ROSE (*Rosa sp.* 'Meidomonac Bonica' PP# 5105)
Black Spot; *Diplocarpon rosae*

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 black spot of rose, 2010.
IR-4 Crop Safety Ornamental Protocol Number 10-015.

Shrub roses (*Rosa sp.* 'Meidomonac Bonica') grown in 5 gal pots were obtained from a local nursery on 13 Apr. Plants arrived with minor amounts of black spot and rust and had already been sprayed with Compass O plus Dithane (rates unknown) on 4 Mar and Compass O (rate unknown) on 27 Mar. Fungicide treatments and plants for this trial were arranged in a randomized complete block design. Each treatment was replicated on 3 sets of 3 plants. 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 bushes. Once plants had begun active growth, fungicides were applied on 4 May, 18 May and 10 Jun. Supplemental irrigation was used as needed during the course of the experiment. Marathon 1G (2 Tablespoons/pot) was applied on 7 Jun for aphid management. No fertilizer or herbicides were applied to these plants in these pots. The height and width of plants was measured on 4 May just before test materials were applied and again on 16 Jun a week after the last application. Plants were surveyed for phytotoxicity every week once fungicide applications were initiated. The incidence of black spot was evaluated on 29 Jun by arbitrarily examining the oldest leaf on 50 floral shoots from each plant.

Spring weather conditions were cold and wet which are typical for western Oregon. Although plants arrived with rust symptoms the disease did not increase even on nontreated plants. Nontreated plants had the highest number of leaves with black spot although the number of leaves with black spot on plants treated with the two lower rates of Tourney was not significantly different. Lowest number of leaves with black spot was associated with plants treated with the high rate of Trinity although the number of leaves with black spot on plants treated with all rates of Trinity or the higher rates of Tourney were not significantly different. The average height of plants was 61 cm at the start of the experiment and 66 cm at the end. The average width of plants was 66 cm at the start and 73 cm at the end. There was no significant difference in height or width before or after the experiment or change in height or width among the various treatments. No phytotoxicity was observed on any plants treated with any fungicide.

Table 1. Safety of metconazole and triticonazole on container roses.

PR #	Treatment and Rate/100 gal	Method of Application	Black Spot (%)*	Change in Hieght (%)*	Change in Width (%)*
---	Nontreated……..	None	30.0 a	9.7	11.3
29399	Tourney 50 WDG at 2 oz...	Foliar	21.0 ab	10.3	7.0
29399	Tourney 50 WDG at 4 oz...	Foliar	16.4 abc	11.7	10.3
29399	Tourney 50 WDG at 8 oz...	Foliar	9.5 bc	16.3	13.0
29426	Trinity 2 SC at 4 fl oz…….	Foliar	6.7 bc	19.7	11.0
29426	Trinity 2 SC at 8 fl oz…….	Foliar	3.3 c	9.7	2.3
29426	Trinity 2 SC at 16 fl oz…....	Foliar	2.0 c	13.7	7.7

* Means followed by the same letter do not differ significantly based on Fisher's protected LSD (P=0.05). Means without letters did not differ significantly.