



Title: Effect of fungicides on *Alternaria* leaf spot on *Zinnia*

Host: *Zinnia elegans* 'Profusion Orange'

Inoculation: Inoculum of *Alternaria zinniae* was started on 2 May 2005 using plates of V-8 agar medium amended with 100 ppm streptomycin sulfate. The spores were collected on 17 May in sterilized distilled water and adjusted to about 1×10^4 /ml. They were sprayed onto the leaves the same day and the plants were placed in plastic bags and an overhead mist system was started. Mist was delivered for 20 seconds every 30 minutes for 12 hours per day. Plastic bags were removed 2 days after inoculation and the mist continued for the rest of the trial.

Treatments:	Rate/100 gal
A. Water-noninoculated	-----
B. Water-inoculated	-----
C. Mimik Improved	32 oz
D. Fosphite	32 oz
E. Aliette	16 oz
F. Insignia	4 oz
G. Heritage	1 oz
H. Compass O	2 oz
I. Cygnus	3.2 oz

Chemical application dates: All treatments were applied as a foliar spray (to drip) on 3, 13 and 23 May, 2005.

Treatment	Rate	Flower Severity Blight 5/25/05	No. of Leaf Spots 6/1/05
Water- noninoculated	-----	1.7 a	0.0 a
Water- inoculated	-----	2.7 bc	13.9 bc
Mimik Improved	32 oz	1.7 a	16.8 c
Fosphite	32 oz	2.5 ab	9.2 b
Aliette	16 oz	2.3 ab	13.0 bc
Insignia	4 oz	2.3 ab	0.0 a
Heritage	1 oz	2.4 ab	0.0 a
Compass O	2 oz	3.2 c	0.0 a
Cygnus	3.2 oz	3.4 c	0.1 a

Severity flower blight was rated as follows: 1 (none), 2 (slight), 3 (moderate), 4 (severe), 5 (all flowers dead). X = no flowers.