Root Rot

Root rot occurs when the medium breaks down, drainage is poor and/or plants are overwatered. Rot sets in when roots are damaged by injury or salt build-up from hard water or over fertilizing. Rhizoctonia is very contagious and if the disease is not controlled immediately, infected plants develop brown root rot and die.

Rhizoctonia is primarily a root disease, but the symptoms can be noticed on aerial parts of the plant resembling the damage caused by Fusarium. Leaves and pseudobulbs become yellow shrivelled, thin and twisted and new growths become progressively smaller. The roots usually show a brown rot with white or brown fungal growth. In severe infections, the fungus girdles and kills the plant. The infection quickly invades the lower leaves and rhizomes of small seedlings.

Treatment: Remove infected part of roots and leaves using a sterile cutting tool, drench the remaining plant in a protectant fungicide like thiophanate methyl or systemic fungicide (such as Subdue) following label instructions. Disinfect growing area with 10% bleach solution.

Prevention: Make sure your potting media is fresh and your plants are not overwatered. When disease is suspected in other plants or when repotting is overdue, unpot the plants, check their roots and repot as necessary. In hard-water areas, pots should be flushed at least monthly to prevent root damage by watering heavily to solubilize the salts and then watering heavily an hour later to flush the salts from the pot.

View More Images of Leaf Spots on Orchids

Symptoms: Infection shows first as a yellow spot on the underside of the leaf. Soon after infection occurs, the yellow-green area may be noted on the top surface of the leaf. As the spots enlarge in irregular patterns, they become slightly sunken and necrotic and turn purplish brown to purplish black. The spots continue to enlarge in a circular or irregular pattern and may eventually cover the entire leaf. The advancing margin remains yellow. Heavily infected leaves usually fall from the plant prematurely, especially if the infection started near the base of the leaf.

Symptoms: The first signs of Guignardia infection are tiny, dark purple, elongated lesions on either leaf surface. These lesions run parallel to the veins and elongate into purple streaks or diamond-shaped areas. Spots often merge to form large irregular lesions that may affect a large part of the leaf. With age, the center of the lesion turns tan. Raised, black sporing bodies develop in the affected area feeling like sandpaper. Affects mostly ascocentrumas and vandas and their hybrids and may indicate insufficient light. This blight is also known as Phyllosticta; the names apply to two different sexual stages of the same fungus.

Symptoms: Spotting from Phyllosticta may start anywhere on the leaf or pseudobulb. The lesions are tiny, yellow and slightly sunken. As they enlarge, they become round to oval and more sunken, especially if the infection is on the leaves. With age, they turn tan to dark brown and develop a slightly raised, red to purple-black margin. Eventually, tiny black, raised spore structures develop in the center of the spots. Individual spots are about ¼ in across. Severely infected leaves may drop prematurely. Its
presence may indicate insufficient light. This blight is also known as Guignardia; the names apply to two different sexual stages of the same fungus.

Symptoms: The tiny spots may start on either leaf surface as sunken, yellow lesions. They continue to enlarge, becoming dark brown to black, circular or irregular lesions. Spots may merge to form large, irregular patches on the leaf. Heavily infected leaves fall prematurely.

Treatment: Remove infected leaves with a sterile instrument and reduce leaf wetness. Spray with a systemic fungicide such as thiophanate methyl or a protectant fungicide like Mancozeb, following label instructions. Alternate systemic and protectant fungicides.

Prevention: Good sanitation with good air movement. Reduce leaf wetness; water on the leaves may lead to infection. If the fungus is a continuing problem, monthly fungicide sprays may offer effective prevention.