

## ROOT DISEASES

by

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Root diseases undetected can ruin the best crop.

The diseases of Rhizoctonia, Pythium which cause dampening off of seedlings and thielaviopsis which works on roots of older plants can in combination be devastating to any crop.

These fungi are found in most soil and attack a wide range of plants. They are spread by the mechanical transfer of mycelia, sclerotia or spores in infested soil particles on flats, pots, benches, tools, the end of the watering hose and infected plant tissue.

The most important control is the practice of sanitation. Keep the work, potting and growing area clean. That is, thoroughly sterilize the containers, tools and benches that come in contact with plants. Select a light, well drained soil media for your crop. Control watering practices especially during cloudy weather. Purchase clean, disease free plants or cultured stock when possible. Unpack and examine purchased materials immediately for disease and insect pests, not in the greenhouse. This will help avoid contaminating existing crops. Apply and use fungicide soil treatments as required to minimize disease problems on a regular basis. Follow your disease prevention program.

Rhizoctonia may be favored by high temperature and a medium range of moisture that fluctuates from wet to dry. It causes a brownish rot that is quite dry looking. Drenches of Terrachlor, Benlate, Topsin M, Banrot are effective.

Thielaviopsis effects the roots by collapsing them in the middle leaving a white growing tip. The collapsed roots soon turn brown to black with many black spores. Control by adjusting pH 4.5 to 5.0 or apply fungicide drench of Benomyl, Topsin M.

Diseases can ruin your crop as the greenhouse provides an optimum environment for them to grow. The alert grower will use a combination of sanitation and fungicidal drench programs to minimize problems. If you suspect a problem contact your Extension agent for assistance.