Diseases of Specific Florist Crops

Keeping florist crops free of disease requires constant care and planning. Prevention is the basis of freedom from disease and should be an integral part of the general cultural program. The symptoms of the diseases of major florist crops are described individually by crop in a series of fact sheets.

Poinsettia (*Euphorbia pulcherrima*)

- **Powdery mildew**: This disease is relatively new to poinsettias but has caused major losses to growers who detected it late in the crop. White powdery spots appear on either the top or bottom surface of leaves. A yellow leaf spot may indicate the presence of a mildew colony on the undersurface. Monitor for powdery mildew colonies through the entire production season. Early detection will improve the effectiveness of control.

- **Stem rot (*Rhizoctonia solani*)**: Brown stem cankers at the soil line or brown discoloration at the base of the cutting. Usually a problem during propagation.

- **Root and stem rot (*Pythium aphanidermatum*):** Soft brown decay of roots sometimes extending up into the stem to cause a brown or black basal canker. This species of *Pythium* is favored by hot summer growing conditions.

- **Root and stem rot (*Phytophthora drechsleri*):** Root rot and dark brown or black cankers at the stem base may be caused by *Phytophthora* as well as by *Pythium*. This species has been the most common problem in recent years.

- **Wilt (*Phytophthora parasitica*):** Tips of shoots wilt and blacken. Black lines may be observed running up the stem of younger plants. Reddish-brown cankers may be observed at the soil line even though roots generally appear healthy.

- **Bacterial stem canker (*Clavibacter poinsettiae*):** Black, water-soaked canker along the stem and spots and blotches on leaves. Uncommon under the cooler temperatures typical of poinsettia production in the northern United States.

- **Scab (*Sphaeloma poinsettiae*):** Round or elongated tan lesions with a purple margin on stems; puckered brown spots on leaves. This disease has been a problem in the northeastern United States in recent years: scout for symptoms.

- **Thielaviopsis root rot**: A blackened, stunted root system, longitudinal cracks at the stem base, and stunted or wilting plants. Use a soil pH of 5.5 or below to deter this disease. Poinsettias in growing mixes that do not contain mineral soil are unlikely to develop Thielaviopsis root rot.

- **Crud (physiological disorder):** Dried drops of plant sap (latex) occurring in the bracts may interfere with normal bract development and cause disfigurement of the flower head.

- **Alternaria leaf spot (*Alternaria euphorbiicola*):** Brown spots with yellow haloes; damage not usually significant in the northern United States.

- **Xanthomonas leaf spot (*Xanthomonas campestris* pv. *poinsettiiicola*):** Brown spots with yellow haloes; damage is not usually significant in the northern United States.