ROSE (*Rosa* sp. 'Pink Simplicity') Rust; *Phragmidium* sp. Black Spot; *Diplocarpon rosae* J. W. Pscheidt and John P. Bassinette Dept. of Botany and Plant Pathology Oregon State University Corvallis, OR 97331-2903

Effect of plastic tents and fungicides on rose diseases, 2006.

Fungicide treatments were arranged in a randomized complete block design in a block of 'Pink Simplicity' roses on 'Dr. Huey' rootstock planted in 1999 on 6 x 6 ft spacing. Each treatment consisted of 6 single bush replicates. Fungicide treatments were applied using a pump-style backpack sprayer at a rate of 58 to 200 gal water/A. Approximately 0.25 to 1 gal of a spray suspension were applied per 6 bushes depending on plant growth. Treatments were applied on 5 Apr (bud break and early shoot growth), 19 Apr and 3 May. Umbrella style greenhouses that covered a single bush were installed 5 Apr and then removed on 15 May. Small caliper canes were removed while large caliper canes were pruned back to a few buds on 2 to 3 Feb. Weeds were controlled using Rely (3 qt/A) applied on 11 May. Fertilizer (16-16-16-7) was broadcast with a hand cranked applicator at a rate of 150 lb/A on17 Apr. The incidence of blackspot and rust was determined on 25 May by visually examining all the leaves from 10 shoots on each bush.

Blackspot was observed on 1 May on a few widely scattered, well leafed out plants. Both rust and blackspot were found by 15 May. Rose bushes treated with Messenger had an incidence of blackspot that was not significantly different than the incidence on nontreated bushes. All other treated bushes had significantly less blackspot than nontreated bushes including bushes only covered with plastic. The highest amount of rust was found on plants treated with aspirin. All other bushes had significantly less rust including nontreated bushes. Bushes treated with Daconil or oil had phytotoxicity symptoms on leaves in the form of necrotic spots. An investigation revealed a problem with cleaning out the backpack sprayer. Residual oil in the hose line resulted in a combination of oil and Daconil being applied to bushes. It is well known that oil combined with chlorothalonil will produce a burning of plant leaves.

	Blackspot*	Rust*
Treatment & Rate/gal	(%)	(%)
Nontreated	3.8 a	6.6 b
Plastic Shelters	0.5 b	0.7 b
Ortho Daconil 2787 Multi Purpose		
Fungicide 0.3 fl oz alternate		
Immunox 1 fl oz	0.3 b	1.0 b
Baking Soda at 3 teaspoons +		
Superior Type Spray Oil at 2.5 Tablespoons +		
Safer Insect Killing Soap at 0.5 teaspoon	0.9 b	1.1 b
Bufferin Aspirin at 1.34 grams (2 tablets)	0.8 b	17.7 a
Messenger at 0.12 oz	1.9 ab	4.6 b

Means followed by same letter do not differ significantly based on Fisher's protected LSD (P=0.05).