Diseases of Specific Florist Crops

Chrysanthemum (Chrysanthemum grandiflorum)

Note: Use culture-indexed stock.

• Verticillium wilt: Interveinal chlorosis beginning on lowest leaves, followed by leaf death, or general wilting and death of the whole plant. Not common.

• Fusarium wilt: Stunting, purpling, scorching, or chlorosis of foliage; wilting and death follow. Vascular discoloration in the stem.

• Foliar nematodes *(Aphelenchoides ritzema-bosi)*: Young growth at top of plant may be distorted by nematode feeding. More typically, brown wedge-shaped dead areas appear on lower foliage and the lower leaves turn brown and dry. Discard infested plants.

• Septoria leaf spot (*Septoria obesa* and *S. chrysanthemella*): Brown oval leaf spots; now fairly rare.

• Bacterial stem blight *(Erwinia chrysanthemi)*: Wilting at top of plant; discoloration of vascular system. Break out cuttings instead of using a knife.

• Bacterial leaf spot (*Pseudomonas cichorii*): Brown to black irregularly outlined blotches on leaves may expand rapidly under moist conditions and spread to stems, buds, and other leaves if plants are crowded and watered from overhead.

• Ascochyta blight *(Mycosphaerella ligulicola)*: Leaf spots, stem cankers, flower bud infection. Easily confused with symptoms of bacterial leaf spot or tomato spotted wilt virus, but less common than these two diseases.

- *Botrytis*: Petal spotting.
- Rhizoctonia: Brown canker at stem base.
 - Foliar Rhizoctonia Damage to Chrysanthemum



• Powdery mildew: White fuzzy patches on foliage under humid conditions.

• White rust *(Puccinia horiana)*: Yellow spots on upper leaf surface and, on the underside, raised tan spore pustules that are powdery white when mature. New disease in the United States; report suspected cases to your Cornell Cooperative Extension agent immediately. Destroy infested plants.

• Brown rust *(Puccinia tanaceti)*: Yellow spots on the upper leaf surface and brown pustules on the leaf underside. Not common in New York but known in the United States.

• Tomato spotted wilt and impatiens necrotic spot tospoviruses: Some cultivars are symptomless when infected; others show blackened midstem sections, chlorotic mottle or necrosis of leaves, or even wilting of the entire plant. Control of the vector, the western flower thrips, is essential for control of the disease.