

POINSETTIA DISEASE PROBLEMS

Roy W. Judd, Jr.
Extension Agent—Horticulture

Poinsettia disease problems are costly. They can reduce production or quality, or ruin a crop that is almost ready for market. The three important diseases form a complex that are called various names. They usually occur in the following order: Rhizoctonia (stem and root rot), Pythium (water mold root rot), and Thielaviopsis (black root rot). The common names give an indication of the type of injury they produce. As can be seen by the names, they are all soilborne diseases.

Rhizoctonia. This fungus produces a brownish discoloration of the stem at the soil line. These well-defined lesions may extend above and below the soil line for some distance. Infected plants may be stunted with the lower leaves yellowing and dropping. This disease may be very destructive in the cutting bench. It is usually more prevalent in hot weather and diminishes with the onset of cool weather. Early infections may develop slowly and not be noticed until later in the growing season. Look for lesions at the soil line when panning.

Pythium. This fungus attacks the root tips causing them to rot. It may also cause a clubby root system to develop. Waterlogging of the soil may occur and this may be due to the roots' inability to remove it from the soil. Plants have a loss in vigor, may be stunted, frequently wilt, and eventually drop their

leaves. The disease is rarely fatal but plants are not salable. The fungus may also produce water-soaked lesions on the stem at and below the soil line.

Thielaviopsis. This is called the black root rot because the roots develop black rotted areas. It may produce small black spots on the roots. These spots typically appear about one inch from the tip on roots growing on the outside of the soil ball. As the root is penetrated by the fungus, the tip dies. In advanced stages, whole roots may be attacked. It is sometimes characterized by an abrupt leaf fall. This disease usually occurs when the crop is being finished off for Christmas.

Control: A complete sanitation program should be followed in controlling these diseases. This is done by using clean (pasteurized) soil and disease-free plants. If the disease should occur, then the following fungicides are suggested for use:

Rhizoctonia--Benomyl, 1 lb./100 or Terraclor,
12 oz./100

Pythium--Truban, 8 oz./100 or Dexon, 8 oz./100

Thielaviopsis--Benomyl 1 lb./100

By keeping the soil pH between 4.8 and 5.2, Thielaviopsis will be minimized.