MAPLE (*Acer rubrum* 'Franksred' 'Red Sunset Maple')
Anthracnose; *Kabatiella apocrypta*

J. W. Pscheidt, S. Cluskey & J. P. Bassinette
Dept. of Botany and Plant Pathology
Oregon State University
Corvallis, OR 97331-2903

Comparison of fungicides for control of maple anthracnose, 2010.
IR-4 Crop Safety Ornamental Protocol Number 10-015 and 10-024.

Bare-root, dormant Red Sunset Maples (*Acer rubrum* 'Franksred') were obtained from a local nursery on 5 May. Trees (grade 4 ft WH) arrived bundled from cold storage ready to break bud and were healed into sawdust until potting. Trees were planted on 12 May into #7 sized pots with 'Sun Grow Sunshine Mix SB40' media (35 to 40% Canadian sphagnum peat moss, fir bark, pumice/cinders, dolomitic limestone, gypsum and a wetting agent). Fungicide treatments and trees (pots) for this trial were arranged in a randomized complete block design. Each treatment was replicated on 3 sets of 3 trees. Foliar fungicides were applied until runoff using a Sthil SG-20 pump-style backpack sprayer. Approximately 0.5 gal of a spray suspension was used per 9 trees. Drench fungicide applications were made by hand. A 10 gallon stock solution was prepared and then 32 fl oz of solution was applied to the media of each pot. Trees were thoroughly watered 24 hours prior to application such that some fluid escaped through the drainage holes of each pot post-application. Once trees had broken bud and begun active shoot growth, foliar fungicides were applied on 10 Jun, 24 Jun and 7 Jul while drenches were applied on 10 Jun and 7 Jul. Supplemental irrigation was used as needed during the course of the experiment. No fertilizer, insecticides or herbicides were applied. The height of trees was measured on 10 Jun just before test materials were applied and again on 15 Jul one week after the last application. Trees were surveyed for phytotoxicity every week once fungicide applications were initiated. The incidence of anthracnose was evaluated on 6-7 Jul by examining all leaves from each tree for necrotic spots.

Spring weather conditions were cold and wet which is typical for western Oregon. Protocol required active plant growth before application of fungicides. This was after the normal fungal infection period of bud break. Anthracnose was first observed on 28 Jun after the second application of fungicide. There were no significant differences in leaves with anthracnose among the various treatments. This indicates no after infection activity of these materials on this disease. The average height of trees was 171 cm at the start of the experiment and 189 cm at the end. There was no significant difference in height before or after the experiment or change in height among the various treatments. Due to the single stem, columnar form of the trees no plant width data was collected. No phytotoxicity was observed on any plants treated with any fungicide.

Table 1. Safety of triticonazole and fluopicolide on container red maples.

PR #	Treatment and Rate/100 gal	Method of Application**	# of leaves with anthracnose	Change in Hieght (%)*
---	Nontreated……..	None	66.3	9.7
29433	Trinity 2 SC at 4 fl oz…….	Foliar	52.7	9.9
29433	Trinity 2 SC at 8 fl oz…….	Foliar	66.3	9.8
29433	Trinity2 SC at 16 fl oz……	Foliar	51.7	10.5
27800	Adorn 4F at 1 fl oz…….	Drench	46.7	7.9
27800	Adorn 4F at 2 fl oz…….	Drench	36.3	10.3
27800	Adorn 4F at 4 fl oz…….	Drench	40.3	9.2

* Means without letters did not differ significantly based on Fisher's protected LSD (P=0.05).

** Foliar fungicides were applied on 10 Jun, 24 Jun and 7 Jul while drenches were applied on 10 Jun and 7 Jul.