	
					2007	NJ	Freiberger			P	
26540 C	Phytotoxicity <i>Phytotoxicity</i>	Fir, Fraser <i>Abies fraseri</i>	Mesotrione 4SC <i>Mesotrione</i>	Field In-Ground	2007	MD	Beste/Frank			P	
26194 B	Phytotoxicity <i>Phytotoxicity</i>	Maple, Red <i>Acer rubrum</i>	BAS 656h EC (dimeth <i>Dimethenamid-p</i>	Field Container	2007	NJ	Freiberger			P	
					2007	NY	Senesac			O	
26541 B	Phytotoxicity <i>Phytotoxicity</i>	Maple, Red <i>Acer rubrum</i>	BAS 656h EC (dimeth <i>Dimethenamid-p</i>	Field In-Ground	2007	MD	Beste/Frank			P	
26195 B	Phytotoxicity <i>Phytotoxicity</i>	Maple, Red <i>Acer rubrum</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container	2007	NJ	Freiberger			P	
26542 B	Phytotoxicity <i>Phytotoxicity</i>	Maple, Red <i>Acer rubrum</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field In-Ground	2007	MD	Beste/Frank			P	

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26196 B	Phytotoxicity	Maple, Red	F6875 0.3G	Field Container	2007	AL	Gilliam			?	
	<i>Phytotoxicity</i>	<i>Acer rubrum</i>	<i>Sulfentrazone</i> +		2007	NJ	Freiberger			P	
26543 B	Phytotoxicity	Maple, Red	F6875 0.3G	Field In-Ground	2007	MD	Beste/Frank			P	
	<i>Phytotoxicity</i>	<i>Acer rubrum</i>	<i>Sulfentrazone</i> +								
26197 C	Phytotoxicity	Maple, Red	Mesotrione 4SC	Field Container	2007	IL	Williams			P	
	<i>Phytotoxicity</i>	<i>Acer rubrum</i>	<i>Mesotrione</i>		2007	NJ	Freiberger			P	
26272 B	Phytotoxicity <i>Phytotoxicity</i>	Hyssop species <i>Agastache sp.</i>	BAS 659H G (dimeth <i>Dimethenamid-p</i> + <i>pendimethalin</i>)	Field Container							
26273 B	Phytotoxicity <i>Phytotoxicity</i>	Hyssop species <i>Agastache sp.</i>	F6875 0.3G <i>Sulfentrazone</i> +	Field Container							
26274 C	Phytotoxicity <i>Phytotoxicity</i>	Hyssop species <i>Agastache sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container							
26283 B	Phytotoxicity	Barberry	BAS 656h EC (dimeth	Field Container	2007	MD	Beste/Frank			P	
	<i>Phytotoxicity</i>	<i>Berberis sp.</i>	<i>Dimethenamid-p</i>		2007	WA	Harvey	Over the top		C	8/22/2007
								<i>Trial Results: No injury at 0.97, 1.94 and 3.88 lb ai per acre</i>			
26284 B	Phytotoxicity <i>Phytotoxicity</i>	Barberry <i>Berberis sp.</i>	BAS 659H G (dimeth <i>Dimethenamid-p</i> + <i>pendimethalin</i>)	Field Container	2007	MD	Beste/Frank			P	
26285 B	Phytotoxicity <i>Phytotoxicity</i>	Barberry <i>Berberis sp.</i>	F6875 0.3G <i>Sulfentrazone</i> +	Field Container	2007	MD	Beste/Frank			P	
26286 B	Phytotoxicity <i>Phytotoxicity</i>	Barberry <i>Berberis sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container	2007	MD	Beste/Frank			P	
26335 B	Phytotoxicity	Butterfly Bush	BAS 656h EC (dimeth	Field Container	2007	GA	Fraelich			P	
	<i>Phytotoxicity</i>	<i>Buddleia davidii</i>	<i>Dimethenamid-p</i>		2007	MI	Marshall			P	
					2007	SC	Fenn			P	
26336 B	Phytotoxicity	Butterfly Bush	BAS 659H G (dimeth	Field Container	2007	GA	Fraelich			P	
	<i>Phytotoxicity</i>	<i>Buddleia davidii</i>	<i>Dimethenamid-p</i> + <i>pendimethalin</i>		2007	MI	Marshall			P	
					2007	OH	Reding			P	
					2007	SC	Fenn			P	
26337 B	Phytotoxicity	Butterfly Bush	F6875 0.3G	Field Container	2007	GA	Fraelich			P	
	<i>Phytotoxicity</i>	<i>Buddleia davidii</i>	<i>Sulfentrazone</i> +		2007	MI	Marshall			P	
					2007	OH	Reding			P	
					2007	SC	Fenn			P	

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26338 C	Phytotoxicity	Butterfly Bush	Mesotrione 4SC	Field Container	2007	IL	Williams			P	
	<i>Phytotoxicity</i>	<i>Buddleia davidii</i>	<i>Mesotrione</i>		2007	MI	Marshall			P	
26305 A	Phytotoxicity	Boxwood	BAS 656h EC (dimeth	Field Container	2007	CO	Klett			P	
	<i>Phytotoxicity</i>	<i>Buxus sp.</i>	<i>Dimethenamid-p</i>		2007	MI	Marshall			P	
					2007	NC	Neal			P	
26367 A	Phytotoxicity	Boxwood	BAS 659H G (dimeth	Field Container	2007	CO	Klett			P	
	<i>Phytotoxicity</i>	<i>Buxus sp.</i>	<i>Dimethenamid-p + pendimethalin</i>		2007	MI	Marshall			P	
					2007	NC	Neal			P	
26306 A	Phytotoxicity	Boxwood	F6875 0.3G	Field Container	2007	CO	Klett			P	
	<i>Phytotoxicity</i>	<i>Buxus sp.</i>	<i>Sulfentrazone +</i>		2007	MI	Marshall			P	
					2007	NC	Neal			P	
					2007	OH	Mathers			P	
26307 B	Phytotoxicity	Boxwood	Mesotrione 4SC	Field Container	2007	MD	Beste/Frank			P	
	<i>Phytotoxicity</i>	<i>Buxus sp.</i>	<i>Mesotrione</i>		2007	MI	Marshall			P	
					2007	OH	Mathers			P	
26205 A	Phytotoxicity	Feather Reed Grass	BAS 659H G (dimeth	Field Container	2007	CO	Klett			P	
	<i>Phytotoxicity</i>	<i>Calamagrostis acutiflora</i>	<i>Dimethenamid-p + pendimethalin</i>		2007	MS	Trader			P	
					2007	WA	Boydston			P	
					2007	WA	Harvey	Over the top		C	8/22/2007
<i>Trial Results: No injury after the first, high injury (stunting and chlorosis) after the second application at 2.65, 5.3 and 10.6 lb ai per acre</i>											
26206 A	Phytotoxicity	Feather Reed Grass	F6875 0.3G	Field Container	2007	CO	Klett			P	
	<i>Phytotoxicity</i>	<i>Calamagrostis acutiflora</i>	<i>Sulfentrazone +</i>		2007	MS	Trader			P	
					2007	WA	Boydston			P	
					2007	WA	Harvey	Over the top		C	8/22/2007
<i>Trial Results: Very slight injury only at 4X rate (1.5 lb ai per acre)</i>											
26207 B	Phytotoxicity	Feather Reed Grass	Mesotrione 4SC	Field Container	2007	WA	Boydston			P	
	<i>Phytotoxicity</i>	<i>Calamagrostis acutiflora</i>	<i>Mesotrione</i>								
26430 C	Phytotoxicity	Canna	BAS 659H G (dimeth	Field Container							
	<i>Phytotoxicity</i>	<i>Canna sp.</i>	<i>Dimethenamid-p + pendimethalin</i>								
26431 C	Phytotoxicity	Canna	F6875 0.3G	Field Container							
	<i>Phytotoxicity</i>	<i>Canna sp.</i>	<i>Sulfentrazone +</i>								
26432 C	Phytotoxicity	Canna	Mesotrione 4SC	Field Container							
	<i>Phytotoxicity</i>	<i>Canna sp.</i>	<i>Mesotrione</i>								

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Key: Priorities A, B, and C are researchable; N is not researchable - these may be completed studies or those with Standards. Trial Status: P = Planned, O = Ongoing, C = Complete, X = Cancelled, ? = Unknown

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26234 B	Phytotoxicity <i>Phytotoxicity</i>	Redroot <i>Ceanothus sp.</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container							
26235 B	Phytotoxicity <i>Phytotoxicity</i>	Redroot <i>Ceanothus sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container							
26236 C	Phytotoxicity <i>Phytotoxicity</i>	Redroot <i>Ceanothus sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container							
26316 B	Phytotoxicity <i>Phytotoxicity</i>	Yellowwood <i>Cladrastis sp.</i>	BAS 656h EC (dimeth <i>Dimethenamid-p</i>	Field Container	2007	NJ	Freiberger			P	
26317 B	Phytotoxicity <i>Phytotoxicity</i>	Yellowwood <i>Cladrastis sp.</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container	2007	NJ	Freiberger			P	
26318 B	Phytotoxicity <i>Phytotoxicity</i>	Yellowwood <i>Cladrastis sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container	2007	NJ	Freiberger			P	
26319 C	Phytotoxicity <i>Phytotoxicity</i>	Yellowwood <i>Cladrastis sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container	2007	NJ	Freiberger			P	
26219 B	Phytotoxicity <i>Phytotoxicity</i>	Tickseed <i>Coreopsis sp.</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container	2007	WA	Boydston			P	
26220 B	Phytotoxicity <i>Phytotoxicity</i>	Tickseed <i>Coreopsis sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container	2007	WA	Boydston			P	
26221 C	Phytotoxicity <i>Phytotoxicity</i>	Tickseed <i>Coreopsis sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container							
26247 B	Phytotoxicity <i>Phytotoxicity</i>	Hardy Mum <i>Dendranthema x morifoliu</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container							
26248 B	Phytotoxicity <i>Phytotoxicity</i>	Hardy Mum <i>Dendranthema x morifoliu</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container	2007	AL	Gilliam			?	
					2007	GA	Czarnota			P	
					2007	VA	Derr			P	
26249 C	Phytotoxicity <i>Phytotoxicity</i>	Hardy Mum <i>Dendranthema x morifoliu</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container							
26241 B	Phytotoxicity <i>Phytotoxicity</i>	Pinks <i>Dianthus sp.</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container	2007	OH	Mathers			P	
					2007	OH	Reding			P	
					2007	WA	Boydston			P	

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26242 B	Phytotoxicity <i>Phytotoxicity</i>	Pinks <i>Dianthus sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container	2007	OH	Mathers			P	
					2007	OH	Reding			P	
					2007	WA	Boydston			P	
26243 C	Phytotoxicity <i>Phytotoxicity</i>	Pinks <i>Dianthus sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container	2007	IL	Williams			P	
					2007	NY	Senesac		D. deltoides 'Brilliant'	O	
					2007	WA	Boydston			P	
26355 A	Phytotoxicity <i>Phytotoxicity</i>	Purple Coneflower <i>Echinacea sp.</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container	2007	CO	Klett			P	
					2007	MS	Trader			P	
					2007	OH	Reding			P	
					2007	SC	Fenn			P	
26356 A	Phytotoxicity <i>Phytotoxicity</i>	Purple Coneflower <i>Echinacea sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container	2007	CO	Klett			P	
					2007	OH	Mathers			P	
					2007	OH	Reding			P	
					2007	SC	Fenn			P	
					2007	VA	Derr			P	
26357 B	Phytotoxicity <i>Phytotoxicity</i>	Purple Coneflower <i>Echinacea sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container	2007	GA	Fraelich			P	
					2007	OH	Mathers			P	
					2007	SC	Fenn			P	
					2007	WA	Boydston			P	
26439 C	Phytotoxicity <i>Phytotoxicity</i>	Thoroughwort <i>Eupatorium sp.</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container							
26440 C	Phytotoxicity <i>Phytotoxicity</i>	Thoroughwort <i>Eupatorium sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container							
26441 C	Phytotoxicity <i>Phytotoxicity</i>	Thoroughwort <i>Eupatorium sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container							
26208 A	Phytotoxicity <i>Phytotoxicity</i>	Blue Fescue <i>Festuca ovina glauca</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container	2007	CO	Klett			P	
					2007	MS	Trader			P	
					2007	OH	Mathers			P	
					2007	WA	Boydston			P	
26209 A	Phytotoxicity <i>Phytotoxicity</i>	Blue Fescue <i>Festuca ovina glauca</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container	2007	CO	Klett			P	
					2007	MS	Trader			P	
					2007	OH	Mathers			P	
					2007	WA	Boydston			P	

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26210	B Phytotoxicity <i>Phytotoxicity</i>	Blue Fescue <i>Festuca ovina glauca</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container	2007	CO	Klett			P	
					2007	WA	Boydston			P	
26258	B Phytotoxicity <i>Phytotoxicity</i>	Ash <i>Fraxinus sp.</i>	BAS 656h EC (dimeth <i>Dimethenamid-p</i>	Field In-Ground	2007	MD	Beste/Frank			P	
26259	B Phytotoxicity <i>Phytotoxicity</i>	Ash <i>Fraxinus sp.</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field In-Ground	2007	MD	Beste/Frank			P	
26260	B Phytotoxicity <i>Phytotoxicity</i>	Ash <i>Fraxinus sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field In-Ground	2007	MD	Beste/Frank			P	
26261	C Phytotoxicity <i>Phytotoxicity</i>	Ash <i>Fraxinus sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container							
26442	C Phytotoxicity <i>Phytotoxicity</i>	Blanket Flower <i>Gaillardia sp.</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container							
26443	C Phytotoxicity <i>Phytotoxicity</i>	Blanket Flower <i>Gaillardia sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container							
26444	C Phytotoxicity <i>Phytotoxicity</i>	Blanket Flower <i>Gaillardia sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container							
26244	B Phytotoxicity <i>Phytotoxicity</i>	Gaura <i>Gaura lindheimeri</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container	2007	WA	Boydston			P	
26245	B Phytotoxicity <i>Phytotoxicity</i>	Gaura <i>Gaura lindheimeri</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container	2007	SC	Whitwell			P	
					2007	WA	Boydston			P	
26246	C Phytotoxicity <i>Phytotoxicity</i>	Gaura <i>Gaura lindheimeri</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container							
26230	B Phytotoxicity <i>Phytotoxicity</i>	Honey Locust <i>Gleditsia sp.</i>	BAS 656h EC (dimeth <i>Dimethenamid-p</i>	Field In-Ground	2007	MD	Beste/Frank			P	
26231	B Phytotoxicity <i>Phytotoxicity</i>	Honey Locust <i>Gleditsia sp.</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field In-Ground	2007	MD	Beste/Frank			P	
26232	B Phytotoxicity <i>Phytotoxicity</i>	Honey Locust <i>Gleditsia sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field In-Ground	2007	MD	Beste/Frank			P	
26233	C Phytotoxicity <i>Phytotoxicity</i>	Honey Locust <i>Gleditsia sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container							
26446	C Phytotoxicity <i>Phytotoxicity</i>	Sunflower <i>Helianthus sp.</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container							

Key: Priorities A, B, and C are researchable; N is not researchable - these may be completed studies or those with Standards. Trial Status: P = Planned, O = Ongoing, C = Complete, X = Cancelled, ? = Unknown

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26445	C Phytotoxicity <i>Phytotoxicity</i>	Sunflower <i>Helianthus sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container								
26447	C Phytotoxicity <i>Phytotoxicity</i>	Sunflower <i>Helianthus sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container								
26343	A Phytotoxicity <i>Phytotoxicity</i>	Daylily <i>Hemerocallis sp.</i>	BAS 659H G (dimeth) <i>Dimethenamid-p + pendimethalin</i>	Field Container	2007	CA	Lieth			P		
					2007	OH	Reding			P		
					2007	SC	Fenn			P		
					2007	SC	Whitwell			P		
26344	A Phytotoxicity <i>Phytotoxicity</i>	Daylily <i>Hemerocallis sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container	2007	CA	Lieth			P		
					2007	OH	Reding			P		
					2007	SC	Fenn			P		
					2007	SC	Whitwell			P		
26345	B Phytotoxicity <i>Phytotoxicity</i>	Daylily <i>Hemerocallis sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container	2007	CA	Lieth			P		
					2007	GA	Fraelich			P		
					2007	SC	Fenn			P		
26298	B Phytotoxicity <i>Phytotoxicity</i>	Mallow, Rose Mallow <i>Hibiscus sp.</i>	BAS 656h EC (dimeth) <i>Dimethenamid-p</i>	Field Container								
26299	B Phytotoxicity <i>Phytotoxicity</i>	Mallow, Rose Mallow <i>Hibiscus sp.</i>	BAS 659H G (dimeth) <i>Dimethenamid-p + pendimethalin</i>	Field Container								
26300	B Phytotoxicity <i>Phytotoxicity</i>	Mallow, Rose Mallow <i>Hibiscus sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container								
26301	C Phytotoxicity <i>Phytotoxicity</i>	Mallow, Rose Mallow <i>Hibiscus sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container								
26262	A Phytotoxicity <i>Phytotoxicity</i>	Hosta <i>Hosta sp.</i>	BAS 659H G (dimeth) <i>Dimethenamid-p + pendimethalin</i>	Field Container	2007	AL	Gilliam			P		
					2007	GA	Fraelich			P		
					2007	OH	Mathers			P		
					2007	OH	Reding			P		
					2007	OR	Regan		H. sieboldiana	P		
					2007	WA	Harvey	Over the top		C	8/22/2007	
					<i>Trial Results: No injury after the first application at 2.65, 5.3 and 10.6 lb ai per acre, slight injury at 2X and 4X rates after the second application</i>							

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26263 A	Phytotoxicity <i>Phytotoxicity</i>	Hosta <i>Hosta sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container	2007	AL	Gilliam			P	
					2007	GA	Fraelich		P		
					2007	OH	Mathers		P		
					2007	OH	Reding		P		
					2007	OR	Regan		P		
					2007	WA	Harvey	Over the top	C	8/22/2007	
					<i>Trial Results: No injury after the first application at 0.375, 0.75 and 1.5 lb ai per acre, slight injury (chlorosis) at 4X rate after the second application</i>						
26264 B	Phytotoxicity <i>Phytotoxicity</i>	Hosta <i>Hosta sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container	2007	GA	Fraelich			P	
					2007	OH	Mathers		P		
					2007	SC	Fenn		P		
26250 A	Phytotoxicity <i>Phytotoxicity</i>	Hydrangea <i>Hydrangea sp.</i>	BAS 656h EC (dimeth <i>Dimethenamid-p</i>	Field Container	2007	CA	Lieth			P	
					2007	GA	Czarnota		P		
					2007	GA	Fraelich		P		
					2007	MD	Beste/Frank		P		
					2007	NY	Senesac		O		
					2007	OH	Mathers		P		
					2007	SC	Fenn		P		
26251 A	Phytotoxicity <i>Phytotoxicity</i>	Hydrangea <i>Hydrangea sp.</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container	2007	CA	Lieth			P	
					2007	GA	Czarnota		P		
					2007	GA	Fraelich		P		
					2007	MD	Beste/Frank		P		
					2007	OH	Mathers		P		
					2007	OH	Reding		P		
					2007	SC	Fenn		P		
26252 A	Phytotoxicity <i>Phytotoxicity</i>	Hydrangea <i>Hydrangea sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container	2007	CA	Lieth			P	
					2007	GA	Czarnota		P		
					2007	GA	Fraelich		P		
					2007	MD	Beste/Frank		P		
					2007	OH	Mathers		P		
					2007	OH	Reding		P		
					2007	SC	Fenn		P		

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26253 B	Phytotoxicity	Hydrangea	Mesotrione 4SC	Field Container	2007	GA	Fraelich			P	
	Phytotoxicity	Hydrangea sp.	Mesotrione		2007	IL	Williams			P	
					2007	MD	Beste/Frank			P	
					2007	NY	Senesac		H. quercifolia 'Alice'	O	
					2007	OH	Mathers			P	
					2007	SC	Fenn			P	
26331 B	Phytotoxicity	Holly	BAS 656h EC (dimeth	Field Container	2007	GA	Fraelich			P	
	Phytotoxicity	Ilex sp.	Dimethenamid-p		2007	NY	Senesac		I. verticillata 'Winter Gold'	O	
					2007	SC	Fenn			P	
26332 B	Phytotoxicity	Holly	BAS 659H G (dimeth	Field Container	2007	GA	Fraelich			P	
	Phytotoxicity	Ilex sp.	Dimethenamid-p + pendimethalin		2007	OH	Reding			P	
					2007	SC	Fenn			P	
26333 B	Phytotoxicity	Holly	F6875 0.3G	Field Container	2007	GA	Czarnota			P	
	Phytotoxicity	Ilex sp.	Sulfentrazone +		2007	GA	Fraelich			P	
					2007	OH	Reding			P	
					2007	SC	Whitwell			P	
26334 C	Phytotoxicity	Holly	Mesotrione 4SC	Field Container	2007	GA	Fraelich			P	
	Phytotoxicity	Ilex sp.	Mesotrione		2007	NY	Senesac		I. verticillata 'Winter Gold'	O	
26349 A	Phytotoxicity	Flag	BAS 659H G (dimeth	Field Container	2007	AL	Gilliam			P	
	Phytotoxicity	Iris sp.	Dimethenamid-p + pendimethalin		2007	CA	Lieth			P	
					2007	OH	Mathers			P	
					2007	WA	Harvey	Over the top		C	8/22/2007
					Trial Results: No injury after the first, slight injury at 2.65 and moderate injury at 5.3 and 10.6 lb ai per acre after the second application						
26350 A	Phytotoxicity	Flag	F6875 0.3G	Field Container	2007	AL	Gilliam			P	
	Phytotoxicity	Iris sp.	Sulfentrazone +		2007	CA	Lieth			P	
					2007	OH	Mathers			P	
					2007	OH	Reding			P	
					2007	WA	Harvey	Over the top		C	8/22/2007
				Trial Results: No injury after the first application at 0.375, 0.75 and 1.5 lb ai per acre, medium and high injury (stunting) at 2X and 4X after the second application							
26351 B	Phytotoxicity	Flag	Mesotrione 4SC	Field Container	2007	MD	Beste/Frank			P	
	Phytotoxicity	Iris sp.	Mesotrione								

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26268 A	Phytotoxicity <i>Phytotoxicity</i>	Juniper <i>Juniperus sp.</i>	BAS 656h EC (dimeth <i>Dimethenamid-p</i>	Field Container	2007	CT	Ahrens/Mervosh		'Blue Star'	P	
					2007	MD	Beste/Frank			P	
					2007	NC	Neal			P	
					2007	NY	Senesac		J. communis 'Gold Totem Pole'	O	
					2007	OH	Mathers			P	
					2007	OR	Regan		J. horizontalis 'Youngstown'	P	
					2007	WA	Harvey	Over the top		C	8/22/2007
<i>Trial Results: No injury at 0.97, 1.94 and 3.88 lb ai per acre</i>											
26269 A	Phytotoxicity <i>Phytotoxicity</i>	Juniper <i>Juniperus sp.</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container	2007	CT	Ahrens/Mervosh		'Blue Star'	P	
					2007	MD	Beste/Frank			P	
					2007	NC	Neal			P	
					2007	OH	Mathers			P	
					2007	OR	Regan		J. horizontalis 'Youngstown'	P	
					2007	WA	Harvey	Over the top		C	8/22/2007
					<i>Trial Results: No injury at 2.65, 5.3 and 10.6 lb ai per acre</i>						
26270 A	Phytotoxicity <i>Phytotoxicity</i>	Juniper <i>Juniperus sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container	2007	CT	Ahrens/Mervosh		'Blue Star'	P	
					2007	MD	Beste/Frank			P	
					2007	NC	Neal			P	
					2007	OH	Mathers			P	
					2007	OR	Regan		J. horizontalis 'Youngstown'	P	
					2007	WA	Harvey	Over the top		C	8/22/2007
					<i>Trial Results: No injury at 0.375, 0.75 and 1.5 lb ai per acre</i>						
26271 B	Phytotoxicity <i>Phytotoxicity</i>	Juniper <i>Juniperus sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container	2007	GA	Fraelich			P	
					2007	NY	Senesac		J. communis 'Gold Totem Pole'	O	
					2007	OH	Mathers			P	
26339 B	Phytotoxicity <i>Phytotoxicity</i>	Crape Myrtle <i>Lagerstroemia indica</i>	BAS 656h EC (dimeth <i>Dimethenamid-p</i>	Field Container	2007	GA	Fraelich			P	
					2007	MD	Beste/Frank			P	
					2007	SC	Fenn			P	
26340 B	Phytotoxicity <i>Phytotoxicity</i>	Crape Myrtle <i>Lagerstroemia indica</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container	2007	GA	Fraelich			P	
					2007	MD	Beste/Frank			P	
					2007	SC	Fenn			P	

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26341 B	Phytotoxicity <i>Phytotoxicity</i>	Crape Myrtle <i>Lagerstroemia indica</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container	2007	GA	Fraelich			P	
					2007	MD	Beste/Frank			P	
					2007	MS	Trader			P	
					2007	SC	Fenn			P	
					2007	SC	Whitwell			P	
26342 C	Phytotoxicity <i>Phytotoxicity</i>	Crape Myrtle <i>Lagerstroemia indica</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container							
26352 A	Phytotoxicity <i>Phytotoxicity</i>	Shrub Verbena <i>Lantana sp.</i>	BAS 659H G (dimeth) <i>Dimethenamid-p + pendimethalin</i>	Field Container	2007	CO	Klett			P	
					2007	GA	Czarnota			P	
					2007	WA	Harvey	Over the top		C	8/22/2007
					<i>Trial Results: No injury at 2.65, 5.3 and 10.6 lb ai per acre</i>						
26353 A	Phytotoxicity <i>Phytotoxicity</i>	Shrub Verbena <i>Lantana sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container	2007	CO	Klett			P	
					2007	GA	Czarnota			P	
					2007	WA	Harvey	Over the top		C	8/22/2007
					<i>Trial Results: No injury after the first application at 0.375, 0.75 and 1.5 lb ai per acre, significant injury at 4X rate after the second application</i>						
26354 B	Phytotoxicity <i>Phytotoxicity</i>	Shrub Verbena <i>Lantana sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container							
26448 C	Phytotoxicity <i>Phytotoxicity</i>	Blazing-Star, Gayfeather <i>Liatris sp.</i>	BAS 659H G (dimeth) <i>Dimethenamid-p + pendimethalin</i>	Field Container							
26449 C	Phytotoxicity <i>Phytotoxicity</i>	Blazing-Star, Gayfeather <i>Liatris sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container							
26450 C	Phytotoxicity <i>Phytotoxicity</i>	Blazing-Star, Gayfeather <i>Liatris sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container							
26433 C	Phytotoxicity <i>Phytotoxicity</i>	Lilyturf, Creeping <i>Liriope sp.</i>	BAS 659H G (dimeth) <i>Dimethenamid-p + pendimethalin</i>	Field Container							
26434 C	Phytotoxicity <i>Phytotoxicity</i>	Lilyturf, Creeping <i>Liriope sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container	2007	MS	Trader			P	
26435 C	Phytotoxicity <i>Phytotoxicity</i>	Lilyturf, Creeping <i>Liriope sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container							
26368 B	Phytotoxicity <i>Phytotoxicity</i>	Loropetalum <i>Loropetalum sp.</i>	BAS 656h EC (dimeth) <i>Dimethenamid-p</i>	Field Container							
26328 B	Phytotoxicity <i>Phytotoxicity</i>	Loropetalum <i>Loropetalum sp.</i>	BAS 659H G (dimeth) <i>Dimethenamid-p + pendimethalin</i>	Field Container							

Key: Priorities A, B, and C are researchable; N is not researchable - these may be completed studies or those with Standards. Trial Status: P = Planned, O = Ongoing, C = Complete, X = Cancelled, ? = Unknown

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26329 B	Phytotoxicity	Loropetalum	F6875 0.3G	Field Container	2007	AL	Gilliam			?	
	Phytotoxicity	Loropetalum sp.	Sulfentrazone +		2007	GA	Czarnota			P	
					2007	SC	Whitwell			P	
26330 C	Phytotoxicity	Loropetalum	Mesotrione 4SC	Field Container							
	Phytotoxicity	Loropetalum sp.	Mesotrione								
26312 B	Phytotoxicity	Magnolia	BAS 656h EC (dimeth	Field Container	2007	GA	Fraelich			P	
	Phytotoxicity	Magnolia sp.	Dimethenamid-p		2007	MD	Beste/Frank			P	
					2007	SC	Fenn			P	
26313 B	Phytotoxicity	Magnolia	BAS 659H G (dimeth	Field Container	2007	GA	Fraelich			P	
	Phytotoxicity	Magnolia sp.	Dimethenamid-p + pendimethalin		2007	MD	Beste/Frank			P	
					2007	SC	Fenn			P	
26314 B	Phytotoxicity	Magnolia	F6875 0.3G	Field Container	2007	AL	Gilliam			?	
	Phytotoxicity	Magnolia sp.	Sulfentrazone +		2007	GA	Fraelich			P	
					2007	MD	Beste/Frank			P	
					2007	NJ	Freiberger			P	
					2007	SC	Fenn			P	
26315 C	Phytotoxicity	Magnolia	Mesotrione 4SC	Field Container							
	Phytotoxicity	Magnolia sp.	Mesotrione								
26211 A	Phytotoxicity	Silver Grass	BAS 659H G (dimeth	Field Container	2007	MI	Marshall			P	
	Phytotoxicity	Miscanthus sp.	Dimethenamid-p + pendimethalin		2007	MS	Trader			P	
					2007	OR	Regan		M. sinensis 'Purpurascens'	P	
					2007	WA	Boydston			P	
26212 A	Phytotoxicity	Silver Grass	F6875 0.3G	Field Container	2007	MI	Marshall			P	
	Phytotoxicity	Miscanthus sp.	Sulfentrazone +		2007	MS	Trader			P	
					2007	OR	Regan		M. sinensis 'Purpurascens'	P	
					2007	WA	Boydston			P	
26213 B	Phytotoxicity	Silver Grass	Mesotrione 4SC	Field Container	2007	MI	Marshall			P	
	Phytotoxicity	Miscanthus sp.	Mesotrione		2007	OH	Mathers			P	
					2007	WA	Boydston			P	
26324 B	Phytotoxicity	Heavenly Bamboo	BAS 656h EC (dimeth	Field Container							
	Phytotoxicity	Nandina domestica	Dimethenamid-p								
26325 B	Phytotoxicity	Heavenly Bamboo	BAS 659H G (dimeth	Field Container							
	Phytotoxicity	Nandina domestica	Dimethenamid-p + pendimethalin								

Key: Priorities A, B, and C are researchable; N is not researchable - these may be completed studies or those with Standards. Trial Status: P = Planned, O = Ongoing, C = Complete, X = Cancelled, ? = Unknown

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26326 B	Phytotoxicity <i>Phytotoxicity</i>	Heavenly Bamboo <i>Nandina domestica</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container							
26327 C	Phytotoxicity <i>Phytotoxicity</i>	Heavenly Bamboo <i>Nandina domestica</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container							
26436 C	Phytotoxicity <i>Phytotoxicity</i>	Mondo Grass, Lilyturf, Ker <i>Ophiopogon sp.</i>	BAS 659H G (dimeth) <i>Dimethenamid-p + pendimethalin</i>	Field Container							
26437 C	Phytotoxicity <i>Phytotoxicity</i>	Mondo Grass, Lilyturf, Ker <i>Ophiopogon sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container	2007	MS	Trader			P	
26438 C	Phytotoxicity <i>Phytotoxicity</i>	Mondo Grass, Lilyturf, Ker <i>Ophiopogon sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container							
26346 B	Phytotoxicity <i>Phytotoxicity</i>	Petunia <i>Petunia sp.</i>	BAS 659H G (dimeth) <i>Dimethenamid-p + pendimethalin</i>	Field Container	2007	GA	Fraelich			P	
					2007	OH	Reding			P	
					2007	SC	Fenn			P	
					2007	WA	Harvey	Over the top		C	8/22/2007
					<i>Trial Results: No injury at 2.65, 5.3 and 10.6 lb ai per acre</i>						
26347 B	Phytotoxicity <i>Phytotoxicity</i>	Petunia <i>Petunia sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container	2007	GA	Fraelich			P	
					2007	OH	Reding			P	
					2007	SC	Fenn			P	
					2007	WA	Harvey	Over the top		P	
					<i>Trial Results: No injury at 0.375, 0.75 and 1.5 lb ai per acre</i>						
26348 C	Phytotoxicity <i>Phytotoxicity</i>	Petunia <i>Petunia sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container							
26214 B	Phytotoxicity <i>Phytotoxicity</i>	Phlox, Perennial <i>Phlox paniculata</i>	BAS 659H G (dimeth) <i>Dimethenamid-p + pendimethalin</i>	Field Container	2007	GA	Fraelich			P	
					2007	SC	Fenn			P	
					2007	WA	Boydston			P	
26215 B	Phytotoxicity <i>Phytotoxicity</i>	Phlox, Perennial <i>Phlox paniculata</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container	2007	GA	Fraelich			P	
					2007	SC	Fenn			P	
					2007	WA	Boydston			P	
26216 C	Phytotoxicity <i>Phytotoxicity</i>	Phlox, Perennial <i>Phlox paniculata</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container	2007	NY	Senesac		P. paniculata 'Robert Poore'	O	
					2007	WA	Boydston			P	
26365 B	Phytotoxicity <i>Phytotoxicity</i>	Creeping Phlox, Moss Pink <i>Phlox subulata</i>	BAS 659H G (dimeth) <i>Dimethenamid-p + pendimethalin</i>	Field Container							

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26217 B	Phytotoxicity	Creeping Phlox, Moss Pink	F6875 0.3G	Field Container	2007	OH	Reding			P	
	Phytotoxicity	<i>Phlox subulata</i>	<i>Sulfentrazone</i> +		2007	WA	Boydston			P	
					2007	WA	Harvey	Over the top		C	8/22/2007
	<i>Trial Results: Slight injury (chlorosis) only at 4X rate (1.5 lb ai per acre)</i>										
26218 C	Phytotoxicity	Creeping Phlox, Moss Pink	Mesotrione 4SC	Field Container	2007	NY	Senesac		P. subulata 'Emerald Blue'	O	
	Phytotoxicity	<i>Phlox subulata</i>	<i>Mesotrione</i>		2007	WA	Boydston			P	
26662 B	Phytotoxicity	Spruce, Norway	BAS 656h EC (dimeth	Field In-Ground	2007	MD	Beste/Frank			P	
	Phytotoxicity	<i>Picea abies</i>	<i>Dimethenamid-p</i>								
26291 B	Phytotoxicity	Spruce	BAS 656h EC (dimeth	Field Container	2007	NJ	Freiberger			P	
	Phytotoxicity	<i>Picea sp.</i>	<i>Dimethenamid-p</i>		2007	NY	Senesac		P. pungens	O	
26292 B	Phytotoxicity	Spruce	BAS 659H G (dimeth	Field Container	2007	NJ	Freiberger			P	
	Phytotoxicity	<i>Picea sp.</i>	<i>Dimethenamid-p</i> +		2007	NY	Senesac		P. pungens	O	
			<i>pendimethalin</i>		2007	OH	Reding			P	
26545 B	Phytotoxicity	Spruce	BAS 659H G (dimeth	Field In-Ground	2007	MD	Beste/Frank			P	
	Phytotoxicity	<i>Picea sp.</i>	<i>Dimethenamid-p</i> +								
			<i>pendimethalin</i>								
26293 B	Phytotoxicity	Spruce	F6875 0.3G	Field Container	2007	NJ	Freiberger			P	
	Phytotoxicity	<i>Picea sp.</i>	<i>Sulfentrazone</i> +								
26544 B	Phytotoxicity	Spruce	F6875 0.3G	Field In-Ground	2007	MD	Beste/Frank			P	
	Phytotoxicity	<i>Picea sp.</i>	<i>Sulfentrazone</i> +								
26294 C	Phytotoxicity	Spruce	Mesotrione 4SC	Field Container	2007	NJ	Freiberger			P	
	Phytotoxicity	<i>Picea sp.</i>	<i>Mesotrione</i>		2007	NY	Senesac		P. pungens	O	
26222 B	Phytotoxicity	Fir, Douglas	BAS 656h EC (dimeth	Field Container	2007	MI	Marshall			P	
	Phytotoxicity	<i>Pseudotsuga menziesii</i>	<i>Dimethenamid-p</i>		2007	NJ	Freiberger			P	
					2007	WA	Boydston			P	
					2007	WA	Harvey	Over the top		C	8/22/2007
<i>Trial Results: Unreliable results due to transplant shock</i>											
26223 B	Phytotoxicity	Fir, Douglas	BAS 659H G (dimeth	Field Container	2007	MI	Marshall			P	
	Phytotoxicity	<i>Pseudotsuga menziesii</i>	<i>Dimethenamid-p</i> +		2007	NJ	Freiberger			P	
			<i>pendimethalin</i>		2007	OH	Reding			P	
					2007	WA	Boydston			P	

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26224	B Phytotoxicity <i>Phytotoxicity</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	F6875 0.3G <i>Sulfentrazone</i> +	Field Container	2007	CA	Lieth			P			
					2007	MI	Marshall			P			
					2007	NJ	Freiberger			P			
					2007	OH	Reding			P			
					2007	WA	Boydston			P			
26225	C Phytotoxicity <i>Phytotoxicity</i>	Fir, Douglas <i>Pseudotsuga menziesii</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container	2007	MI	Marshall			P			
					2007	NJ	Freiberger			P			
					2007	WA	Boydston			P			
26287	A Phytotoxicity <i>Phytotoxicity</i>	Azalea <i>Rhododendron sp.</i>	BAS 656h EC (dimeth <i>Dimethenamid-p</i>	Field Container	2007	AL	Gilliam			P			
					2007	GA	Fraelich			P			
					2007	NY	Senesac		R. x 'Crete' (<i>Yakushmanum</i> hybrid)	O			
					2007	OR	Regan		'Vulcan'	P			
					2007	SC	Fenn			P			
26288	A Phytotoxicity <i>Phytotoxicity</i>	Azalea <i>Rhododendron sp.</i>	BAS 659H G (dimeth <i>Dimethenamid-p</i> + <i>pendimethalin</i>	Field Container	2007	AL	Gilliam			P			
					2007	GA	Fraelich			P			
					2007	OR	Regan		'Vulcan'	P			
					2007	SC	Fenn			P			
26289	A Phytotoxicity <i>Phytotoxicity</i>	Azalea <i>Rhododendron sp.</i>	F6875 0.3G <i>Sulfentrazone</i> +	Field Container	2006	GA	Czarnota	Over the top	'Tradition'	C	12/18/2006		
					<i>Trial Results: No injury at 0.75 and 1.13 lb ai per acre.</i>								
					2007	AL	Gilliam			P			
					2007	GA	Fraelich			P			
					2007	OR	Regan		'Vulcan'	P			
2007	SC	Fenn			P								
26290	B Phytotoxicity <i>Phytotoxicity</i>	Azalea <i>Rhododendron sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container	2007	GA	Fraelich			P			
					2007	NY	Senesac		R. x 'Crete' (<i>Yakushmanum</i> hybrid)	O			
					2007	OR	Regan		'Vulcan'	P			
					2007	SC	Fenn			P			
26198	A Phytotoxicity <i>Phytotoxicity</i>	Rose <i>Rosa sp.</i>	BAS 656h EC (dimeth <i>Dimethenamid-p</i>	Field Container	2007	CA	Lieth			C	8/29/2007		
					2007	GA	Czarnota			P			
					2007	NY	Senesac		R. virginiana	O			
					2007	SC	Fenn			P			

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26199 A	Phytotoxicity <i>Phytotoxicity</i>	Rose	BAS 659H G (dimeth	Field Container	2007	CA	Lieth			C	8/29/2007
		<i>Rosa sp.</i>	<i>Dimethenamid-p + pendimethalin</i>		2007	GA	Czarnota			P	
					2007	SC	Fenn			P	
					2007	WA	Boydston			P	
26366 A	Phytotoxicity <i>Phytotoxicity</i>	Rose	F6875 0.3G	Field Container	2007	CA	Lieth			C	8/29/2007
		<i>Rosa sp.</i>	<i>Sulfentrazone +</i>		2007	GA	Czarnota			P	
					2007	SC	Fenn			P	
					2007	WA	Boydston			P	
26200 B	Phytotoxicity <i>Phytotoxicity</i>	Rose	Mesotrione 4SC	Field Container	2007	IL	Williams			P	
		<i>Rosa sp.</i>	<i>Mesotrione</i>		2007	NY	Senesac		R. virginiana	O	
					2007	WA	Boydston			P	
26451 C	Phytotoxicity <i>Phytotoxicity</i>	Coneflower <i>Rudbeckia sp.</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container							
26452 C	Phytotoxicity <i>Phytotoxicity</i>	Coneflower <i>Rudbeckia sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container							
26453 C	Phytotoxicity <i>Phytotoxicity</i>	Coneflower <i>Rudbeckia sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container							
26201 A	Phytotoxicity <i>Phytotoxicity</i>	Sage, Ramona	BAS 656h EC (dimeth	Field Container	2007	CO	Klett			P	
		<i>Salvia sylvestris</i>	<i>Dimethenamid-p</i>		2007	MD	Beste/Frank			P	
					2007	VA	Derr			P	
					2007	WA	Boydston			P	
26202 A	Phytotoxicity <i>Phytotoxicity</i>	Sage, Ramona	BAS 659H G (dimeth	Field Container	2007	CO	Klett			P	
		<i>Salvia sylvestris</i>	<i>Dimethenamid-p + pendimethalin</i>		2007	MD	Beste/Frank			P	
					2007	OH	Mathers			P	
					2007	VA	Derr			P	
					2007	WA	Boydston			P	
26203 A	Phytotoxicity <i>Phytotoxicity</i>	Sage, Ramona	F6875 0.3G	Field Container	2007	CO	Klett			P	
		<i>Salvia sylvestris</i>	<i>Sulfentrazone +</i>		2007	MD	Beste/Frank			P	
					2007	OH	Mathers			P	
					2007	VA	Derr			P	
					2007	WA	Boydston			P	
26204 B	Phytotoxicity <i>Phytotoxicity</i>	Sage, Ramona	Mesotrione 4SC	Field Container	2007	IL	Williams			P	
		<i>Salvia sylvestris</i>	<i>Mesotrione</i>		2007	MD	Beste/Frank			P	
					2007	WA	Boydston			P	

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26302 B	Phytotoxicity	Pincushion Flower	BAS 659H G (dimeth	Field Container	2007	WA	Boydston			P	
	Phytotoxicity	Scabiosa sp.	Dimethenamid-p + pendimethalin		2007	WA	Harvey	Over the top		C	8/22/2007
<i>Trial Results: No injury after the first application at 2.65, 5.3 and 10.6 lb ai per acre, high injury at 2X and 4X after the second application</i>											
26303 B	Phytotoxicity	Pincushion Flower	F6875 0.3G	Field Container	2007	VA	Derr			P	
	Phytotoxicity	Scabiosa sp.	Sulfentrazone +		2007	WA	Boydston			P	
					2007	WA	Harvey	Over the top		C	8/22/2007
<i>Trial Results: Variable injury (none to severe) at all treatments including untreated Check</i>											
26304 C	Phytotoxicity	Pincushion Flower	Mesotrione 4SC	Field Container							
	Phytotoxicity	Scabiosa sp.	Mesotrione								
26454 C	Phytotoxicity	Goldenrod	BAS 659H G (dimeth	Field Container							
	Phytotoxicity	Solidago sp.	Dimethenamid-p + pendimethalin								
26455 C	Phytotoxicity	Goldenrod	F6875 0.3G	Field Container							
	Phytotoxicity	Solidago sp.	Sulfentrazone +								
26456 C	Phytotoxicity	Goldenrod	Mesotrione 4SC	Field Container							
	Phytotoxicity	Solidago sp.	Mesotrione								
26279 B	Phytotoxicity	Bridal-Wreath	BAS 656h EC (dimeth	Field Container	2007	CT	Ahrens/Mervosh		'Golden Mount'	P	
	Phytotoxicity	Spiraea sp.	Dimethenamid-p		2007	NJ	Freiberger			P	
					2007	NY	Senesac		S. decumbens	O	
					2007	WA	Harvey	Over the top		C	8/22/2007
<i>Trial Results: No injury after the first application at 0.97, 1.94 and 3.88 lb ai per acre, significant injury only at 4X rate after the second application</i>											
26280 B	Phytotoxicity	Bridal-Wreath	BAS 659H G (dimeth	Field Container	2007	CT	Ahrens/Mervosh		'Golden Mount'	P	
	Phytotoxicity	Spiraea sp.	Dimethenamid-p + pendimethalin		2007	NJ	Freiberger			P	
					2007	WA	Harvey	Over the top		C	8/22/2007
<i>Trial Results: Very slight injury only at 4X rate (10.6 lb ai per acre)</i>											
26281 B	Phytotoxicity	Bridal-Wreath	F6875 0.3G	Field Container	2007	CT	Ahrens/Mervosh		'Golden Mount'	P	
	Phytotoxicity	Spiraea sp.	Sulfentrazone +		2007	NJ	Freiberger			P	
26282 C	Phytotoxicity	Bridal-Wreath	Mesotrione 4SC	Field Container	2007	NJ	Freiberger			P	
	Phytotoxicity	Spiraea sp.	Mesotrione		2007	NY	Senesac		S. decumbens	O	
26308 B	Phytotoxicity	Yew	BAS 656h EC (dimeth	Field Container	2007	MD	Beste/Frank			P	
	Phytotoxicity	Taxus sp.	Dimethenamid-p		2007	NJ	Freiberger			P	
					2007	NY	Senesac		T. baccata	O	
					2007	WA	Harvey	Over the top		C	8/22/2007
<i>Trial Results: No injury at 0.97, 1.94 and 3.88 lb ai per acre</i>											

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26309 B	Phytotoxicity	Yew	BAS 659H G (dimeth	Field Container	2007	MD	Beste/Frank			P	
	<i>Phytotoxicity</i>	<i>Taxus sp.</i>	<i>Dimethenamid-p + pendimethalin</i>		2007	NJ	Freiberger			P	
					2007	NY	Senesac		T. baccata	O	
26310 B	Phytotoxicity	Yew	F6875 0.3G	Field Container	2007	GA	Fraelich			P	
	<i>Phytotoxicity</i>	<i>Taxus sp.</i>	<i>Sulfentrazone +</i>		2007	MD	Beste/Frank			P	
					2007	NJ	Freiberger			P	
26311 C	Phytotoxicity	Yew	Mesotrione 4SC	Field Container	2007	NJ	Freiberger			P	
	<i>Phytotoxicity</i>	<i>Taxus sp.</i>	<i>Mesotrione</i>		2007	NY	Senesac		T. baccata	O	
26226 B	Phytotoxicity	Cedar, Western Red	BAS 656h EC (dimeth	Field Container	2007	WA	Boydston			P	
	<i>Phytotoxicity</i>	<i>Thuja plicata</i>	<i>Dimethenamid-p</i>								
26227 B	Phytotoxicity	Cedar, Western Red	BAS 659H G (dimeth	Field Container	2007	WA	Boydston			P	
	<i>Phytotoxicity</i>	<i>Thuja plicata</i>	<i>Dimethenamid-p + pendimethalin</i>								
26228 B	Phytotoxicity	Cedar, Western Red	F6875 0.3G	Field Container	2007	WA	Boydston			P	
	<i>Phytotoxicity</i>	<i>Thuja plicata</i>	<i>Sulfentrazone +</i>								
26229 C	Phytotoxicity	Cedar, Western Red	Mesotrione 4SC	Field Container							
	<i>Phytotoxicity</i>	<i>Thuja plicata</i>	<i>Mesotrione</i>								
26275 A	Phytotoxicity	Arborvitae	BAS 656h EC (dimeth	Field Container	2007	CA	Lieth			P	
	<i>Phytotoxicity</i>	<i>Thuja sp.</i>	<i>Dimethenamid-p</i>		2007	CT	Ahrens/Mervosh		T. occidentalis 'Emerald Green'	P	
					2007	NC	Neal			P	
					2007	NY	Senesac		T. occidentalis 'Nigra'	O	
					2007	OH	Mathers			P	
26276 A	Phytotoxicity	Arborvitae	BAS 659H G (dimeth	Field Container	2007	CA	Lieth			P	
	<i>Phytotoxicity</i>	<i>Thuja sp.</i>	<i>Dimethenamid-p + pendimethalin</i>		2007	CT	Ahrens/Mervosh		T. occidentalis 'Emerald Green'	P	
					2007	NC	Neal			P	
					2007	OH	Mathers			P	
26277 A	Phytotoxicity	Arborvitae	F6875 0.3G	Field Container	2007	CA	Lieth			P	
	<i>Phytotoxicity</i>	<i>Thuja sp.</i>	<i>Sulfentrazone +</i>		2007	CT	Ahrens/Mervosh		T. occidentalis 'Emerald Green'	P	
					2007	NC	Neal			P	
					2007	OH	Mathers			P	
26278 B	Phytotoxicity	Arborvitae	Mesotrione 4SC	Field Container	2007	CA	Lieth			P	
	<i>Phytotoxicity</i>	<i>Thuja sp.</i>	<i>Mesotrione</i>		2007	NY	Senesac		T. occidentalis 'Nigra'	O	
					2007	OH	Mathers			P	

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26237 B	Phytotoxicity <i>Phytotoxicity</i>	Hemlock, Western <i>Tsuga heterophylla</i>	BAS 656h EC (dimeth <i>Dimethenamid-p</i>	Field Container	2007	WA	Boydston			P	
26663 B	Phytotoxicity <i>Phytotoxicity</i>	Hemlock, Western <i>Tsuga heterophylla</i>	BAS 656h EC (dimeth <i>Dimethenamid-p</i>	Field In-Ground	2007	MD	Beste/Frank			P	
26238 B	Phytotoxicity <i>Phytotoxicity</i>	Hemlock, Western <i>Tsuga heterophylla</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container	2007	WA	Boydston			P	
26664 B	Phytotoxicity <i>Phytotoxicity</i>	Hemlock, Western <i>Tsuga heterophylla</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field In-Ground	2007	MD	Beste/Frank			P	
26239 B	Phytotoxicity <i>Phytotoxicity</i>	Hemlock, Western <i>Tsuga heterophylla</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container							
26666 B	Phytotoxicity <i>Phytotoxicity</i>	Hemlock, Western <i>Tsuga heterophylla</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field In-Ground	2007	MD	Beste/Frank			P	
26240 C	Phytotoxicity <i>Phytotoxicity</i>	Hemlock, Western <i>Tsuga heterophylla</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container	2007	WA	Boydston			P	
26665 C	Phytotoxicity <i>Phytotoxicity</i>	Hemlock, Western <i>Tsuga heterophylla</i>	Mesotrione 4SC <i>Mesotrione</i>	Field In-Ground							
26457 C	Phytotoxicity <i>Phytotoxicity</i>	Ironweed, New York <i>Vernonia noveboracensis</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container							
26459 C	Phytotoxicity <i>Phytotoxicity</i>	Ironweed, New York <i>Vernonia noveboracensis</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container							
26458 C	Phytotoxicity <i>Phytotoxicity</i>	Ironweed, New York <i>Vernonia noveboracensis</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container							
26265 B	Phytotoxicity <i>Phytotoxicity</i>	Speedwell, Brooklime <i>Veronica sp.</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container							
26266 B	Phytotoxicity <i>Phytotoxicity</i>	Speedwell, Brooklime <i>Veronica sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container							
26267 C	Phytotoxicity <i>Phytotoxicity</i>	Speedwell, Brooklime <i>Veronica sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container	2007	IL	Williams			P	
					2007	NY	Senesac		V. peduncularis 'Waterperry'	O	
					2007	WA	Boydston			P	

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26254 A	Phytotoxicity <i>Phytotoxicity</i>	Arrowwood <i>Viburnum sp.</i>	BAS 656H EC (dimeth <i>Dimethenamid-p</i>	Field Container	2007	CT	Ahrens/Mervosh		'Shasta'	P	
					2007	MD	Beste/Frank			P	
					2007	NC	Neal			P	
					2007	NY	Senesac		V. nudum 'Winterthur'	O	
					2007	OR	Regan		V. opulus	P	
26255 A	Phytotoxicity <i>Phytotoxicity</i>	Arrowwood <i>Viburnum sp.</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container	2007	CT	Ahrens/Mervosh		'Shasta'	P	
					2007	MD	Beste/Frank			P	
					2007	NC	Neal			P	
					2007	OR	Regan		V. opulus	P	
26256 A	Phytotoxicity <i>Phytotoxicity</i>	Arrowwood <i>Viburnum sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container	2007	CT	Ahrens/Mervosh		'Shasta'	P	
					2007	MD	Beste/Frank			P	
					2007	NC	Neal			P	
					2007	OR	Regan		V. opulus	P	
26257 B	Phytotoxicity <i>Phytotoxicity</i>	Arrowwood <i>Viburnum sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container	2007	IL	Williams			P	
					2007	NY	Senesac		V. nudum 'Winterthur'	O	
					2007	OR	Regan		V. opulus	P	
26295 B	Phytotoxicity <i>Phytotoxicity</i>	Periwinkle <i>Vinca sp.</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field Container	2007	NY	Senesac		V. minor	O	
					2007	OH	Reding			P	
					2007	WA	Boydston			P	
26296 B	Phytotoxicity <i>Phytotoxicity</i>	Periwinkle <i>Vinca sp.</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field Container	2007	CA	Lieth			P	
					2007	NJ	Freiberger			P	
					2007	OH	Reding			P	
					2007	WA	Boydston			P	
26297 C	Phytotoxicity <i>Phytotoxicity</i>	Periwinkle <i>Vinca sp.</i>	Mesotrione 4SC <i>Mesotrione</i>	Field Container	2007	NJ	Freiberger			P	
					2007	NY	Senesac		V. minor	O	
					2007	WA	Boydston			P	

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG	
26165 C	Phytotoxicity	Fir, Fraser	SedgeHammer	Field Container	2006	NJ	Freiberger	Over the top		C	4/5/2007 4/26/2007	
	Phytotoxicity	Abies fraseri	Halosulfuron		Trial Results: No to very slight injury at 0.045 lb ai per acre, slight to moderate at higher rates; no growth reduction						P	
25366 C	Phytotoxicity	Fir, Fraser	Sulfentrazone 0.2G	Field Container	2006	OR	Altland	Over the top		C	12/21/2006 4/27/2007	
	Phytotoxicity	Abies fraseri	Sulfentrazone		Trial Results: No significant injury at 0.125, 0.25, and 0.5 lb ai per acre.						P	
					2007	CA	Lieth			P		
25916 C	Phytotoxicity	Fir, Fraser	Sulfentrazone 4F	Field Container	2006	NJ	Freiberger	Over the top		C	4/5/2007 4/27/2007	
	Phytotoxicity	Abies fraseri	Sulfentrazone		Trial Results: Virtually no injury at all rates (0.125, 0.25 and 0.5 lb ai per acre) after 1st, moderate after 2nd application; no growth reduction							
					2006	OR	Altland	Over the top		C	12/21/2006 4/26/2007	
					Trial Results: No significant injury at 0.125, 0.25, and 0.5 lb ai per acre.						P	
26816 C	Phytotoxicity	Fir, Fraser	V-10142 0.5G	Field Container	2007	CA	Lieth			P		
	Phytotoxicity	Abies fraseri	Imzasulfuron		2007	WA	Boydston			P		
25476 C	Phytotoxicity	Maple, Red	SedgeHammer	Field Container	2006	NJ	Freiberger	Over the top		C	4/5/2007 4/26/2007	
	Phytotoxicity	Acer rubrum	Halosulfuron		Trial Results: High injury at all rates (0.045, 0.09, 0.18 lb ai per acre)							
					2006	OR	Altland	Over the top		C	12/21/2006 4/26/2007	
25934 C	Phytotoxicity	Maple, Red	Sulfentrazone 4F	Field Container	2006	NJ	Freiberger	Over the top		C	4/5/2007 4/27/2007	
	Phytotoxicity	Acer rubrum	Sulfentrazone		Trial Results: High injury at all rates (0.125, 0.25 and 0.5 lb ai per acre)							
					2007	IL	Williams			P		
25349 C	Phytotoxicity	Birch	SedgeHammer	Field Container	2006	MD	Beste/Frank			P		
	Phytotoxicity	Betula sp.	Halosulfuron		2007	IL	Williams			P		
25375 C	Phytotoxicity	Cotoneaster	Sulfentrazone 0.2G	Field Container	2006	MD	Beste/Frank	Over the top	C. dammeri	C	1/5/2007 4/27/2007	
	Phytotoxicity	Cotoneaster sp.	Sulfentrazone		Trial Results: No significant injury or growth reduction at all rates (0.125, 0.25 and 0.5 lb ai/A); all plants marketable							
					2006	NC	Neal	Over the top	C. horizontalis	C	1/18/2007 4/27/2007	
25955 C	Phytotoxicity	Cotoneaster	Sulfentrazone 4F	Field Container	2006	NC	Neal	Over the top	C. horizontalis	C	1/18/2007 4/27/2007	
	Phytotoxicity	Cotoneaster sp.	Sulfentrazone		Trial Results: No significant injury at 0.125, 0.25, 0.5 lb ai per acre.							
					2007	IL	Williams			P		

Key: Priorities A, B, and C are researchable; N is not researchable - these may be completed studies or those with Standards. Trial Status: P = Planned, O = Ongoing, C = Complete, X = Cancelled, ? = Unknown

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
25006 C	Phytotoxicity	Euonymus	SedgeHammer	Field Container	2005	VA	Derr	Over the top		C	11/22/2005 1/9/2006
	Phytotoxicity	<i>Euonymus sp.</i>	<i>Halosulfuron</i>		Trial Results: Very slight injury at all rates (0.045, 0.09, 0.18 lb ai per acre).					P	
26690 C	Phytotoxicity	English Ivy	Sulfentrazone 4F	Field Container	2005	VA	Derr			C	10/28/2005 1/9/2006
	Phytotoxicity	<i>Hedera helix L. ssp. Helix</i>	<i>Sulfentrazone</i>		Trial Results: Very slight injury at all rates (0.25, 0.5, 1.0 lb ai per acre).					P	
25958 C	Phytotoxicity	Holly	Sulfentrazone 4F	Field Container	2006	MI	Marshall		'Ivory queen'	C	12/1/2006 4/26/2007
	Phytotoxicity	<i>Ilex sp.</i>	<i>Sulfentrazone</i>		Trial Results: Slight to moderate injury increasing with rate (0.125, 0.25, 0.5 lb ai per acre).					C	1/18/2007 4/27/2007
					2006	NC	Neal	Over the top	I. cornuta 'bufordii nana'	C	1/18/2007 4/27/2007
					Trial Results: No significant injury at 0.125, 0.25, 0.5 lb ai per acre.					C	12/21/2006 4/26/2007
					2006	OR	Altland	Over the top	I. x meserveae 'Blue Princess'	C	12/21/2006 4/26/2007
					Trial Results: Slight to moderate, transient injury increasing with rate (0.125, 0.25, 0.5 lb ai per acre).					P	
25929 C	Phytotoxicity	Holly, Dwarf Yaupon	Sulfentrazone 4F	Field Container	2006	NC	Neal	Over the top		C	1/18/2007 4/27/2007
	Phytotoxicity	<i>Ilex vomitoria 'nana'</i>	<i>Sulfentrazone</i>		Trial Results: No significant injury at 0.125, 0.25, 0.5 lb ai per acre.					P	
					2007	CA	Lieth			P	
					2007	MS	Trader			P	
25353 C	Phytotoxicity	Shrub Verbena	SedgeHammer	Field Container	2006	VA	Derr	Over the top		C	11/17/2006 4/26/2007
	Phytotoxicity	<i>Lantana sp.</i>	<i>Halosulfuron</i>		Trial Results: Slight injury at all rates (0.045, 0.09, 0.18 lb ai per acre).					P	
					2007	IL	Williams			P	
25379 C	Phytotoxicity	Shrub Verbena	Sulfentrazone 0.2G	Field Container	2006	VA	Derr	Over the top		C	11/17/2006 4/27/2007
	Phytotoxicity	<i>Lantana sp.</i>	<i>Sulfentrazone</i>		Trial Results: No injury at all rates (0.125, 0.25, 0.5 lb ai per acre).					P	
24737 C	Phytotoxicity	Shrub Verbena	Sulfentrazone 4F	Field In-Ground	2005	LA	Chen	Foliage spray	'New Gold'	C	1/4/2006 5/12/2006
	Phytotoxicity	<i>Lantana sp.</i>	<i>Sulfentrazone</i>		Trial Results: Moderate to severe injury (0.25, 0.5, 1.0 lb ai per acre).					P	
25670 C	Phytotoxicity	Lilyturf, Big Blue;Giant	SedgeHammer	Field Container	2005	AL	Gilliam	Over the top		C	1/9/2006 4/26/2007
	Phytotoxicity	<i>Liriope muscari</i>	<i>Halosulfuron</i>		Trial Results: No visible injury, but plant growth was significantly suppressed at 0.09 lb ai per acre					P	
25354 C	Phytotoxicity	Pentas	SedgeHammer	Field Container	2006	VA	Derr	Over the top	'Ruby Red'	C	11/17/2006 4/26/2007
	Phytotoxicity	<i>Pentas sp.</i>	<i>Halosulfuron</i>		Trial Results: Slight injury 0.045 and 0.09 lb ai per acre and moderate at 0.18 lb ai per acre.					P	

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26166 C	Phytotoxicity	Fir, Douglas	SedgeHammer	Field Container	2006	NJ	Freiberger	Over the top	P. menziesii glauca	C	4/5/2007 4/27/2007	
	Phytotoxicity	Pseudotsuga menziesii	Halosulfuron		Trial Results: Very slight injury after 1st, high after 2nd application at all rates (0.045, 0.09, 0.18 lb ai per acre)						P	
25357 N	Phytotoxicity	Fir, Douglas	Sulfentrazone 0.2G	Field Container	2006	OR	Altland	Over the top		C	12/21/2006 4/27/2007	
	Phytotoxicity	Pseudotsuga menziesii	Sulfentrazone		Trial Results: No significant injury at 0.125, 0.25, and 0.5 lb ai per acre.							
					2006	WA	Boydston	Over the top		C	10/6/2006 4/27/2007	
					Trial Results: No injury or growth differences at 0.125, 0.25, and 0.5 lb ai per acre.						P	
25915 C	Phytotoxicity	Fir, Douglas	Sulfentrazone 4F	Field Container	2006	NJ	Freiberger	Over the top	P. menziesii glauca	C	4/5/2007 4/27/2007	
	Phytotoxicity	Pseudotsuga menziesii	Sulfentrazone		Trial Results: Slight injury at 0.125 and 0.25 lb ai per acre, moderate at 4X rate; no growth reduction							
					2006	OR	Altland	Over the top		C	12/21/2006 4/26/2007	
					Trial Results: Minor injury after the first application at all rates, but no injury after the second (0.125, 0.25, 0.5 lb ai per acre).						P	
26817 C	Phytotoxicity	Fir, Douglas	V-10142 0.5G	Field Container	2007	CA	Lieth			P		
	Phytotoxicity	Pseudotsuga menziesii	Imazosulfuron									
24533 N	Phytotoxicity	Azalea, & Rhododendron	Sulfentrazone 0.2G	Field Container	2006	AL	Gilliam	Over the top	'Congo'	C	2/12/2007 4/26/2007	
	Phytotoxicity	Rhododendron sp.	Sulfentrazone		Trial Results: No injury or growth reduction at 0.125, 0.25, and 0.5 lb ai per acre.							
					2006	GA	Czarnota	Over the top	'Tradition'	C	12/18/2006 4/27/2007	
					Trial Results: No injury at 0.25 and 0.38 lb ai per acre.							
					2006	MD	Beste/Frank	Over the top	'Girard Rose'	C	1/5/2007 4/26/2007	
					Trial Results: No significant injury or growth reduction at all rates (0.125, 0.25 and 0.5 lb ai/A); all plants marketable							
					2006	MD	Beste/Frank	Over the top	R. catawbiense 'English Roseum'	C	1/5/2007 4/26/2007	
					Trial Results: No significant injury or growth reduction at all rates (0.125, 0.25 and 0.5 lb ai/A); all plants marketable							
				2006	NC	Neal	Over the top	'Pink Gumpo'	C	1/18/2007 4/27/2007		
				Trial Results: No significant injury at 0.125, 0.25, 0.5 lb ai per acre.								
				2006	OH	Mathers	Over the top	R. x 'Roseum Elegans'	C	12/12/2006 4/27/2007		
				Trial Results: Virtually no injury to slight injury increasing with rate (0.125, 0.25, 0.5 lb ai per acre).								
				2007	AL	Gilliam				?		
				2007	VA	Derr				P		

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25952 C	Phytotoxicity <i>Phytotoxicity</i>	Azalea, & Rhododendron	Sulfentrazone 4F	Field Container	2005	FL	Norcini		'Fashion'	C	8/19/2005 1/9/2006
		<i>Rhododendron sp.</i>	<i>Sulfentrazone</i>		<i>Trial Results: Slight transient injury (0.25, 0.5, 1.0 lb ai per acre).</i>						
					2005	VA	Derr		'Formosa'	C	10/28/2005 1/9/2006
					<i>Trial Results: Moderate but transient injury at all rates (0.25, 0.5, 1.0 lb ai per acre).</i>						
					2006	CA	Wilens	Over the top	'Nuccio's Wild Cherry'	C	12/1/2006 4/26/2007
					<i>Trial Results: Unacceptable injury at all rates (0.125, 0.25, 0.5 lb ai per acre).</i>						
					2006	CT	Ahrens/Mervosh	Over the top	Rhododendron 'P.J.M.'	C	4/12/2007 4/26/2007
					<i>Trial Results: Slight injury after 1st, no injury after 2nd application at all rates (0.125, 0.25 and 0.5 lb ai per acre)</i>						
					2006	GA	Czarnota	Over the top	'Tradition'	C	12/18/2006 4/27/2007
					<i>Trial Results: No injury at 0.25 and 0.38 lb ai per acre.</i>						
				2006	MI	Marshall	Over the top	'Ex Cannons Double Pk'	C	12/1/2006 4/26/2007	
				<i>Trial Results: No to slight injury increasing with rate, but no difference in plant growth (0.125, 0.25, 0.5 lb ai per acre).</i>							
				2006	NC	Neal	Over the top	'Pink Gumpo'	C	1/18/2007 4/27/2007	
				<i>Trial Results: Slight transient injury at 0.125 lb ai per acre and moderate unacceptable injury at 0.25 and 0.5 lb ai per acre.</i>							
				2007	AL	Gilliam			?		
				2007	VA	Derr			P		
25966 C	Phytotoxicity <i>Phytotoxicity</i>	Rose	Sulfentrazone 4F	Field Container	2006	NJ	Freiberger	Over the top	R. multiflora	C	4/5/2007 4/27/2007
		<i>Rosa sp.</i>	<i>Sulfentrazone</i>		<i>Trial Results: No to slight injury at all rates (0.125, 0.25 and 0.5 lb ai per acre) after 1st, moderate after 2nd application; no growth reduction</i>						
					2006	NY	Senesac	Over the top	'Sea Foam'	C	10/17/2006 4/27/2007
				<i>Trial Results: Slight, transient injury after second application (0.125, 0.25, 0.5 lb ai per acre).</i>							
				2007	MS	Trader			P		
20860 C	Phytotoxicity <i>Phytotoxicity</i>	Coneflower, Orange	SedgeHammer	Field Container	2006	VA	Derr	Over the top	'Becky'	C	11/17/2006 4/26/2007
		<i>Rudbeckia fulgida speciosa</i>	<i>Halosulfuron</i>		<i>Trial Results: No significant injury at 0.045 and 0.09 lb ai per acre, moderate at 0.18 lb ai per acre.</i>						
				2007	IL	Williams			P		
25370 C	Phytotoxicity <i>Phytotoxicity</i>	Coneflower, Orange	Sulfentrazone 0.2G	Field Container	2006	OH	Mathers	Over the top	'Viettas Little Suzie'	C	12/12/2006 4/26/2007
		<i>Rudbeckia fulgida speciosa</i>	<i>Sulfentrazone</i>		<i>Trial Results: Very slight injury at 0.125 lb ai per acre even with second application; moderate, transient injury at 0.25 lb ai per acre; and moderate persisting injury with 0.5 lb ai per acre.</i>						
					2006	VA	Derr	Over the top	'Becky'	C	11/17/2006 4/27/2007
				<i>Trial Results: No significant injury at all rates (0.125, 0.25, 0.5 lb ai per acre).</i>							
				2007	IL	Williams			P		
26062 C	Phytotoxicity <i>Phytotoxicity</i>	Coneflower, Orange	Sulfentrazone 4F	Field Container	2006	MI	Marshall	Over the top	'Meadowbrite'	C	12/1/2006 4/26/2007
		<i>Rudbeckia fulgida speciosa</i>	<i>Sulfentrazone</i>		<i>Trial Results: Moderate to significant injury as well as significant decrease in growth, increasing with rate (0.125, 0.25, 0.5 lb ai per acre).</i>						
				2007	IL	Williams			P		

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG	
25392	C Phytotoxicity Phytotoxicity	Bridal-Wreath	V-10142 75WG	Field Container	2006	CT	Ahrens/Mervosh	Over the top	'Gooldflame'	C	4/12/2007 4/26/2007	
		<i>Spiraea sp.</i>	<i>Imazosulfuron</i>		2006	MD	Beste/Frank	Over the top	S. bumalda 'Anthony Waterer'	C	1/6/2007 4/27/2007	
											<i>Trial Results: Severe injury at all rates (0.5, 1 and 2 lb ai per acre)</i>	
											<i>Trial Results: Significant reduction of plant size, flower number and marketability at all rates (0.5, 1 and 2 lb ai/A)</i>	
											2006 NC Neal Over the top S. japonica 'Little Princess' C 1/18/2007 4/27/2007	
											<i>Trial Results: Significant injury at all rates (0.5, 1.0, 2.0 lb ai per acre).</i>	
												2006 NY Senesac Over the top S. decumbens C 10/17/2006 4/27/2007
												<i>Trial Results: Moderate, transient injury with complete recovery at lower rates (0.5, 1 and 2 lb ai/A).</i>
												2006 OH Mathers Over the top S. x bumalda 'Goldmound' C 12/12/2006 4/26/2007
												<i>Trial Results: Slight to significant injury increasing with time and second application (0.5, 1.0, 2.0 lb ai per acre).</i>
											2006 VA Derr Over the top S. x bumalda 'Gold Mound' C 11/17/2006 4/27/2007	
											<i>Trial Results: Severe injury at all rates (0.5, 1 and 2 lb ai/A).</i>	
											2007 NJ Freiburger Directed spray P	
											2007 XX tbd Directed spray P	
25914	C Phytotoxicity Phytotoxicity	Arborvitae	Sulfentrazone 4F	Field Container	2006	CT	Ahrens/Mervosh	Over the top	'Emerald Green'	C	4/12/2007 4/26/2007	
		<i>Thuja sp.</i>	<i>Sulfentrazone</i>		2006	GA	Czarnota	Over the top	T. occidentalis 'Elegantissima'	C	12/18/2006 4/27/2007	
											<i>Trial Results: No injury at all rates (0.125, 0.25 and 0.5 lb ai per acre)</i>	
											2007 IL Williams P	
26525	C Phytotoxicity Phytotoxicity	Arrowwood	Sulfentrazone 4F	Field Container	2006	NC	Neal	Over the top	V. tinus compacta	C	1/18/2007 4/27/2007	
		<i>Viburnum sp.</i>	<i>Sulfentrazone</i>		2006	OR	Altland	Over the top	V. carlessi	C	12/21/2006 4/27/2007	
											<i>Trial Results: Slight transient injury at 0.125 lb ai per acre and moderate, unacceptable injury at 0.25 and 0.5 lb ai per acre.</i>	
											<i>Trial Results: Moderate to significant injury with single application at all rates (0.125, 0.25, 0.5 lb ai per acre).</i>	
											2007 IL Williams P	
25018	C Phytotoxicity Phytotoxicity	Periwinkle	Sulfentrazone 0.2G	Field Container	2006	CA	Lieth	Over the top	Vinca minor 'Bowles'	C	11/29/2006 4/27/2007	
		<i>Vinca sp.</i>	<i>Sulfentrazone</i>		2007	NJ	Freiberger			P		
											<i>Trial Results: Not possible to determine if product caused injury as untreated plants showed substantial injury</i>	
25964	C Phytotoxicity Phytotoxicity	Periwinkle	Sulfentrazone 4F	Field Container	2006	MI	Marshall	Over the top	'Alba'	C	12/1/2006 4/26/2007	
		<i>Vinca sp.</i>	<i>Sulfentrazone</i>		2007	NJ	Freiberger			P		
											<i>Trial Results: No visible injury however plant growth was reduced increasing with rate (0.125, 0.25, 0.5 lb ai per acre).</i>	

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Dithiopyr Crop Safety

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26977	C Phytotoxicity <i>Phytotoxicity</i>	Shrub Verbena <i>Lantana sp.</i>	Dimension 2EW <i>Dithiopyr</i>	Field Container	2007	NJ	Freiberger	Over the top		P	
26978	C Phytotoxicity <i>Phytotoxicity</i>	Rose <i>Rosa sp.</i>	Dimension 2EW <i>Dithiopyr</i>	Field Container	2007	NJ	Freiberger	Over the top		P	
					2007	NJ	Freiberger	Over the top		P	
					2007	NJ	Freiberger	Over the top		P	

Isoxaben Crop Safety

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG			
25533 C	Phytotoxicity <i>Phytotoxicity</i>	Fern, American Maidenhair <i>Adiantum pedatum</i>	Gallery 75DF <i>Isoxaben</i>	Field Container	2006	NY	Senesac	Spray over top		C	10/17/2006			
					<i>Trial Results: No data due to limited emergence</i>									
					2007	AL	Gilliam			P				
					2007	VA	Derr			P				
25640 C	Phytotoxicity <i>Phytotoxicity</i>	Fern, Lady <i>Athyrium nipponicum</i>	Gallery 75DF <i>Isoxaben</i>	Field Container	2006	NC	Neal			C	1/19/2007			
					2006	VA	Derr	Spray over top		C	11/17/2006			
					<i>Trial Results: No stand or growth reduction at all rates</i>									
					2007	AL	Gilliam			P				
25641 C	Phytotoxicity <i>Phytotoxicity</i>	Fern, Japanese Holly <i>Cyrtomium fortunei</i>	Gallery 75DF <i>Isoxaben</i>	Field Container	2006	NC	Neal			C	1/19/2007			
					2006	VA	Derr	Spray over top		C	11/17/2006			
					<i>Trial Results: No stand or growth reduction at all rates</i>									
					2007	AL	Gilliam			P				
25642 C	Phytotoxicity <i>Phytotoxicity</i>	Fern, Dixie Wood <i>Dryopteris x australis</i>	Gallery 75DF <i>Isoxaben</i>	Field Container	2006	AL	Gilliam	Over the top	x australis 'Dixie Wood Fern'	C	12/6/2006			
					<i>Trial Results: No injury or growth reduction at all rates</i>									
					2006	NC	Neal			C	1/19/2007			
					2006	VA	Derr	Spray over top		C	11/17/2006			
					<i>Trial Results: No stand reduction but growth reduced at all rates</i>									
					2007	AL	Gilliam			P				
25643 C	Phytotoxicity <i>Phytotoxicity</i>	Fern, Sensitive <i>Onoclea sensibilis</i>	Gallery 75DF <i>Isoxaben</i>	Field Container	2006	NC	Neal			C	1/19/2007			
					2006	VA	Derr	Spray over top		C	11/17/2006			
					<i>Trial Results: No stand or growth reduction at all rates</i>									
					2007	AL	Gilliam			P				
25644 C	Phytotoxicity <i>Phytotoxicity</i>	Fern, Royal <i>Osmunda regalis</i>	Gallery 75DF <i>Isoxaben</i>	Field Container	2006	NC	Neal			C	1/19/2007			
					2006	VA	Derr	Spray over top		C	11/17/2006			
					<i>Trial Results: No stand or growth reduction at all rates</i>									
					2007	AL	Gilliam			P				

Nutsedge & Sedge Efficacy

Printed: 9/20/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26139 N	Nutsedge, Yellow <i>Cyperus esculentus</i>	TBD <i>TBD</i>	Basagran T/O 4L <i>Bentazon</i>	Field In-Ground	1977	AR	Talbert	Directed spray		C	12/1/1977
					Trial Results: By 3 weeks after second application, 100% of the arborvitae had died. 100% control with 1.68 and 3.36 lb ai per acre 3 weeks after second application; about 50% control with 0.84 lb ai per acre						
					2007	NJ	Freiberger			P	
					2007	NY	Senesac			P	
25748 C	Nutsedge, Yellow <i>Cyperus esculentus</i>	TBD <i>TBD</i>	BroadStar 0.25G <i>Flumioxazin</i>	Field In-Ground	2005	LA	Chen	Granular Broadcast		C	1/4/2006 4/26/2007
25784 C	Nutsedge, Yellow <i>Cyperus esculentus</i>	TBD <i>TBD</i>	Pendulum 2G <i>Pendimethalin</i>	Field In-Ground							
25785 C	Nutsedge, Yellow <i>Cyperus esculentus</i>	TBD <i>TBD</i>	Pennant Magnum <i>S-Metolachlor</i>	Field In-Ground	2005	LA	Chen			C	1/4/2006 6/20/2006
					2007	NC	Neal			P	
					2007	NY	Senesac			P	
25786 C	Nutsedge, Yellow <i>Cyperus esculentus</i>	TBD <i>TBD</i>	Snapshot 2.5TG <i>Trifluralin + Isoxaben</i>	Field In-Ground	2005	LA	Chen			C	1/4/2006 6/19/2006
25792 C	Nutsedge, Yellow <i>Cyperus esculentus</i>	TBD <i>TBD</i>	Sulfentrazone 4F <i>Sulfentrazone</i>	Field In-Ground	2005	LA	Chen	Foliage spray		C	1/4/2006 5/12/2006
					2007	NJ	Freiberger			P	
					2007	NY	Senesac			P	
0	C TBD <i>TBD</i>	TBD <i>TBD</i>	BAS 656h EC (dimeth <i>Dimethenamid-p</i>	Field In-Ground	2007	MI	Mickelbart			P	
					2007	NC	Neal			P	
					2007	NY	Senesac			P	
0	C TBD <i>TBD</i>	TBD <i>TBD</i>	BAS 659H G (dimeth <i>Dimethenamid-p + pendimethalin</i>	Field In-Ground	2007	MI	Mickelbart			P	
					2007	NC	Neal			P	
					2007	NY	Senesac			P	
0	C TBD <i>TBD</i>	TBD <i>TBD</i>	Casoron 4G <i>Dichlobenil</i>	Field In-Ground	2007	NY	Senesac			P	
0	C TBD <i>TBD</i>	TBD <i>TBD</i>	Eptam EC <i>EPTC</i>	Field In-Ground	2007	NC	Neal			P	
					2007	NY	Senesac			P	
0	N TBD <i>TBD</i>	TBD <i>TBD</i>	Eptam G <i>EPTC</i>	TBD							
0	C TBD <i>TBD</i>	TBD <i>TBD</i>	F6875 0.3G <i>Sulfentrazone +</i>	Field In-Ground	2007	MI	Mickelbart			P	
					2007	NC	Neal			P	
					2007	NY	Senesac			P	

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Key: Priorities A, B, and C are researchable; N is not researchable - these may be completed studies or those with Standards. Trial Status: P = Planned, O = Ongoing, C = Complete, X = Cancelled, ? = Unknown

Nutsedge & Sedge Efficacy

Printed: 9/20/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
0	C TBD TBD	TBD TBD	Mesotrione 4SC <i>Mesotrione</i>	Field In-Ground	2007	MI	Mickelbart			P	
					2007	NJ	Freiberger			P	
					2007	NY	Senesac			P	
0	C TBD TBD	TBD TBD	RoundUp <i>Glyphosate</i>	Field In-Ground	2007	NJ	Freiberger			P	
					2007	NY	Senesac			P	
					2007	NY	Senesac			O	
0	C TBD TBD	TBD TBD	SedgeHammer <i>Halosulfuron</i>	Field In-Ground	2007	MI	Mickelbart			P	
					2007	MI	Mickelbart			P	
					2007	NC	Neal			P	
					2007	NJ	Freiberger			P	
					2007	NY	Senesac			P	
					2007	NY	Senesac			P	
0	C TBD TBD	TBD TBD	Sulfentrazone 0.2G <i>Sulfentrazone</i>	Field In-Ground	2007	MI	Mickelbart			P	
					2007	MI	Mickelbart			P	
					2007	NC	Neal			P	
					2007	NJ	Freiberger			P	
					2007	NY	Senesac			P	
					2007	NY	Senesac			P	
0	C TBD TBD	TBD TBD	V-10142 0.5G <i>Imzasulfuron</i>	Field In-Ground	2007	MI	Mickelbart			P	
					2007	NC	Neal			P	
					2007	NJ	Freiberger			P	
					2007	NY	Senesac			P	
					2007	NY	Senesac			P	
0	C TBD TBD	TBD TBD	V-10142 75WG <i>Imzasulfuron</i>	Field In-Ground	2007	MI	Mickelbart			P	
					2007	MI	Mickelbart			P	
					2007	NC	Neal			P	
					2007	NJ	Freiberger			P	
					2007	NY	Senesac			P	
					2007	NY	Senesac			P	

Trifluralin + Isoxaben + Oxyfluorfen Crop Safety

Printed: 9/20/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26979 C	Phytotoxicity <i>Phytotoxicity</i>	Shrub Verbena <i>Lantana sp.</i>	Showcase <i>Trifluralin + Isoxaben + Oxyfluorfen</i>	Field Container	2007	NJ	Freiberger	Over the top		P	
26982 C	Phytotoxicity <i>Phytotoxicity</i>	Loropetalum <i>Loropetalum sp.</i>	Showcase <i>Trifluralin + Isoxaben + Oxyfluorfen</i>	Field Container	2007	SC	Whitwell	Over the top		P	
26980 C	Phytotoxicity <i>Phytotoxicity</i>	Rose <i>Rosa sp.</i>	Showcase <i>Trifluralin + Isoxaben + Oxyfluorfen</i>	Field Container	2007	NJ	Freiberger	Over the top		P	
					2007	NJ	Freiberger	Over the top		P	
					2007	NJ	Freiberger	Over the top		P	
					2007	NJ	Freiberger	Over the top		P	

New Requests for Herbicides: halosulfuron

Date of Request: 9/13/2007 10:56:00 AM**Related PRNumbers:****Name:** Joe Masabni**Affiliation:** Univ. of Kentucky**State:** KY**ProjectType:** ConductCropSafety**Crop Information:** Flowering Potted/Cut Plant - Perennial**Scientific Name:****Common Name:** chrysanthemum**Plant Stage** Pre-transplant or preemergence**UseSite:** field grown mums**TradeName:** Sandea**ActiveIngredients:** halosulfuron**Rate Per Application:** 0.5-1 oz/acre**Volume Per Application:** 20-30 gal/acre**Number of Applications** 1-2**Application Interval:****Research Target:** Efficacy**Efficacy Target:** yellow nutsedge**Economic Impact:** I don't know the mum acreage in Kentucky. But the yellow nutsedge issue in field grown mums is a question I have been getting from the amish and mennonite communities**Labeled Products:****Comments:**

Date of Request: 5/14/2007 11:12:00 AM

Related PRNumbers:

Name: Robert Berghage

Affiliation: Penn State

State: PA

ProjectType: ConductCropSafety

Crop Information: Hardy Ground Cover Foliage

Scientific Name: *Sedum sp.*

Common Name: Sedums and other green roof plants

Plant Stage Mature

UseSite: Green roof

TradeName:

ActiveIngredients: Glyphosate - as a test compound

Rate Per Application:

Volume Per Application:

Number of Applications

Application Interval:

Research Target: Efficacy

Efficacy Target: No fate information available on herbicides in green roof media

Economic Impact: Green roofs are a rapidly expanding industry in North America. Weed control on these roofs has not been addressed. Fate information of herbicides in these manufactured soils is unavailable. We would like to begin an herbicide fate study for these systems to determine if there is reason to be concerned about herbicide use.

Labeled Products: Unclear - may be landscape use - may not.

Comments: Weed control has been a problem in a number of roofs - it is not clear if this fall under existing labeling for any herbicide. The media are very different than soils and fates of applied materials are unknown. Since runoff from most green roofs is directly conveyed to storm water systems leachate containing herbicides or other pesticides might pose a significant environmental risk.

Top 10 Weeds for Herbaceous Plant Materials Separated by Geography.

	Weed (Weighted Ranking)			
Region	North Central	Northeast	Southern	Western
Survey Count	83	33	183	77
1	Oxalis (26)	Oxalis (19)	Spurge (71)	Liverwort (31)
2	Thistle (19)	Bittercress (16)	Bittercress (63)	Bittercress (29)
3	Yellow Nutsedge (14)	Groundsel (7)	Nutsedge (44)	Oxalis (25)
4	Canada Thistle (12)	Crabgrass (7)	Oxalis (38)	Groundsel (15)
5	Nutsedge (11)	Chickweed (6)	Crabgrass (29)	Fireweed (11)
6	Bittercress (10)	Clover (6)	Nutgrass (22)	Spurge (11)
7	Groundsel (10)	Grasses (4)	Chickweed (21)	Pearlwort (9)
8	Liverwort (10)	Marestail (4)	Dallisgrass (21)	Horsetail (8)
9	Purslane (9)	Spurge (3)	Grasses (16)	Nutsedge (8)
10	Common Groundsel (9)	Thistle (3)	Liverwort (15)	Bindweed (7)

Top 10 Weeds Identified for Woody Plant Materials Separated by Geography.

	Weed (Weighted Ranking)			
Region	North Central	Northeast	Southern	Western
Survey Count	55	31	184	82
1	Oxalis (17)	Bittercress (15)	Spurge (95)	Bittercress (30)
2	Yellow Nutsedge (14)	Crabgrass (10)	Nutsedge (65)	Liverwort (26)
3	Canada Thistle (12)	Oxalis (8)	Bittercress (62)	Oxalis (22)
4	Thistle (12)	Marestail (7)	Crabgrass (32)	Groundsel (22)
5	Nutsedge (11)	Grasses (7)	Oxalis (32)	Fireweed (17)
6	Common Groundsel (9)	Groundsel (7)	Nutgrass (22)	Thistle (14)
7	Bittercress (9)	Clover (6)	Dallisgrass (21)	Yellow Nutsedge (13)
8	Liverwort (8)	Wild Carrot (6)	Eclipta (19)	Nutsedge (12)
9	Groundsel (6)	Spurge (4)	Grasses (19)	Horsetail (12)
10	Bindweed (6)	Nutsedge (4)	Chickweed (15)	Pearlwort (12)

New Products / Solutions List - Weeds

Printed: 9/21/2007

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
AEB171509				Bayer Environmental Sciences	Nirtopyrazole, PPO Inhibitor	Control of Lamium, Stellaria, Viola, and Veronica spp.		No	No
<i>Alternaria destruens</i>	Smolder			UAP	Microbial biopesticide	Controls dodder (swamp, largeseed, field, and smallseed)	Biopesticide.	No	No
Amicarbazone	Dinamic			Arvesta	Triazolinone	Applied at rates up to 500 g ai/ha (0.45 lb ai/A) to the soil preplant or pre-emergence. It also has burndown activity. Soil and burndown activity is primarily on broadleaf weed species.		No	No
Aminopyralid	DE-750			Dow Agroscience	Pyridine (Cell division inhibitor)	Pre-emergence and post-emergence to control annual broadleaf weeds.		No	No
Beflubutamid	UBH-820			Ube Industries	Phenoxybutanamide (inhibits phytoene desaturase).	Post-emergence control of broadleaf weeds at rates of 170 to 255 g ai/ha (0.15 to 0.23 lb ai/A)		No	No
Bispyribac sodium	Regiment	Velocity		Valent USA / Kumiai	Pyrimidinyloxybenzoic acid (ALS inhibitor)	Post emergent control of Poa annua, Poa trivialis and annual broadleaf weeds in turf. Effective against hydrilla and other numerous other aquatic weeds.	Reduced Risk Product. Registered in turf and being evaluated for aquatic plant management. No plans to develop in ornamental crops.	No	Yes
Butafenacil	Rebin, Inspire			Syngenta	PPO Inhibitor	Controls important grasses, broadleaf and sedge weeds as a desiccant and defoliant.	OP Replacement. Cotton Defoliant	No	No
Carfentrazone-ethyl	Affinity Aim	QuickSilver T&O		FMC	Aryl triazolinone (PPO Inhibitor)	Numerous broadleaf weeds, including cocklebur and water hemp.	Reduced Risk Product. High interest by FMC to develop use in ornamentals for moss and algae control.	Yes	Yes
Catechin				Colorado StateUniversity	A component from Spotted knapweed (Centaurea maculosa)	Controls many weeds.		No	No
Cinidon-ethyl	Lotus			BASF	Isoindoldione (Inhibits protoporphyrinogen oxidase).	It is particularly active post-emergence on Galium aparine, among other broadleaf species, in small grains at 30 to 50 g ai/ha (0.027 to 0.045 lb ai/A).	Not registered in the USA.	No	No
Clethodim	Select Prism	Envoy		Valent USA	Cyclohexanone / ACCase inhibitor	Selective postemergence herbicide for control of annual and perennial grasses.	For use on Conifer trees, Non-Bearing Food Crops, Ornamentals and Non-Crop or Non-Planted areas. No additional data required on ornamental crops.	No	No
Clodinafop-propargyl	Discover			Syngenta	Pyridylory-phenoxy propionate (ACC ase)	Selective post-emergence of wild oats, annual grasses and other weeds.	Post-emergent Wheat Herbicide	No	No

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
Clomazone	Command	X		FMC	Isonazolidinone - Carotenoid biosynthesis inhibitor	Material controls a broad spectrum of grasses and broadleaf weeds.		No	No
Cloransulam-methyl	Firstrate			Dow AgroSciences	Sulfonamide / ALS Inhibitor	Pre-emergence or post-emergence to control annual broadleaf weeds		No	No
<i>Colletotrichum gloesporioides</i> f. sp <i>malvae</i>	Mallet WP Lock-Down			Encore Technologies	Fungus	It is pathogenic to round-leaved mallow, small flowered mallow, common mallow, and velvetleaf.	Biopesticide.	No	No
Cyhalofop-butyl	Clincher			Dow AgroSciences	Phenoxy-propionate	Post-emergence graminicide		No	Yes
DCPA	Dacthal			AMVAC Chemical Corp	Chlorthal dimethyl	Pre-emergence control of broadleaf weeds and grasses (particularly crabgrass)		No	No
Dichlobenil	Casoron	Casoron		Chemtura	Benzonitrile	Pre-emergent, early post emergent on grasses and broadleaves.	New sprayable formulation in development	Yes	No
Diclosulam	Strongar M			Dow AgroSciences	Sulfonamide / ALS Inhibitor	Pre- or post emergence for broadleaf weeds such as morning glory, cocklebur, velvetleaf and nutsedge		No	No
Diflufenzopyr	Overdrive			BASF	Pyridine / (Auxin transport inhibitor)	Annual grasses and broadleaf weeds. Sold in a pre-mix with dicamba.	Ornamental crop safety studies needed to ascertain crop safety to formulation. Not presently supported as a stand-alone product.	No	Yes
Dimethenamid-P	Outlook	Tower		BASF	Chloroacetamide, single isomer of dimethenamid	Annual grasses, broadleaf weeds, yellow nutsedge		Yes	Yes
Dithiopyr		Dimension		Dow AgroSciences	Pyridine (Cell division inhibitor)	Selective for annual grasses	Registered on turf and for use on landscape ornamentals. Considering registration on container and field grown ornamental and nursery plants.	Yes	No
<i>Drechslera monoceras</i>	MTB-951			Mitsui Chemical	Biopesticide	Barnyardgrass		No	No
F6875		F6875		FMC	Not disclosed.	Provides pre grass control and pre& post broadleaf weed control including YNS		Yes	No
Flazasulfuron	Mission, Katana			ISK	Sulfonylurea (ALS inhibitor)	Active against many grasses and broadleaf weeds with pre- and post-emergence activity at 50 grams/ha		No	No
Floransulam	Primus, Boxer			Dow AgroSciences	Triazolopyrimidine sulfonanilide, (ALS inhibitor)	Provides post-emergence control of broadleaf weeds, particularly Galium aparine (catchweed bedstraw) at rates of 0.0045 to 0.0067 lb ai/A.		No	No
Fluazolate	JV 485			Bayer Environmental Sciences and Monsanto	Pyrazole Benzoate	Pre-emergence control of broadleaf weeds and grasses		No	No

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
Flucarbazone-sodium	Everest 70WG			Arysta Life Sciences	Sulfonylaminocarbonyl-triazolinone,(ALS inhibitor)	Low rate post-emergence material that controls grass and certain broadleaf weeds		No	Yes
Flufenacet	Define			Bayer Environmental Sciences	Oxyacetimide	Soil applied for annual grasses and some broadleaf weeds.	No plans to develop for ornamental uses as a standalone product. Possibly as a pre-mix with iodosulfuron.	No	No
Flufenpyr-ethyl	S-3153			Valent USA	PPO Inhibitor	Excellent control of velvetleaf and morning glories.	No plans to develop for ornamental uses.	No	Yes
Flumetsulam	Broadstrike			Dow AgroSciences	Sulfonamide (ALS Inhibitor)	Controls broadleaf and grass weeds.		No	No
Flumiclorac-pentyl	Resource			Valent USA	N-phenylphthalimide derivative (PPO Inhibitor)	Post-emergence control of velvetleaf and other broadleaf weeds	No plans to develop for ornamental uses.	No	Yes
Flumioxazin	Valor Chateau Payload	SureGuard, BroadStar		Valent USA	N-phenylphthalimide derivative (PPO Inhibitor)	Broad spectrum, preemergent and early post control of annual broadleaf and grassy weeds. Contact activity against hydrilla and many other aquatic weeds. Low use rate product.	BroadStar Herbicide (0.25G) and SureGuard 51WDG registered for use in ornamentals, and being evaluated for use in aquatic plant management. Registrant is interested in adding new plants and pests to label.	Yes	No
Fluroxypyr	Starane Vista			Dow AgroSciences	Pyridine. (Cell division inhibitor)	Post-emergence applications to control annual and perennial broadleaf weeds.		No	Yes
Foramsulfuron	Option	Revolver		Bayer Environmental Sciences	Sulfonylurea (ALS inhibitor)	Post-emergence control of annual grasses/ryegrass transition & volunteer, tall fescue	Registered on warm season turf grasses. Registrant endorses adding new plants to label.	Yes	No
Glyphosate	RoundUp Pro, Touchdown Pro	Roundup		Monsanto	Glycine (EPSPS inhibitor)	Non-selective foliar systemic for control of a broad spectrum of emerged annual & perennial grasses, broadleaf weeds and woody plants.	Roundup Pro and Touchdown Pro: Used in areas such as airports, apartment complexes, Christmas trees & Christmas tree farms, ditch banks, dry ditches, dry canals, fencerows, golf courses, industrial sites, lumber yards, manufacturing sites, office complexes, ornamental nurseries, parks, parking areas, petroleum tank farms and plumbing installations, railroads, rangeland, recreational areas, residential areas (commercial applicators only), roadsides, schools, storage areas, utility substations, warehouse areas, wildlife refuges, other public areas and similar industrial and noncrop sites.	No	No
Glyphosate	Accord			Dow AgroSciences			Accord: Use in forests, utility rights-of-way, including aquatic areas and wildlife habitat areas within these sites.	No	No

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
Glyphosate	Aquamaster, Rodeo, Glypro			Dow AgroSciences			Aquamaster and Rodeo: For aquatic weed and brush control. Controls annual and perennial weeds and woody plants in and around aquatic and other noncrop sites; also for use in wildlife habitat areas, for perennial grass release and grass growth suppression.	No	No
Halosulfuron	Permit Sempra Sandea	Sedgehammer		Gowan	Sulfonylurea (ALS inhibitor)	Nutsedge, velvetleaf, cocklebur, and other broadleaf weeds	Methyl Bromide Alternative. Registered on turf and post-directed around woody ornamentals in landscape uses.	Yes	No
Imazamox	Raptor			BASF	Imidazolinone (ALS inhibitor)	Annual grasses and some broadleaf weeds	Product is being evaluated in selective non-crop areas. Due to potential crop injury, no plans to develop for production ornamentals.	No	Yes
Imazapic	Cadre	Plateau		BASF	Imidazolinone (ALS inhibitor)	Pre- and post-emergence control of annual grasses and broadleaf weeds.	Provides weed control and/or turf height suppression on pastures, rangeland, Federal Conservation Reserve Program land and noncropland areas. Support for Christmas tree production or other field production for invasive weed control on state specific request possible.	Yes	Yes
Imazapyr	Stalker	Chopper		BASF	Imidazolinone (ALS inhibitor)	Broad spectrum control of annual grasses and some broadleaf weeds	Applied to noncropland areas such as railroads and highway rights-of-way. Will not develop for ornamental uses.	No	No
Imazapyr + Diuron	Sahara			BASF	Imidazolinone (ALS inhibitor) + phenylurea	Controls most annual & perennial grasses and broadleaf weeds, in addition to many brush & vine species.	Applied to noncropland areas such as railroads and highway rights-of-way. Will not develop for ornamental uses.	No	No
Imazethapyr	Pursuit			BASF	Imidazolinone (ALS inhibitor)	Broad spectrum control of annual grasses and some broadleaf weeds			Yes
Imazosulfuron	V-10142			Valent USA	Sulfonylurea (ALS inhibitor)	Post-emergence control of sedges, certain broadleaf weeds, and some seedling grasses.	Registrant interested in evaluation of efficacy and tolerance of ornamental crops. Pending submission to EPA.	Yes	
Iodosulfuron	Autumn Husar			Bayer Environmental Sciences	Sulfonylurea (ALS inhibitor)	Early to mid-POST applications for control of grass and broadleaf weeds.	No plans to develop for ornamental uses as a standalone product. Possibly as a pre-mix with flufenacet.	No	Yes
Isoxaflutole	Balance			Bayer Environmental Sciences	Isoxazole	Soil applied for many annual grasses and some broadleaf weeds.		No	No

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
Mesosulfuron-methyl	Osprey Silverado			Bayer Environmental Sciences	Sulfonylurea (ALS inhibitor)	Early and mid post-emergence control of grasses and some broadleaf weeds including annual ryegrass, annual bluegrass, wild oat, canarygrass, downy brome, Japanese brome wild mustard, Tansy mustard, blue mustard.		No	Yes
Mesotrione	Callisto	Outplay		Syngenta	Cyclohexanedione, It disrupts carotenoid biosynthesis by inhibition of phydroxyphenylpyruvatedioxygenase.	Pre-and post-emergence control of annual grasses and broadleaf weeds, including sulfonylurea resistant weeds. Will be marketed as a stand-alone product, as well as a premix.	Need efficacy and crop safety data. Willing to expand label for ornamental uses.	Yes	Yes
Metosulam	Barko			Dow AgroSciences	ALS inhibitor	Preemergence control of broadleaf weeds		No	No
Orthosulfamuron	Strada			Isagro, USA	ALS inhibitor	Broadleaf and sedge weeds. It will be applied at 1.7-2.1 ozs/acre.	Interested in turf and ornamental uses. Registered in rice	Yes	No
Oxasulfuron	Dynam			Syngenta	Sulfonylurea, (ALS inhibitor)	Post-emergence for cocklebur, ragweed, and other broadleaf weeds	Registered in Brazil for use on Soybean.	No	No
Oxaziclomefene	MY-100			Bayer Environmental Sciences	Phenyl olazinone	Grass weeds		No	No
Pelargonic Acid	Scythe			Dow AgroSciences	Fatty acid	Contact, non-selective broad spectrum foliar applied material	Biopesticide.	No	No
Penoxsulam	DE-638 Granate Grasp			Dow AgroSciences.	Triazolopyrimidine sulfonamide (an ALS inhibitor)	It controls grasses, broadleaf and sedge weeds including SU resistant sedge. Weaknesses are sprangletop and broadleaf signalgrass and large barnyardgrass. It will be applied at 10-50 g ai/ha		No	Yes
Pethoxamid	Successor 600			Tokuyama	Acetamide	Selectively controls certain grasses and broadleaf weeds			
Picolinafen	Pico Sniper			BASF	Aryloxyypicolinamide (inhibits phytoene desaturase)	Post-emergence use to control annual broadleaf weeds. The application rate will be 50 g ai/ha (0.045 lb ai/A). It will be sold as a pre-mix	Registration pending in Canada. No plans to develop for ornamental us in the USA.	No	No
Profoxydim	Aura Tetris			BASF	Cyclohexanone graminicide, (ACCCase inhibitor)	Controls grass weeds at use rates ranging from 50 to 200 g ai/ha (0.045 to 0.18 lb ai/ha)		No	No
Propoxycarbazone	Olympus			Bayer Environmental Sciences	Sulfonylaminocarbonyl triazolinone (ALS inhibitor)	Post-emergence grass weed control. Broadleaf weeds in the Cruciferous family are also controlled. Also controls Bromus sp.		No	No

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
Propyzamide	Rapsol			Sumitomo		Controls annual grasses and broadleaf weeds		No	No
Prosulfuron	Peak			Syngenta	Sulfonylurea (ALS inhibitor)	Post-emergence for broadleaf weeds such as cocklebur, kochia, lambsquarter, pigweed, and velvetleaf	Registered in the US. Used in Cereal Grains	No	No
<i>Puccinia thlaspeos</i>	Road Warrior			Greenville Farms	Biological herbicide- Dyers Woad Rust	Specific to Dyer's Woad		No	No
Pyraflufen-ethyl	ET			Nichino America	Protox inhibitor	Post-emergence herbicide for general non-selective control of weeds or use as desiccant. Low use rates, 1 g ai/A			
Pyribenzoxium	Pyanchor			Dow AgroSciences	Benzophenone	Post emergence material with activity on numerous annual and perennial grasses, broadleaf and sedges.			
Pyriftalid	Apiro			Syngenta	Acetolactate synthase inhibitor	Mainly a grass material, pre- and post-emergence for barnyardgrass.	Registered in Japan and So. Korea. Used in Rice Production.	No	No
Quinclorac	Facet Paramount	Drive		BASF	Quinoline carboxylic acid	Post-emergence control of annual grasses and broadleaf weeds	Registered in turf. No plans to develop for ornamental uses due to plant injury.	No	No
Sethoxydim	Poast	Vantage		BASF	Cyclohexanone (ACCase inhibitor)	Post emergence grass herbicide	For use in bedding plants, cut flowers, Christmas trees, centipedegrass & fine fescue turf, fine fescue seed production, nonbearing food crops, wildflowers, and noncrop sites.	Yes	No
S-metolachlor	Dual Magnum	Pennant Magnum	100-950	Syngenta	Chloracetanilide	Pre-emergent herbicide -controls many annual grasses, certain annual broadleaf weeds, and yellow nutsedge.	Pennant MAGNUM may be used on commercial and residential warm-season turfgrasses and other noncrop land, including, but not limited to the following: airports, roadsides, golf courses, sports fields, public recreational areas, ornamental gardens, cemeteries, other landscaped areas, etc. Pennant MAGNUM may also be used in and around container and field-grown ornamentals, non-bearing nursery stock, and on sod farms. DO NOT USE IN GREENHOUSES OR OTHER ENCLOSED STRUCTURES. Registered in ornamentals. Registrant endorses adding new plants to the label.	Yes	No

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
Sulfentrazone	Spartan	Dismiss		FMC	Aryl triazolinone (PPO Inhibitor)	Low use rate pre-emergence broadleaf herbicide with contact activity and residual soil activity.	High interest by FMC to develop use in ornamentals. Need to characterize nutsedge activity and length of residual control.	Yes	No
Sulfosulfuron	Maverick	Outrider		Monsanto	Sulfonylurea (ALS inhibitor)		Registered for roadside turf. Interested in labeling in fine turf as Battalion for selective grass control. No plans to develop for ornamental uses.	No	No
Tepraloxymid	Equinox			BASF	Cyclohexanedione, (ACCcase inhibitor)	Provides post-emergence grass weed control in broadleaf crops, at rates of 50 to 75 g ai/ha (0.045 to 0.067 lb ai/A). At rates of 100 g ai/ha (0.089 lb ai/A) it will control perennials such as johnsongrass, and suppress Bermuda grass.	Registered in soybeans. No plans for development in ornamentals for the foreseeable future.	No	
TM 435				Arvesta	Not disclosed.	Post emergence control of broadleaf weeds			
Tralkoxydim	Achieve			Syngenta	Cyclohexandione (ACCcase inhibitor)	Post-emergence for grass weeds such as wild oats, green and yellow foxtail, and annual ryegrass.	Registered in US and Canada. Used on cereal crops wheat, barley.	No	Yes
Triasulfuron	Amber			Syngenta	Sulfonylurea (ALS inhibitor)	Post emergent control over 50 broadleaf weeds, suppresses annual ryegrass./	Registered in US- west of the Mississippi. Used in Wheat, Barley, Pastures, Rangeland	No	
Trifloxysulfuron	Enfield Envoke	Monument	100-1134	Syngenta	Sulfonylurea (ALS inhibitor)	Provides post-emergent control of certain broadleaf, grass weeds and sedges in turf.	Methyl Bromide Alternative. Need efficacy and crop safety data to support an ornamental registration.	Yes	No

Section 7

Herbaceous Shelf Life

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26986 N	Plant Impact	Poinsettia	Argylene XM	Greenhouse	2006	CA	Reid	Foliar	'Prestigo'	C	7/11/2007
	Plant Impact	<i>Euphorbia pulcherrima</i>	Sodium Silver Thiosulfate		2006	CA	Reid	Foliar	'Hot Pink'	C	7/11/2007
					2006	CA	Reid	Foliar	'Yellow'	C	7/11/2007
					2006	CA	Reid	Foliar	'Premium Red'	C	7/11/2007
					2006	CA	Reid	Foliar	'Premium Red'	C	7/11/2007
25876 C	Plant Impact	Poinsettia	Exilis Plus	Greenhouse	2006	TX	Pembernton			P	
	Plant Impact	<i>Euphorbia pulcherrima</i>	6-Benzyladenine								
25873 C	Plant Impact	Poinsettia	Fascination	Greenhouse	2006	CA	Reid	Foliar	'Prestigo'	C	7/11/2007
	Plant Impact	<i>Euphorbia pulcherrima</i>	6-Benzyladenine + Gibberellic Acid		2006	CA	Reid	Foliar	'Hot Pink'	C	7/11/2007
					2006	CA	Reid	Foliar	'Yellow'	C	7/11/2007
					2006	CA	Reid	Foliar	'Premium Red'	C	7/11/2007
					2006	TX	Pembernton			P	
25877 C	Plant Impact	Poinsettia	MaxCel	Greenhouse	2006	CA	Reid	Foliar	'Prestigo'	C	7/11/2007
	Plant Impact	<i>Euphorbia pulcherrima</i>	6-Benzyladenine		2006	CA	Reid	Foliar	'Hot Pink'	C	7/11/2007
					2006	CA	Reid	Foliar	'Yellow'	C	7/11/2007
					2006	CA	Reid	Foliar	'Premium Red'	C	7/11/2007
					2006	TX	Pembernton			P	
25879 C	Plant Impact	Poinsettia	ProVide	Greenhouse	2006	CA	Reid	Foliar	'Prestigo'	C	7/11/2007
	Plant Impact	<i>Euphorbia pulcherrima</i>	GA4+7		2006	CA	Reid	Foliar	'Hot Pink'	C	7/11/2007
					2006	CA	Reid	Foliar	'Yellow'	C	7/11/2007
					2006	CA	Reid	Foliar	'Premium Red'	C	7/11/2007
					2006	TX	Pembernton			P	
26001 N	Plant Impact	Poinsettia	TDZ	Greenhouse							
	Plant Impact	<i>Euphorbia pulcherrima</i>	Thidiazuron								

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Herbaceous Shelf Life

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG				
25947	N Plant Impact <i>Plant Impact</i>	New Guinea Impatiens <i>Impatiens New Guinea hyb</i>	Exilis Plus <i>6-Benzyladenine</i>	Greenhouse	2006	FL	Gibson			P					
					2006	TX	Pemberton			P					
25944	N Plant Impact <i>Plant Impact</i>	New Guinea Impatiens <i>Impatiens New Guinea hyb</i>	Fascination <i>6-Benzyladenine + Gibberellic Acid</i>	Greenhouse	2006	FL	Gibson			P					
					2006	TX	Pemberton			P					
25950	N Plant Impact <i>Plant Impact</i>	New Guinea Impatiens <i>Impatiens New Guinea hyb</i>	ProVide <i>GA4+7</i>	Greenhouse	2006	FL	Gibson			P					
					2006	TX	Pemberton			P					
25862	N Plant Impact <i>Plant Impact</i>	Geranium <i>Pelargonium sp.</i>	Exilis Plus <i>6-Benzyladenine</i>	Greenhouse	2006	CA	Reid			P					
					2006	MI	Runkle			P					
					2006	NY	Miller			P					
					2006	TX	Pemberton			P					
					2007	LA	Chen			P					
					2007	NY	Miller			P					
					2007	TX	Pemberton			P					
25859	N Plant Impact <i>Plant Impact</i>	Geranium <i>Pelargonium sp.</i>	Fascination <i>6-Benzyladenine + Gibberellic Acid</i>	Greenhouse	2006	CA	Reid			P					
					2006	LA	Chen	Sprenc	'Startrack Purple'	C	12/2/2006				
					<i>Trial Results: Less flowers than untreated Check by 14 DAT</i>										
					2006	LA	Chen	Sprenc	'Startrack Violet'	C	12/2/2006				
					<i>Trial Results: Less flowers than untreated Check by 14 DAT</i>										
					2006	LA	Chen	Sprenc	'Holiday Purple'	C	12/2/2006				
					<i>Trial Results: Less flowers than untreated Check by 14 DAT</i>										
					2006	LA	Chen	Sprenc	'Cascade Hot Pink'	C	12/2/2006				
					<i>Trial Results: Less flowers than untreated Check by 14 DAT</i>										
					2006	MI	Runkle			P					
					2006	NY	Miller			P					
					2006	TX	Pemberton			P					
					2007	LA	Chen			P					
2007	NY	Miller			P										
2007	TX	Pemberton			P										
25860	C Plant Impact <i>Plant Impact</i>	Geranium <i>Pelargonium sp.</i>	Fresco <i>Gibberellic Acid + 6-Benzyladenine</i>	Greenhouse											

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
25863	C Plant Impact <i>Plant Impact</i>	Geranium	MaxCel	Greenhouse	2006	LA	Chen	Sprenc	'Startrack Purple'	C	12/2/2006
		<i>Pelargonium sp.</i>	<i>6-Benzyladenine</i>								
					2006	LA	Chen	Sprenc	'Startrack Violet'	C	12/2/2006
					2006	LA	Chen	Sprenc	'Holiday Purple'	C	12/2/2006
					2006	LA	Chen	Sprenc	'Cascade Hot Pink'	C	12/2/2006
					2007	NY	Miller			P	
25864	C Plant Impact <i>Plant Impact</i>	Geranium	NovaGib	Greenhouse	2006	LA	Chen	Sprenc	'Startrack Purple'	C	12/2/2006
		<i>Pelargonium sp.</i>	<i>GA4+7</i>								
					2006	LA	Chen	Sprenc	'Startrack Violet'	C	12/2/2006
					2006	LA	Chen	Sprenc	'Holiday Purple'	C	12/2/2006
					2006	LA	Chen	Sprenc	'Cascade Hot Pink'	C	12/2/2006
					2007	LA	Chen			P	
					2007	TX	Pemberton			P	
25865	N Plant Impact <i>Plant Impact</i>	Geranium	ProVide	Greenhouse	2006	CA	Reid			P	
		<i>Pelargonium sp.</i>	<i>GA4+7</i>								
					2006	MI	Runkle			P	
					2006	NY	Miller			P	
					2006	TX	Pemberton			P	
26072	C Plant Impact <i>Plant Impact</i>	Geranium <i>Pelargonium sp.</i>	STS + BA <i>STS + BA</i>	Greenhouse	2006	CA	Reid			P	
25999	N Plant Impact <i>Plant Impact</i>	Geranium <i>Pelargonium sp.</i>	TDZ <i>Thidiazuron</i>	Greenhouse							
0	C Plant Impact <i>Plant Impact</i>	TBD	tbd	Greenhouse	2007	MI	Runkle			P	
		<i>TBD</i>	<i>tbd</i>								
					2007	MI	Runkle			P	
					2007	MI	Runkle			P	
					2007	MI	Runkle			P	
					2007	MI	Runkle			P	
					2007	MI	Runkle			P	
					2007	NY	Miller			P	
					2007	NY	Miller			P	
			2007	NY	Miller			P			

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Herbaceous Shelf Life

Printed: 9/20/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG			
26985	N Plant Impact Plant Impact	Tulip Tulipa sp.	Argylene XM Sodium Silver Thiosulfate	Greenhouse	2006	CA	Reid	Foliar	'Hollandia'	C	7/11/2007			
					<i>Trial Results: No significant increase in shelf life at 0.5 mM</i>									
					2006	CA	Reid	Foliar	'Red Present'	C	7/11/2007			
					<i>Trial Results: No significant increase in shelf life at 0.5 mM</i>									
					2006	CA	Reid	Foliar	'Purple Prince'	C	7/11/2007			
					2006	CA	Reid	Foliar	'Purple Prince'	C	7/11/2007			
					<i>Trial Results: No significant increase in shelf life at 0.5 mM</i>									
					2006	CA	Reid	Foliar	'Pink Impression'	C	7/11/2007			
					<i>Trial Results: No significant increase in shelf life at 0.5 mM</i>									
25869	C Plant Impact Plant Impact	Tulip Tulipa sp.	Exilis Plus 6-Benzyladenine	Greenhouse	2006	NY	Miller			P				
25866	C Plant Impact Plant Impact	Tulip Tulipa sp.	Fascination 6-Benzyladenine + Gibberellic Acid	Greenhouse	2006	CA	Reid	Foliar	'Pink Impression'	C	7/11/2007			
					<i>Trial Results: Reduced leaf yellowing but no other positive effects at 100 ppm</i>									
					2006	CA	Reid	Foliar	'Purple Prince'	C	7/11/2007			
					<i>Trial Results: Undesirable effect - increased scape length at 100 ppm</i>									
					2006	CA	Reid	Foliar	'Red Present'	C	7/11/2007			
					<i>Trial Results: Reduced leaf yellowing but no other positive effects at 100 ppm</i>									
					2006	CA	Reid	Foliar	'Hollandia'	C	7/11/2007			
					<i>Trial Results: Undesirable effect - increased scape length and bending at 100 ppm</i>									
					2006	CA	Reid	Foliar	'Pink Impression'	C	7/11/2007			
					<i>Trial Results: Reduced leaf yellowing but no other positive effects at 100 ppm</i>									
					2006	NY	Miller			P				
25870	C Plant Impact Plant Impact	Tulip Tulipa sp.	MaxCel 6-Benzyladenine	Greenhouse	2006	CA	Reid	Foliar	'Pink Impression'	C	7/11/2007			
					<i>Trial Results: Reduced leaf yellowing but no other positive effects at 100 ppm</i>									
					2006	CA	Reid	Foliar	'Purple Prince'	C	7/11/2007			
					<i>Trial Results: Reduced leaf yellowing but no other positive effects at 100 ppm</i>									
					2006	CA	Reid	Foliar	'Hollandia'	C	7/11/2007			
					2006	CA	Reid	Foliar	'Hollandia'	C	7/11/2007			
					<i>Trial Results: Reduced leaf yellowing but no other positive effects at 100 ppm</i>									
					2006	CA	Reid	Foliar	'Red Present'	C	7/11/2007			
					<i>Trial Results: Reduced leaf yellowing but no other positive effects at 100 ppm</i>									
25872	C Plant Impact Plant Impact	Tulip Tulipa sp.	ProVide GA4+7	Greenhouse	2006	CA	Reid	Foliar	'Hollandia'	C	7/11/2007			
					<i>Trial Results: Undesirable effect - increased scape length and bending at 100 ppm</i>									
					2006	CA	Reid	Foliar	'Purple Prince'	C	7/11/2007			
					<i>Trial Results: Increased flower life and reduced leaf yellowing but increased scape length at 100 ppm</i>									
					2006	CA	Reid	Foliar	'Red Present'	C	7/11/2007			
					<i>Trial Results: Reduced leaf yellowing but increased scape length at 100 ppm</i>									
					2006	CA	Reid	Foliar	'Red Present'	C	7/11/2007			
					<i>Trial Results: Reduced leaf yellowing but increased scape length at 100 ppm</i>									
					2006	CA	Reid	Foliar	'Pink Impression'	C	7/11/2007			
					<i>Trial Results: Increased flower life and reduced leaf yellowing but increased scape length at 100 ppm</i>									
2006	NY	Miller			P									
26000	N Plant Impact Plant Impact	Tulip Tulipa sp.	TDZ Thidiazuron	Greenhouse										

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Woody Ornamental Branching

Printed: 9/20/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG		
25887	N Plant Impact <i>Plant Impact</i>	Hydrangea <i>Hydrangea sp.</i>	Cyclanalide	Greenhouse	2006	CA	Lieth	Foliar	H. macrophylla 'Angel Robe'	C	7/17/2007		
					<i>Trial Results: No increase in branching and growth, no injury at 112 ppm + Latron; 1 application looked better</i>								
					2006	FL	Gibson				C	6/27/2007	
					2006	GA	Czarnota				P		
					2007	KY	Fulcher		H. quercifolia	P			
25890	C Plant Impact <i>Plant Impact</i>	Hydrangea <i>Hydrangea sp.</i>	Exilis Plus <i>6-Benzyladenine</i>	Greenhouse	2006	FL	Gibson			C	6/27/2006		
					2006	GA	Czarnota				P		
					2007	KY	Fulcher				P		
								H. quercifolia					
25888	N Plant Impact <i>Plant Impact</i>	Hydrangea <i>Hydrangea sp.</i>	Fascination <i>6-Benzyladenine + Gibberellic Acid</i>	Greenhouse	2006	CA	Lieth	Foliar	H. macrophylla 'Angel Robe'	C	7/17/2007		
					<i>Trial Results: Significant injury but increased height, may increase branching at 500 ppm; should test a lower rate</i>								
					2006	GA	Czarnota			P			
25889	C Plant Impact <i>Plant Impact</i>	Hydrangea <i>Hydrangea sp.</i>	Fresco <i>Gibberellic Acid + 6-Benzyladenine</i>	Greenhouse	2006	FL	Gibson			C	6/27/2007		
25891	C Plant Impact <i>Plant Impact</i>	Hydrangea <i>Hydrangea sp.</i>	MaxCel <i>6-Benzyladenine</i>	Greenhouse	2006	CA	Lieth	Foliar	H. macrophylla 'Angel Robe'	C	7/17/2007		
					<i>Trial Results: No increase in branching at 500 ppm; unacceptable injury</i>								
25893	N Plant Impact <i>Plant Impact</i>	Hydrangea <i>Hydrangea sp.</i>	ProVide <i>GA4+7</i>	Greenhouse	2006	CA	Lieth	Foliar	H. macrophylla 'Angel Robe'	C	7/17/2007		
					<i>Trial Results: No increase in branching at 500 ppm; no injury</i>								
					2006	GA	Czarnota			P			
25894	C Plant Impact <i>Plant Impact</i>	Holly <i>Ilex sp.</i>	Cyclanalide	Greenhouse	2006	AL	Keever			I. crenata 'Sky Pencil'	C	9/26/2006	
					<i>Trial Results: Two applications increased shoot counts with no injury; generally no effect on plant height, width and GI</i>								
					2007	KY	Fulcher				P		
					2007	KY	Fulcher				P		
					2007	XX	tbd				P		
					2007	XX	tbd			P			
25897	C Plant Impact <i>Plant Impact</i>	Holly <i>Ilex sp.</i>	Exilis Plus <i>6-Benzyladenine</i>	Greenhouse	2007	KY	Fulcher			I. opaca 'Cedar Hill'	P		
					2007	KY	Fulcher				P		
					2007	XX	tbd				P		
					2007	XX	tbd				P		

Woody Oramental Branching

Printed: 9/20/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
25895	N Plant Impact <i>Plant Impact</i>	Holly <i>Ilex sp.</i>	Fascination <i>6-Benzyladenine + Gibberellic Acid</i>	Greenhouse	2006	AL	Keever		I. crenata 'Sky Pencil'	C	9/6/2006
											<i>Trial Results: Did not increase shoot counts; no injury; generally no significant effect on plant height, width and GI</i>
					2007	XX	tbd			P	
					2007	XX	tbd			P	
25898	C Plant Impact <i>Plant Impact</i>	Holly <i>Ilex sp.</i>	MaxCel <i>6-Benzyladenine</i>	Greenhouse	2006	AL	Keever		I. crenata 'Sky Pencil'	C	9/6/2006
											<i>Trial Results: Increase shoot counts at 7, but not at 12 WAT; no injury; generally no significant effect on plant height, width and GI</i>
25900	N Plant Impact <i>Plant Impact</i>	Holly <i>Ilex sp.</i>	ProVide <i>GA4+7</i>	Greenhouse	2006	AL	Keever		I. crenata 'Sky Pencil'	C	9/6/2006
											<i>Trial Results: Did not increase shoot counts; no injury; generally no significant effect on plant height, width and GI</i>
					2007	XX	tbd			P	
					2007	XX	tbd			P	
26859	C Plant Impact <i>Plant Impact</i>	Sourwood, Sorrel Tree <i>Oxydendrum arboreum</i>	Cyclanallide	Field Container	2007	KY	Fulcher			P	
26860	C Plant Impact <i>Plant Impact</i>	Sourwood, Sorrel Tree <i>Oxydendrum arboreum</i>	Exilis Plus <i>6-Benzyladenine</i>	Field Container	2007	KY	Fulcher			P	
27013	A Plant Impact <i>Plant Impact</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Cyclanallide	Field Container							
27012	A Plant Impact <i>Plant Impact</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Cyclanallide	Field Container							
25880	N Plant Impact <i>Plant Impact</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Cyclanallide	Greenhouse	2006	AL	Keever		R. roukhanense 'Korean Stardust'	C	9/6/2006
											<i>Trial Results: Increased shoot counts with no injury; no effect on plant height, width and GI; 2 applications more effective</i>
					2006	CA	Lieth	Foliar	'Remembrance'	C	7/17/2007
											<i>Trial Results: Two applications at 112 ppm + Latron reduced branching and growth but increased flowering; no injury</i>
					2006	GA	Czarnota			P	
					2006	LA	Chen	Foliar	Azalea 'Amelia Rose'	C	12/12/2006
											<i>Trial Results: Marginal increase on branching</i>
					2006	TX	Pemberton			P	
25883	C Plant Impact <i>Plant Impact</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Exilis Plus <i>6-Benzyladenine</i>	Greenhouse	2006	GA	Czarnota			P	
					2006	TX	Pemberton			P	
27014	A Plant Impact <i>Plant Impact</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Fascination <i>6-Benzyladenine + Gibberellic Acid</i>	Field Container							

Woody Oramental Branching

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PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
25881	N Plant Impact <i>Plant Impact</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	Fascination <i>6-Benzyladenine + Gibberellic Acid</i>	Greenhouse	2006	AL	Keever		R. roukhanense 'Korean Stardust'	C	9/6/2006
											<i>Trial Results: Did not significantly increase shoot counts; no injury and no effect on plant height, width and GI</i>
					2006	CA	Lieth	Foliar	'Remembrance'	C	7/17/2007
											<i>Trial Results: Decreased branching at 500 ppm; no injury, no effect on growth and flowering</i>
					2006	GA	Czarnota			P	
					2006	TX	Pemberton			P	
21496	C Plant Impact <i>Plant Impact</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	MaxCel <i>6-Benzyladenine</i>	Field Container	2003	AL	Gilliam			C	1/1/1975 4/1/2004
21495	N Plant Impact <i>Plant Impact</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	MaxCel <i>6-Benzyladenine</i>	Greenhouse	2003	AL	Keever			C	1/1/1975 4/1/2004
					2006	AL	Keever		R. roukhanense 'Korean Stardust'	C	9/6/2006
											<i>Trial Results: Increased shoot counts with no injury; no effect on plant height, width and GI</i>
					2006	CA	Lieth	Foliar	'Remembrance'	C	7/17/2007 4/26/2007
											<i>Trial Results: Decreased branching at 500 ppm; no injury, no effect on growth and flowering</i>
25885	C Plant Impact <i>Plant Impact</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	NovaGib <i>GA4+7</i>	Greenhouse							
25886	N Plant Impact <i>Plant Impact</i>	Azalea, & Rhododendron <i>Rhododendron sp.</i>	ProVide <i>GA4+7</i>	Greenhouse	2006	AL	Keever		R. roukhanense 'Korean Stardust'	C	9/6/2006
											<i>Trial Results: Did not increase shoot counts: no injury and no effect on plant height, width and GI</i>
					2006	CA	Lieth	Foliar	'Remembrance'	C	7/17/2007
											<i>Trial Results: Decreased branching at 500 ppm; no injury, no effect on growth and flowering</i>
					2006	GA	Czarnota			P	
					2006	TX	Pemberton			P	
25901	C Plant Impact <i>Plant Impact</i>	Rose <i>Rosa sp.</i>	Cyclanalide	Greenhouse	2006	CA	Lieth	Foliar	'Kardinal'	C	7/17/2007
											<i>Trial Results: No increase in branching and growth, no injury at 112 ppm + Latron</i>
					2006	GA	Czarnota			P	
					2006	TX	Pemberton			P	
25904	C Plant Impact <i>Plant Impact</i>	Rose <i>Rosa sp.</i>	Exilis Plus <i>6-Benzyladenine</i>	Greenhouse	2006	GA	Czarnota			P	
					2006	TX	Pemberton			P	
25902	N Plant Impact <i>Plant Impact</i>	Rose <i>Rosa sp.</i>	Fascination <i>6-Benzyladenine + Gibberellic Acid</i>	Greenhouse	2006	CA	Lieth	Foliar	'Kardinal'	C	7/17/2007
											<i>Trial Results: No increase in branching and growth, no injury at 500 ppm</i>
					2006	GA	Czarnota			P	
					2006	TX	Pemberton			P	
25905	C Plant Impact <i>Plant Impact</i>	Rose <i>Rosa sp.</i>	MaxCel <i>6-Benzyladenine</i>	Greenhouse	2006	CA	Lieth		'Kardinal'	C	7/17/2007
											<i>Trial Results: Increase in branching but significant injury at 500 ppm; should test lower rates</i>

Woody Oramental Branching

Printed: 9/20/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
25907	N Plant Impact <i>Plant Impact</i>	Rose <i>Rosa sp.</i>	ProVide <i>GA4+7</i>	Greenhouse	2006	CA	Lieth	Foliar	'Kardinal'	C	7/17/2007
					2006	GA	Czarnota			P	
					2006	TX	Pemberton			P	
<i>Trial Results: No increase in branching and growth, no injury at 500 ppm</i>											
0	C Plant Impact <i>Plant Impact</i>	TBD <i>TBD</i>	tbd <i>tbd</i>	Field Container	2007	AL	Keever			P	
					2007	AL	Keever			P	
					2007	AL	Keever			P	
					2007	AL	Keever			P	

Woody Ornamental Pruning

Printed: 9/20/2007

PR # / Priority	Target/Pest Name	Crop	Product	Production Site	Trial Year	State	Researcher	Application Type	Species / Cultivar	Status	Dates to HQ / MFG
26867 C	Phytotoxicity <i>Phytotoxicity</i>	Loropetalum <i>Loropetalum sp.</i>	Atrimmec <i>Dikegulac sodium</i>	Commercial Lan	2007	LA	Chen			P	
26866 C	Phytotoxicity <i>Phytotoxicity</i>	Loropetalum <i>Loropetalum sp.</i>	Cutless 0.33G <i>Flurprimidol</i>	Commercial Lan	2007	LA	Chen			P	
26865 C	Phytotoxicity <i>Phytotoxicity</i>	Azalea <i>Rhododendron sp.</i>	Atrimmec <i>Dikegulac sodium</i>	Field Container	2007	LA	Chen			P	
26864 C	Phytotoxicity <i>Phytotoxicity</i>	Azalea <i>Rhododendron sp.</i>	Topflor <i>Flurprimidol</i>	Field Container	2007	LA	Chen			P	

New Products / Solutions List - Plant Growth Regulators

Printed: 9/21/2007

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
1,2,6-DIPN	Amplify			UAP	Diisopropyl naphthalene	Controls sprout on storage potatoes. Works in synergy with CIPC		No	No
1-MCP	Smart-Fresh			AgroFresh Inc.	Cyclopropene	Inhibits the attachment of ethylene to ethylene receptor for a post- harvest storage extension		No	Yes
6-Benzyladenine	MaxCel			Valent USA	Benzylamicyo-purine	Branching agent	Not currently labeled on ornamentals. Planning to label for use in ornamental crops. Need efficacy and crop safety data.	Yes	No
6-Benzyladenine	Exilis Plus	Configure		Fine Chemicals			Registered for use on Christmas cactus, plantain lily and purple coneflower. Registrant endorses adding new ornamental plants to label.	Yes	No
6-Benzyladenine	RiteWay			Nufarm Americas	Benzylamicyo-purine	Branching agent	Not currently labeled on ornamentals. Planning to label for use in ornamental crops. Need efficacy and crop safety data.	Yes	No
6-Benzyladenine + Gibberelic Acid A4&A7		Fascination		Valent USA	Benzylamicyo-purine and gibberelic acid A4 and A7	Prevents leaf yellowing, increases flower size, prolongs flower life.	Registered for use on lilies, poinsettia and other ornamental plants. Registrant endorses adding new ornamental plants to label.	Yes	No
6-Benzyladenine + Gibberelic Acid A4&A7		Fresco		Fine Chemicals	Benzylamicyo-purine and gibberelic acid A4 and A7	Prevent leaf yellowing, prolongs flower life in lilies.	Registered for use on lilies and poinsettia. Registrant endorses adding new ornamental plants to label.	Yes	No
6-Benzyladenine + Gibberelic Acid A4&A7	RiteSize, Typy			Nufarm Americas	Benzylamicyo-purine and gibberelic acid A4 and A7	Prevent leaf yellowing, prolongs flower life in lilies.	Not currently labeled on ornamentals. Planning to label for use in ornamental crops. Need efficacy and crop safety data.	Yes	No
Ammonium thiosulfate	ATS			Siemer	Ammonium thiosulfate	Active as blossom thinner		No	No
Ammonium/Calcium Nitrate	Bud Break			Western Farm Services	Ammonium/Calcium Nitrate	Promotes uniform bud break		No	No
Aviglycine	Retain			Valent USA	Aminoethoxyvinylglycine Lysine analog	Plant growth regulator that improves harvest management by inhibiting ethylene biosynthesis.		No	No
<i>Bacillus cereus</i> Strain BP01				Microflo	Bacteria	Cotton in boll retention and size. It also promotes increase in root mass, earlier fruit initiation and increased fruit retention.	Biopesticide	No	No

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
Chlormequar Chloride		Cycocel		BASF / Olympic Horticultural	Chlormequar Chloride	PGR on azaleas, poinsettias, and geraniums.	BASF will submit an extensive, revised label to the EPA. Tank mix evaluations may be supported by Olympic Horticultural.	Yes	No
Clofencet	Detasselor			Monsanto	Carboxylic acid	Hybridizing agent		No	No
Copper Ethylenediamine	Inferno			DuPont	Copper organicomplex	Desiccant and harvest aid		No	No
Cyclanilide		Tiburon		Bayer Environmental Sciences, OHP, Inc.		Promotes branching	Label submitted, but more evaluations are needed to determine optimal uses.	Yes	?
Diphenylamine				Syngenta	Diphenylamine	Protects the fruit from scald		No	No
Ethephon	Cerone Proxy Prep			Bayer Environmental Sciences,	Mimics the effect of ethylene gas.	Promotes earlier coloration and maturity, promotes abscission and/or accelerates ripening. Will delay bloom in peach and blueberry		No	No
Ethephon	Florel			DuPont	Mimics the effect of ethylene gas.	Promotes earlier coloration and maturity, promotes abscission and/or accelerates ripening. Will delay bloom in peach and blueberry		No	No
Flurprimidol		Topflor/Cutless		SePRO	pyrimidine - GA inhibitor	Growth suppression of container ornamental plants (Topflor) and landscape ornamental plants (Cutless)	Currently registered on container ornamentals, landscape ornamentals, and turfgrass.	Yes	No
Gibberellic Acid	Provide	ProGib T&O		Valent USA	Gibberelic acid A3	Promotes cell elongation and plant growth.	Registered on lilies, ornamentals (azela, calla lily, camellia, geranium, pomptom chrysanthemum, spathiphyllum), cut flowers (aster, baby's breath, matthiola, delphinium, larkspur, Queen Ann's lace, statice, sweet William) unspecified bedding plants, unspecified annual and perennial potted crops and turfgrass. Registrant endorses adding new ornamental plants to label.	Yes	No

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
Gibberellic Acid	NovaGib	Florgib		Fine Chemicals	Gibberelic acid A3	Promotes cell elongation and plant growth.	Registered on lilies, ornamentals (azela, calla lily, camellia, geranium, pomptom chrysanthemum, spathiphyllum), cut flowers (aster, baby's breath, matthiola, delphinium, larkspur, Queen Ann's lace, statice, sweet William) unspecified bedding plants, unspecified annual and perennial potted crops and turfgrass. Registrant endorses adding new ornamental plants to label.	Yes	No
Gibberellic Acid	GibGro			Nufarm Americas	Gibberelic acid A3	Promotes cell elongation and plant growth.	Not currently labeled on ornamentals. Planning to label for use in ornamental crops. Need efficacy and crop safety data.	Yes	No
Glutamic Acid	AuxiGrow			Emerald Bioagriculture	Glutamic acid	Enhances crop growth and yield		No	No
Harpin Protein	Messenger			Eden Bioscience	Protein which switches natural plant defenses in plant	Enhance, fruit set, size and yield. Also shown to be a disease resistance activator.	Biopesticide. Registrant is interested in developing for ornamentals. Need efficacy and crop safety data.	Yes	No
LPE 94T				NutraPark	Phospholipid	Ripening and shelf life enhancement	Biopesticide.	No	No
Mepiquat Chloride	Pix			BASF and DuPont	Quarternary ammonium	Shortens plant internodes and plant height		No	No
NAA	Tre-Hold			AMVAC Chemical Corp	Napthaleneacetic Acid	Tree sucker control, manages crop load and supresses axillary bud development. Removes nuisance fruit.	RED document under preparation at EPA	No	No
Paclbutrazol		Bonzi	100-996	Syngenta	Chlorophenyl Triazole	Plant Growth Regulator	Registered for use on Poinsettia, Bedding Plants, Chrysanthemums, Geraniums, Bulb Crops, Woody Ornamentals such as Azaleas, Hibiscus, Hydrangea. Need additional data on woody ornamentals and perennials crops??.	Yes	No
Paclbutrazol		Clipper		Syngenta	Chlorophenyl Triazole	Ornamental tree shoot growth inhibitor.	Need additional efficacy and crop safety on woody and conifer trees.	Yes	No
Prohexadione Calcium	Apogee			Kumiai Chemical	Calcium carboxylate	Reduces vegetative growth-better balance between canopy development and fruit production	BASF has returned the ornamental rights back to Kumiai who is seeking a partner to evaluate the product on ornamentals.	Yes	No
Sodium nitrophenolate	Atonik			Asahi Mfg. Ltd.	Combination of sodium nitrophenolates and nitroguatalolate	Increased nutrient uptake, resulting in improved yields		No	No
Thidiazuron	TDZ			Bayer Environmental Sciences,				No	No

Active Ingredient	Food Use Trade Name(s)	Orn.Hort./Turf Trade Name(s)	EPA Reg # for Orn. Hort Uses	Registrant	Chemistry/Mode of Action	Description of Activity/Spectrum	Additional Information	Mfg Supports New Orn. Hort Uses	Reduced Risk or Candidate for Reduced Risk
Trinexapac-methyl		Primo	100-729	Syngenta	Cyclohexane carboxylic acid	Reduces the growth and frequency of mowing of both cool season and warm season turf.	Registered for use on cool season and warm season turfgrass. Interested in development on ornamentals including ornamental grasses. Need efficacy and crop safety data.	Yes	No
Trinexapac-methyl	Palisade			Syngenta	Cyclohexane carboxylic acid	Growth regulator with use resulting in less potential for lodging, more efficient seed harvest, and improved seed set.	Registered on ryegrass seed. Interested in development on ornamentals. Need efficacy and crop safety data.	Yes	No
Uniconazole		Sumagic		Valent USA	Triazole	Growth retardant, reduces plant height by reducing internode elongation	Registered on poinsettia, unspecified bedding plants, bulb crops, geraniums, Easter lily, chrysanthemums, florist azaleas, and unspecified woody landscape ornamentals and ixora. Registrant endorses adding new plants to label.	Yes	No

Section 8

Products (Active Ingredients) Used in IR-4 Research Since 2002

Product Name	Active Ingredients
3336 WP	Thiophanate-methyl
Acclaim	fenoxaprop
Actigard 50WG	Acibenzolar
Actinovate	Actinovate
Agri 50	Agri 50
Akari 5SC	Fenpyroximate
Aliette WDG	Fosetyl Al
Allectus SC	Bifenthrin + Imidacloprid
Alude	Potassium phosphite
Apogee	Prohexadione calcium
Arena 50WDG	Clothianadin
Argylene XM	Sodium Silver Thiosulfate
Aria 50SG	Fonicamid
Aria 50WG	Fonicamid
ARY-50401	Plant Extract
Astro	Permethrin
Atrimmec	Dikegulac sodium
Avid 0.15EC	Abamectin
Avid 0.15EC + Scimitar	abamectin + cyfluthrin
Avid 0.15EC + Talstar GH	abamectin + bifenthrin
Avid 0.15EC + Tame	abamectin + fenpropathrin
Avid 2EC + Oil	Abamectin + OIL
Aza-Direct	Azadirachtin
Azatin XL	Azadirachtin
Banol	Propamocarb hydrochloride
Barricade 4FL	Prodiamine
Barricade 65WG	Prodiamine
BAS 320i	Metaflumizone
BAS 350i	Fipronil
BAS 510 (Emerald)	Boscalid
BAS 516 04 F	Boscalid + Pyraclostrobin
BAS 516 UFF	Boscalid + Pyraclostrobin
BAS 656h EC (dimethenamid)	Dimethenamid-p
BAS 659H G (dimethenamid + pendimethalin)	Dimethenamid-p + pendimethalin
Basagran T/O 4L	Bentazon
Bemistop	Bemistop
BioPhos 43L	Dipotassium phosphonate + Dipotassium phosphate
Bonzi	Paclobutrazol
BotaniGard	Beauveria bassiana

Product Name	Active Ingredients
Botanigard 22WP	Beauveria bassiana
BotaniGard ES	Beauveria bassiana
BroadStar 0.17G	Flumioxazin
BroadStar 0.25G	Flumioxazin
Bueno 6	MSMA
BYI 8330 240SC	Spirotetramat
Cal-Agri-50	Potassium phosphate
Calirus (PMA300)	Dikegulac sodium
Captan	Captan
Carzol	
Casoron 4G	Dichlobenil
Celero 16WSG	Clothianidin
Champ Formula 2F	
Chipco Ronstar 50 WSP	Oxadiazon
Chipco Ronstar G	Oxadiazon
Clofentezine	Clofentezine
Companion	Bacillus subtilis GB03
Compass	Trifloxystrobin
Conserve SC	Spinosad
Copper Hydroxide	COPPER HYDROXIDE
Cutless 0.33G	Flurprimidol
Cyclanalide	
Cycocel	Chlormequat chloride
Cymoxanil	Cymoxanil
Cyprodinil + Fludioxonil	Cyprodinil + Fludioxonil
Daconil	Chlorothalonil
Daconil Ultrex	Chlorothalonil
Daconil Weather Stik	Chlorothalonil
Decree	Fenhexamid
DEET	DEET
Devrinol 2G	Napropamide
Devrinol 50 DF	Napropamide
Diazinon 4E	Diazinon
Diazinon 50W	Diazinon
Diclofop-methyl	Diclofop-methyl
Dimension 2EW	Dithiopyr
Dimension Ultra	Dithiopyr
Dimension WSP	Dithiopyr
Dimethoate 4EC	Dimethoate
Disarm	Fluoxastrobin
Discus	Imidacloprid + Cyfluthrin
Distance	Pyriproxyfen
Dithane 75 DF	Mancozeb
Dithane T/O	Mancozeb
DPX-E2Y45	Chlorantraniliprole
DPX-HGW86	DPX-HGW86
Dursban	Chlorpyrifos
Dursban 50 W	Chlorpyrifos
Dursban Pro	Chlorpyrifos

Product Name	Active Ingredients
Eagle WSP	Myclobutanil
EcoGuard	Bacillus licheniformis SB3086 + Indole-3-butyric Acid
EcoTrol	EcoTrol
Endeavor	Pymetrozine
Endorse	Polyoxin D
Endosulfan	Endosulfan
Enstar II	Kinoprene
Envoy	Clethodim
Eptam EC	EPTC
ERASE	Jojoba oil
Ethephon	Ethephon
Exilis Plus	6-Benzyladenine
F6875 0.3G	Sulfentrazone +
F6875 4SC	Sulfentrazone +
Fascination	6-Benzyladenine + Gibberellic Acid
Fenstop	Fenamidone
Flagship 25WG	Thiamethoxam
Flagship Granular	Thiamethoxam
Fluazinam	Fluazinam
Foramsulfuron	Foramsulfuron
Fore 80WP	Manganese + Zinc + Ethylene bis-dithiocarbamate Ion
Fresco	Gibberellic Acid + 6-Benzyladenine
Fusilade II	Fluazifop-p-butyl
G41	G41
Gallery 75DF	Isoxaben
GardEn	GardEn
Gentry	Quinoclamine
Gowan Trifluralin 4	Trifluralin
Heritage	Azoxystrobin
Hymexazol 30L	Hymexazol
Imazapic	Imazapic
Insignia	Pyraclostrobin
Judo	Spiromesifen
Junction	Mancozeb + COPPER HYDROXIDE
K-Phite	Phosphorus acid salts
Kansel	Oxadiazon + Pendimethalin
Kasugamycin	Kasugamycin
Lontrel	Clopyralid
M-Pede	Horticulture Soap
Mach 2 Granular	Halofenazide
Mach 2 Liquid	Halofenazide
Magellan	Mono- and Dibasic Sodium, Potassium and Ammonium Phosphites
Manage	Halosulfuron
Mancozeb + Zoxamide	Mancozeb + Zoxamide
Maneb	Maneb
Marathon 1% granular	Imidacloprid

Product Name	Active Ingredients
Marathon 60WP	Imidacloprid
Marathon II	Imidacloprid
Marathon Ultra	Imidacloprid + cyfluthrin
MaxCel	6-Benzyladenine
Medallion	Fludioxonil
Mesotrione 4SC	Mesotrione
Mesurool 75-W	Methicarb
Metarhizium anisopliae strain F52	Metarhizium anisopliae strain F52
Metiram	Metiram
Milbemectin	Milbemectin
MilStop	Potassium bicarbonate
MSD Abamectin	Abamectin
MultiGuard	Furfural
Muscodor albus	Muscodor albus
Napropamide 10G	Napropamide
Naturalis	Beauveria bassiana
Neemazal F	Azadirachtin
NEI 25925	Acetamiprid
NNI-0101	NNI-0101
NOA 446510	Mandipropamid
NovaGib	GA4+7
Onyx	Bifenthrin
Ornazin 3%EC	Azadirachtin
Orthene TT&O + Tame 2.4EC	acephate + fenpropathrin
Orthene TTO 97	Acephate
Overture	Pyridalyl
Oxadiazon + Pendimethalin	Oxadiazon + Pendamethalin
Pedestal	Novaluron
Pendulum 2G	Pendimethalin
Pendulum 3.3 EC	Pendimethalin
Pendulum Aqua Cap	Pendimethalin
Pendulum WDG	Pendimethalin
Pennant Liquid	S-Metolachlor
Pennant Magnum	S-Metolachlor
Perm-Up 3.2EC	Permethrin
Phyton27	COPPER SALTS-FATTY & ROSIN ACID
PlantShield HC	Trichoderma harzianum Rifai Strain KRL-AG2
Polyram	Polyram
Precise	Acephate
Precision	Fenoxycarb
Prograss EC	Ethofumesate
ProMate Revoke	Potassium salts of fatty acids
ProStar 50WP	Flutalonil
ProVide	GA4+7
Pylon	Chlorfenapyr
QRD 400	Not specified
QuickSilver T&O	Carfentrazone-ethyl
Regal O-O	Oxadiazon + Oxyfluorfen

Product Name	Active Ingredients
Regal Star G	Oxadiazon + Prodiamine
RegalKade G	Prodiamine
RegalStar G	Oxadiazon + Prodiamine
Reward	Diquat
Rhapsody Biofungicide	Bacillus subtilis
RoundUp	Glyphosate
Rout	Oxyfluorfen + Oryzalin
S1812 35WP VC1638	Pyridalyl
SA 11210	SA 11210
Safari 20SG	Dinotefuran
SaferSoap	
Sanmite	Pyridaben
Scimitar	Lambda-cyhalothrin
SedgeHammer	Halosulfuron
Segway	Cyazofamid
Sencor 75 Turf	Metribuzin
Sevin SL	Carbaryl
Showcase	Trifluralin + Isoxaben + Oxyfluorfen
Shuttle 15SC	Acequinocyl
Snapshot 2.5TG	Trifluralin + Isoxaben
Sodium tetrathiocarbonate	Sodium tetrathiocarbonate
Stature	Dimethomorph + Mancozeb
Stature DM	Dimethomorph
STBX	
STS + BA	STS + BA
Subdue MAXX	Mefenoxam
Sucroicide	Sucrose octanoate ester
Sulfentrazone 0.2G	Sulfentrazone
Sulfentrazone 4F	Sulfentrazone
Sulfosulfuron	Sulfosulfuron
Sumagic	Uniconazole
Sun Spray Ultra-Fine Spray Oil	Horticultural Oil
SureGuard 51WDG	Flumioxazin
Surflan AS T/O	Oryzalin
Surround WP	Kaolin Clay
T382	T382
Talstar	Bifenthrin
Talstar NF	Bifenthrin

Product Name	Active Ingredients
Talstar NG	Bifenthrin
Talus 40SC	Buprofezin
Talus WP	Buprofezin
Tame 2.4 EC	Fenpropathrin
Tank Mix: Cyazofamid + Aliette	Cyazofamid + Fosetyl Al
Tank Mix: Cyazofamid + Alude	Cyazofamid + Potassium phosphite
Tank Mix: Heritage + Subdue MAXX	azoxystrobin + mefenoxam
Tanos	Famoxadone + Cymoxanil
Tanos + Kocide Tank Mix	Famoxadone + Cymoxanil + Copper
tbd	tbd
TDZ	Thidiazuron
Tempo 20WP	Cyfluthrin
Tempo Ultra	Cyfluthrin
Terramec SP	Chloroneb
Terrazole 35% WP	Etridiazole
TM-435	TM-435
TM-459	TM-459
Tolfenpyrad (Nichino)	Tolfenpyrad
Topflor	Flurprimidol
TranXit	Rimsulfuron
Trichoderma harzianum	Trichoderma harzianum
TriCon (BW 420)	BW 420
Trimec Classic DSC Broadleaf	2,4-D (AMINE) + Dicamba + MCPP
TriStar 30SG	Acetamiprid
TriStar 70WSP	Acetamiprid
Truban	Etridiazole
Tupersan	Simazine
V-10112 2G	Dinotefuran
V-10142 0.5G	Imzasulfuron
V-10142 75WG	Imzasulfuron
V-10161	V-10161
Vantage	Sethoxydim
Vital 4L	Potassium phosphite
ZeroTol	Hydrogen peroxide

Active Ingredients (Products) Used in IR-4 Research Since 2002

Active Ingredients	Product Name
2,4-D (AMINE) + Dicamba + MCPP	Trimec Classic DSC Broadleaf
6-Benzyladenine	Exilis Plus
6-Benzyladenine	MaxCel
6-Benzyladenine + Gibberellic Acid	Fascination
Abamectin	Avid 0.15EC
Abamectin	MSD Abamectin
abamectin + bifenthrin	Avid 0.15EC + Talstar GH
abamectin + cyfluthrin	Avid 0.15EC + Scimitar
abamectin + fenpropathrin	Avid 0.15EC + Tame
Abamectin + OIL	Avid 2EC + Oil
Acephate	Orthene TTO 97
Acephate	Precise
acephate + fenpropathrin	Orthene TT&O + Tame 2.4EC
Acequinocyl	Shuttle 15SC
Acetamiprid	NEI 25925
Acetamiprid	TriStar 30SG
Acetamiprid	TriStar 70WSP
Acibenzolar	Actigard 50WG
Actinovate	Actinovate
Agri 50	Agri 50
Azadirachtin	Aza-Direct
Azadirachtin	Azatin XL
Azadirachtin	Neemazal F
Azadirachtin	Ornazin 3%EC
Azoxystrobin	Heritage
azoxystrobin + mefonaxam	Tank Mix: Heritage + Subdue MAXX
Bacillus licheniformis SB3086 + Indole-3-butyric Acid	EcoGuard
Bacillus subtilis	Rhapsody Biofungicide
Bacillus subtilis GB03	Companion
Beauveria bassiana	BotaniGard
Beauveria bassiana	Botanigard 22WP
Beauveria bassiana	BotaniGard ES
Beauveria bassiana	Naturalis
Bemistop	Bemistop
Bentazon	Basagran T/O 4L
Bifenthrin	Onyx
Bifenthrin	Talstar
Bifenthrin	Talstar NF
Bifenthrin	Talstar NG
Bifenthrin + Imidacloprid	Allectus SC

Active Ingredients	Product Name
Boscalid	BAS 510 (Emerald)
Boscalid + Pyraclostrobin	BAS 516 04 F
Boscalid + Pyraclostrobin	BAS 516 UFF
Buprofezin	Talus 40SC
Buprofezin	Talus WP
BW 420	TriCon (BW 420)
Captan	Captan
Carbaryl	Sevin SL
Carfentrazone-ethyl	QuickSilver T&O
Chlorantraniliprole	DPX-E2Y45
Chlorfenapyr	Pylon
Chlormequat chloride	Cycocel
Chloroneb	Terramec SP
Chlorothalonil	Daconil
Chlorothalonil	Daconil Ultrex
Chlorothalonil	Daconil Weather Stik
Chlorpyrifos	Dursban
Chlorpyrifos	Dursban 50 W
Chlorpyrifos	Dursban Pro
Clethodim	Envoy
Clofentezine	Clofentezine
Clopyralid	Lontrel
Clothianadin	Arena 50WDG
Clothianidin	Celero 16WSG
COPPER HYDROXIDE	Copper Hydroxide
COPPER SALTS-FATTY & ROSIN ACID	Phyton27
Cyazofamid	Segway
Cyazofamid + Fosetyl Al	Tank Mix: Cyazofamid + Aliette
Cyazofamid + Potassium phosphite	Tank Mix: Cyazofamid + Alude
Cyclanalide	Cyclanalide
Cyfluthrin	Tempo 20WP
Cyfluthrin	Tempo Ultra
Cymoxanil	Cymoxanil
Cyprodinil + Fludioxonil	Cyprodinil + Fludioxonil
DEET	DEET
Diazinon	Diazinon 4E
Diazinon	Diazinon 50W
Dichlobenil	Casoron 4G
Diclofop-methyl	Diclofop-methyl
Dikegulac sodium	Atrimmec
Dikegulac sodium	Calirus (PMA300)

Active Ingredients	Product Name
Dimethenamid-p	BAS 656h EC (dimethenamid)
Dimethenamid-p + pendimethalin	BAS 659H G (dimethenamid + pendimethalin)
Dimethoate	Dimethoate 4EC
Dimethomorph	Stature DM
Dimethomorph + Mancozeb	Stature
Dinotefuran	Safari 20SG
Dinotefuran	V-10112 2G
Dipotassium phosphonate + Dipotassium phosphate	BioPhos 43L
Diquat	Reward
Dithiopyr	Dimension 2EW
Dithiopyr	Dimension Ultra
Dithiopyr	Dimension WSP
DPX-HGW86	DPX-HGW86
EcoTrol	EcoTrol
Endosulfan	Endosulfan
EPTC	Eptam EC
Ethephon	Ethephon
Ethofumesate	Prograss EC
Etridiazole	Terrazole 35% WP
Etridiazole	Truban
Famoxadone + Cymoxanil	Tanos
Famoxadone + Cymoxanil + Copper	Tanos + Kocide Tank Mix
Fenamidone	Fenstop
Fenhexamid	Decree
fenoxaprop	Acclaim
Fenoxycarb	Precision
Fenpropathrin	Tame 2.4 EC
Fenpyroximate	Akari 5SC
Fipronil	BAS 350i
Flonicamid	Aria 50SG
Flonicamid	Aria 50WG
Fluazifop-p-butyl	Fusilade II
Fluazinam	Fluazinam
Fludioxonil	Medallion
Flumioxazin	BroadStar 0.17G
Flumioxazin	BroadStar 0.25G
Flumioxazin	SureGuard 51WDG
Fluoxastrobin	Disarm
Flurprimidol	Cutless 0.33G
Flurprimidol	Topflor
Flutaloni	ProStar 50WP
Foramsulfuron	Foramsulfuron
Fosetyl Al	Aliette WDG
Furfural	MultiGuard

Active Ingredients	Product Name
G41	G41
GA4+7	NovaGib
GA4+7	ProVide
GardEn	GardEn
Gibberelic Acid + 6-Benzyladenine	Fresco
Glyphosate	RoundUp
Halofenazide	Mach 2 Granular
Halofenazide	Mach 2 Liquid
Halosulfuron	Manage
Halosulfuron	SedgeHammer
Horticultural Oil	Sun Spray Ultra-Fine Spray Oil
Horticulture Soap	M-Pede
Hydrogen peroxide	ZeroTol
Hymexazol	Hymexazol 30L
Imazapic	Imazapic
Imazasulfuron	V-10142 0.5G
Imazasulfuron	V-10142 75WG
Imidacloprid	Marathon 1% granular
Imidacloprid	Marathon 60WP
Imidacloprid	Marathon II
Imidacloprid + Cyfluthrin	Discus
Imidacloprid + cyfluthrin	Marathon Ultra
Isoxaben	Gallery 75DF
Jojoba oil	ERASE
Kaolin Clay	Surround WP
Kasugamycin	Kasugamycin
Kinoprene	Enstar II
Lambda-cyhalothrin	Scimitar
Mancozeb	Dithane 75 DF
Mancozeb	Dithane T/O
Mancozeb + COPPER HYDROXIDE	Junction
Mancozeb + Zoxamide	Mancozeb + Zoxamide
Mandipropamid	NOA 446510
Maneb	Maneb
Manganese + Zinc + Ethylene bis-dithiocarbamate Ion	Fore 80WP
Mefenoxam	Subdue MAXX
Mesotrione	Mesotrione 4SC
Metaflumizone	BAS 320i
Metarhizium anisopliae strain F52	Metarhizium anisopliae strain F52
Methicarb	Mesurool 75-W
Metiram	Metiram
Metribuzin	Sencor 75 Turf
Milbemectin	Milbemectin
Mono- and Dibasic	Magellan

Active Ingredients	Product Name
Sodium, Potassium and Ammonium Phosphites	
MSMA	Bueno 6
Muscodor albus	Muscodor albus
Myclobutanil	Eagle WSP
Napropamide	Devrinol 2G
Napropamide	Devrinol 50 DF
Napropamide	Napropamide 10G
NNI-0101	NNI-0101
Not specified	QRD 400
Novaluron	Pedestal
Oryzalin	Surflan AS T/O
Oxadiazon	Chipco Ronstar 50 WSP
Oxadiazon	Chipco Ronstar G
Oxadiazon + Oxyfluorfen	Regal O-O
Oxadiazon + Pendamethalin	Oxadiazon + Pendimethalin
Oxadiazon + Pendimethalin	Kansel
Oxadiazon + Prodiamine	Regal Star G
Oxadiazon + Prodiamine	RegalStar G
Oxyfluorfen + Oryzalin	Rout
Paclobutrazol	Bonzi
Pendimethalin	Pendulum 2G
Pendimethalin	Pendulum 3.3 EC
Pendimethalin	Pendulum Aqua Cap
Pendimethalin	Pendulum WDG
Permethrin	Astro
Permethrin	Perm-Up 3.2EC
Phophorus acid salts	K-Phite
Plant Extract	ARY-50401
Polyoxin D	Endorse
Polyram	Polyram
Potassium bicarbonate	MilStop
Potassium phosphate	Cal-Agri-50
Potassium phosphite	Alude
Potassium phosphite	Vital 4L
Potassium salts of fatty acids	ProMate Revoke
Prodiamine	Barricade 4FL
Prodiamine	Barricade 65WG
Prodiamine	RegalKade G
Prohexadione calcium	Apogee
Propamocarb hydrochloride	Banol

Active Ingredients	Product Name
Pymetrozine	Endeavor
Pyraclostrobin	Insignia
Pyridaben	Sanmite
Pyridalyl	Overture
Pyridalyl	S1812 35WP VC1638
Pyriproxyfen	Distance
Quinoclamine	Gentry
Rimsulfuron	TranXit
SA 11210	SA 11210
Sethoxydim	Vantage
Simazine	Tupersan
S-Metolachlor	Pennant Liquid
S-Metolachlor	Pennant Magnum
Sodium Silver Thiosulfate	Argylene XM
Sodium tetrathiocarbonate	Sodium tetrathiocarbonate
Spinosad	Conserve SC
Spiromesifen	Judo
Spirotetramat	BYI 8330 240SC
STS + BA	STS + BA
Sucrose octanoate ester	Sucroside
Sulfentrazone	Sulfentrazone 0.2G
Sulfentrazone	Sulfentrazone 4F
Sulfentrazone +	F6875 0.3G
Sulfentrazone +	F6875 4SC
Sulfosulfuron	Sulfosulfuron
T382	T382
tbd	tbd
Thiamethoxam	Flagship 25WG
Thiamethoxam	Flagship Granular
Thidiazuron	TDZ
Thiophanate-methyl	3336 WP
TM-435	TM-435
TM-459	TM-459
Tolfenpyrad	Tolfenpyrad (Nichino)
Trichoderma harzianum	Trichoderma harzianum
Trichoderma harzianum Rifai Strain KRL-AG2	PlantShield HC
Trifloxystrobin	Compass
Trifluralin	Gowan Trifluralin 4
Trifluralin + Isoxaben	Snapshot 2.5TG
Trifluralin + Isoxaben + Oxyfluorfen	Showcase
Uniconazole	Sumagic
V-10161	V-10161