

IMMUNIZING CUTTINGS AGAINST RHIZOCTONIA  
(Progress Report)

Chrysanthemum cuttings planted in soil infested with the soil-borne fungus Rhizoctonia solani develop basal decay, turn yellow and often die. Many growers mix the fungicide PCNB into the soil prior to planting to prevent such an occurrence.

The experimental fungicide 1991 (DuPont) was recently tested in the Plant Pathology greenhouse at UCB by McCain and Byrne to determine its effectiveness as an "immunizer" against this disease.

Chrysanthemum cuttings were dipped for 30 seconds in several concentrations of 1991, drained and planted in soil (50% fine sand and 50% peat) inoculated with PDA cultures of Rhizoctonia solani.

The varieties Iceberg and Improved Albatross were used in this trial. The cuttings were planted singly in 4" pots and replicated three times.

A PCNB drench (500 ppm) was applied to another group of plants at planting time to serve as a comparison treatment. The results of this test are given in the following table:

Concentration ppm 1991 5/31/68	Number of dead plants 6/18/68
0	5
7.5	4
15	4
31	1
62	3
125	0
250	0
500	1
PCNB drench (500 ppm)	0

Rhizoctonia infected all of the treatments except the PCNB drenched plants. Those that did not die recovered from the disease as they became established.

Drenching the cuttings in the rooting medium a few days before pulling may give superior control since more chemical would be available for uptake. Another experiment is in progress to determine if this is true. In addition, the chemical is being evaluated for control of Verticillium albo-atrum. The results of these tests will be published in a future issue of Flower and Nursery Notes.

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