

Black Mold Root Rot of Rose

A recent article on this disease by Dr. Kenneth F. Baker in the Plant Disease Reporter (Aug. 15, 1953) is believed to be of sufficient interest to warrant a review. This disease was found to be severe on Red Delight plants purchased from a nursery in central California. It occurred also on Better Times, Pink Bountiful, and Talisman. All affected varieties were budded on Manetti stock. The sources of inoculum were traced to (a) the field site where the plants had been pulled, (b) rejected plants left in the field, (c) dust from floor of room where cuttings were "de-eyed", (d) trough used for soaking cutting wood, and (e) moss packing used in the field and for shipment of plants. The greatest supply of inoculum potential was obtained from the latter source.

Conditions of handling the plants after they left the field were largely responsible for the disease losses in the greenhouse. The root rot was aggravated by prolonged storage in wet moss and by continued excessive watering after set-

ting the plants in greenhouse beds. When these plants were later grown on the dry side satisfactory commercial recovery resulted. In situations involving similar circumstances this salvage method was recommended for trial.

The fungus grows commonly in nursery soils where susceptible plants have been grown, but it usually becomes evident only under unusual conditions of handling, particularly of dormant parts. It is a "low-grade" parasite which is unable to attack actively growing tissue. "The pathogenic capacity of the fungus appears to have been overrated by growers and investigators."

An attempt was made to eliminate the pathogen on infected stock by heat therapy, but because of the high thermal tolerance of the organism and the low tolerance of the rose plants, this was not possible. Satisfactory control appeared to be possible in greenhouses by careful manipulation of cultural practices.