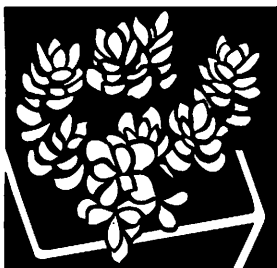


# Flower & Nursery Report

for commercial growers



CONTENTS	
Leaf Scorch of Narcissus—Progress Report . . . . .	1
Protea Nursery Production Trial . . . . .	2
Susceptibility of Selected Chrysanthemum Cultivars to Leafminer Damage . . . . .	5
Water Consumption by Pompon Chrysanthemums . . . . .	6

Winter 1980

## Leaf Scorch of Narcissus Progress Report

Arthur H. McCain, Lyle E. Pyeatt, and Louise Pierce

Leaf scorch caused by the fungus *Stagonospora curtisii* attacks *Amaryllis* and *Narcissus* species and some related genera. Early symptoms of the disease — blighted leaf tips — resemble frost or herbicide injury. Under wet conditions, the infection extends down the leaf, producing reddish brown elongated areas. Tissues around these areas turn yellow and wither, and the plants appear scorched. The fungus produces minute fruiting structures (pycnidia), which appear as small brown specks in the lesions. Spores exude from the pycnidia when water is present and are spread by splashing or by contact with equipment or workers. The infection may extend into the bulb, and in this manner it is introduced into new areas.

Treatment of bulbs with fungicidal dips is helpful. The disease can cause appreciable damage in plantings that remain in place for several years, as is done in cut flower cropping of Chinese sacred lily (*Narcissus tazetta*). In this situation, fungicidal sprays may aid in control of the disease. A trial to determine which fungicides are most effective was established with a grower of field-grown *N. tazetta*. The planting had been in place for three years, and

the disease had been severe in the previous two years.

The fungicides were applied to runoff at two-week intervals using an air-pressurized garden sprayer. Applications were made from November 8, 1979 until March 20, 1980. Disease ratings were made periodically. Differences in the plots were not evident until February, probably because the disease is not active in cold weather. A final evaluation was made in March. Materials used and results are presented in the table.

Anilazine provided the best control followed closely by captan and mancozeb; however, none is registered for use for controlling the disease. Several copper-containing fungicides are registered, but in this trial the copper-containing fungicide was not nearly as effective as the first mentioned materials.

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Control of Narcissus Scorch with Fungicides		
Product (active ingredient)	Concentration lb/100 gal	Disease rating*
Dyrene (50% anilazine)	2.0	1.0
Captan (50% captan)	2.0	1.3
Fore (80% mancozeb)	1.5	1.5
Chipco 26019 (50% iprodione)	1.0	2.0
Daconil 2787 (75% chlorothalonil)	1.5	2.0
Tribasic (53% Cu, tribasic copper sulfate)	4.0	2.0
Tersan 1991 (50% benomyl)	0.5	2.3
Bayleton (25% triademefon)	0.5	3.0
Control (not sprayed)	—	3.0

\*Average of four replications: 1 = light disease, good control; 2 = moderate disease, some control; 3 = severe disease, no control.