Chase Horticultural Research, Inc.
Education for Horticulture

Title: Effect of MultiGuard on root diseases of pansy

Host: *Viola x wittrockiana* (pansy) 'Crown Yellow'

Inoculation: *Thielaviopsis basicola*. The slurry was drenched into the potting medium at the rate of 10 ml per pot on 18 January, 2005 and watered into the pots lightly.

Treatments:		Rate/10 gal
A.	Water - noninoculated	-----
B.	Water - inoculated	-----
C.	Subdue Maxx and	1 oz
	Clearys 3336 and	16 oz
	Heritage	4 oz
D.	MultiGuard	10 ppm
E.	MultiGuard	25 ppm
F.	MultiGuard	50 ppm
G.	MultiGuard (plants not in trays)	250 ppm drench

Chemical application dates: All treatments in the ebb and flood trays were started on 7 January, 2005 and applied as listed above. Treatment 'G' was applied as a weekly drench at the rate of 35 ml/ A815 or 50 ml/ 4 inch standard pot on the dates listed below.

Treatment	Rate/ 100 gal	Top Grade 2/4/05	Phytotoxicity 2/22/05	Top Grade 3/2/05	Root Grade 3/3/05	Top Weight (g) 3/3/05
Water Noninoculated	-----	3.4 a	1.1 a	4.3 c	2.8 b	15.0 b
Water inoculated	-----	3.3 a	1.8 ab	3.4 ab	2.5 ab	8.9 a
Subdue Maxx and Clearys 3336 and Heritage	1 oz 16 oz 4 oz	3.5 a	1.2 a	3.7 bc	2.0 a	10.2 a
Multiguard	10 ppm	3.5 a	1.8 ab	3.7 bc	2.5 ab	9.6 a
Multiguard	25 ppm	3.4 a	1.7 ab	3.3 ab	2.2 a	9.8 a
Multiguard	50 ppm	3.2 a	2.1 b	2.8 a	2.2 a	9.1 a
Multiguard (drench)	250 ppm	3.4 a	1.5 ab	3.5 b	2.8 b	9.6 a

Top grade was recorded using the following scale: 1 - plant dead, unsalable, 2 - poor, unsalable, 3 - moderate, salable, 4 - good, salable to 5 - excellent, salable.

Phytotoxicity (marginal leaf burns) was recorded using the following scale: 1 - no phytotoxicity, 2 - slight, 3 - moderate, 4 - severe to 5 - plant dead.

Root grade was recorded using the following scale: 1 - no roots on the root ball, 2 - slight, 3 - moderate, 4 - good to 5 - excellent.