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CONTENTS

Control of Pythium Root Rot of Cyclamen

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Pythium root rot of cyclamen *(Cyclamen persicum* Mill.) may be a problem in the production of this plant. The fungus infects the roots, causing them to rot, and often killing very young plants. Once the fleshy tuber is formed, plants tend to remain alive and although new roots are produced, plants fail to grow as well as non-infected plants. The extent of the problem has increased with the change to plastic pots. An experiment to determine if fungicide drenches could be used to give control was started in a Bay Area nursery which produces large numbers of potted cyclamen.

Seedling plants of the cultivar Pearl of Zehlendorf were treated while in 2-inch plastic plant bands at the rate of 50 ml of fungicide solution per plant. Forty-two plants were used for each treatment. One month later the plants were transplanted into 4-inch square plastic pots. They were treated again at this time and once monthly the following three months, giving five treatments in all. Six months after the first treatment, the plants were rated as to plant growth. Table 1 gives the fungicides used, and concentrations and plant ratings.

TABLE 1. Effect of Fungicide Drenches on the Growth of Potted Pearl of Zehlendorf Cyclamen.

Treatment	Concentration/ gallon	Equivalent concentration/ 100 gallons	Plant rating*
Subdue† (5% metalaxyl)	1.52 g	5⅓ ounces	7.93
Subdue 5% WP	1.52 g	5⅓ ounces	7.88
+ Benlate (50% benomyl)	.76 g	2⅔ ounces	7.88
Lesan 35% (35% fenaminosulf)	1.08 g	4 ounces	7.61
Banrot (15% etridiazole, 25% thiophanate methyl)	1.51 g	5⅓ ounces	7.17
Previcur‡ 70% (70% procamocarb)	6.3 ml	⅔ quart	6.88
Truban (30% etridiazole)	1.26 g	4½ ounces	5.36
Untreated check			5.10

*Plants rated on basis of growth: 0 = no growth, 10 = best growth.
†Used as an experimental Ciba Geigy 48988. Not presently registered for ornamentals in U.S.
‡Used as an experimental NorAm 66752. Not presently registered in U.S.

All treatments gave control compared to the check. Addition of benomyl to the metalaxyl did not improve control, suggesting that Pythium was mainly involved in the decline of the plants. Plants treated with etridiazole did not do as well as did the Banrot treatment which also contains etridiazole. However, the concentration of etridiazole was lower in the Banrot, suggesting that possibly the etridiazole was slightly toxic to the cyclamen plants and that, if used, it should be used at a lower concentration.

Of the materials used, only Banrot, Lesan and Truban are presently available.

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