

Plant collapse, plant stunting

Colletotrichum acutatum, Verticillium dahliae, Phytophthora spp, Black root rot complex (Fusarium, Pythium, Rhizoctonia), Pseudomonas syringae pv. syringae, insect feeding

Damage:



When a whole plant wilts, although soil moisture is adequate, it is usually a result of root and/or crown damage. Various beetle larvae can also chew on crown and roots, damaging the vascular system and leading to plant collapse.

Identification:

Many fungi can damage roots, sometimes to the extent that the whole plant collapses, especially during hot weather when rapid water uptake is required to keep up with plant transpiration. Interior of crown may be discoloured, and roots are often black and lacking fresh white root hair growth.

A diagnostic lab is usually required to determine which fungal species is the culprit. The species is worth confirming, as control measures for 'oomycetes' like phytophthora and pythium are quite different to those for other fungi or bacteria.

Beetle grubs can occasionally cause plant wilt by feeding on roots and crowns. Examine roots carefully to find the white grubs.

Sometimes plant stunting can be seen in the field following a "plant bundle" pattern, where a whole bundle of plants from the nursery (perhaps a 25 count) fails to thrive from planting onwards. This can be attributed to either plants heating up (composting) in storage, or by freezing in storage.

Spread:

Root rots build up in the soil during the strawberry season, and will become problematic unless plantings are started in new media, rotated to a new field, or soil is fumigated. Phytophthora and Anthracnose (*Colletotrichum*) are commonly introduced with infected transplants.