Cucurbit Diseases

Gummy Stem Blight
Didymella bryoniae

Found worldwide, most damaging in tropical and subtropical areas

Damage Symptoms

The disease is particularly damaging to stems and foliage of cucumber, cantaloupe, and watermelon. It causes a fruit rot known as black rot on many cucurbit crops. Seedlings may be killed following infection of hypocotyls or cotyledons. On older plants, leaf symptoms appear as circular, tan to dark brown lesions on which numerous black fruiting bodies may occur. Stem lesions begin as elongated watersoaked spots that frequently exude an amber colored gummy substance and later dry and crack open. The stem is frequently girdled resulting in death of the vine beyond this point. Symptoms on fruit vary from crop to crop, but generally result in development of dark stroma near the fruit surface.

Conditions for Development

The fungal pathogen persists on infected crop debris, on other cucurbit crops or weeds, and can be seedborne. The pathogen can be disseminated quickly by rain splash and windblown rain. Wounds from pruning, harvesting or insect injury are important entry sites into stems. The disease can cause serious losses in the field or in glasshouses.

Control

Some cultivars have partial resistance to the disease and should be used if available. A fungicidal spray program may be necessary if the crop is grown under conditions conducive for disease development. In glasshouses, maintain crop ventilation to reduce the humidity. Use soil sterilization, sanitation and rotation in glasshouse production.
Information from: Vegetable Diseases: A Practical Guide, Lowell L. Black, AVRDC.