

Orchid Diseases Commonly Affecting Orchids Organized by Genus  
by Sue Bottom, sbottom15@bellsouth.net

Orchid Genera Commonly Affected	Symptoms of Disease	Pathogen Causing Disease	Treatment
Angraecum	Yellow spot on leaf undersurface, spot enlarges in irregular pattern, becomes sunken and turns purplish brown to black. The corresponding top leaf surface becomes first chlorotic and finally necrotic.	Cercospora Leaf Spot caused by <i>Cercospora angraeci</i>	Sanitize plant, reduce leaf wetness. Systemic fungicide like thiophanate methyl (like Cleary's 3336) or protectant fungicide like mancozeb. Alternate systemic and protectant fungicide use.
Cattleya	Small necrotic sunken blackened spots	Bacterial Brown Spot caused by <i>Pseudomonas cattleyae</i>	Physan or captan as bactericides and copper based fungicides (will cause flower damage).
	Damping off of seedlings as the fungus invades the soil line causing water soaked lesions that enlarge rapidly OR dark to black lesions on roots, stems or leaves. Leaf lesions may be soft and one sided on the leaf.	Black Rot caused by <i>Pythium ultimum</i> and <i>Phytophthora cactorum</i>	Drenches of Truban or Terrazole or systemic fungicides like Aliette or Subdue
	Yellow, thin shriveled leaves and pseudobulbs that are somewhat twisted. Causes root rot. Diagnostic symptom is found in rhizome as a circle or band of purple discoloration in the epidermis and hypodermis with light pink vascular bundles.	Fusarium Wilt caused by <i>Fusarium oxysporum</i> and <i>Fusarium oxysporum f.sp. cattleyae</i>	Discard infected part of rhizome and pseudobulb, plant only part of plant showing no purple discoloration. Drench or dip sanitized plants in a thiophanate methyl (like Cleary's 3336) or iprodione based fungicide.
	Brown discoloration on leaves which is round or irregular, more or less sunken, yellow to light green and sharply defined. As disease progresses, fruiting bodies develop in dead areas.	Anthrachnose caused by <i>Colletotrichum gleosporioides</i> and <i>Glomerella</i> species	Sanitize plant, reduce leaf wetness. Systemic fungicide like thiophanate methyl (like Cleary's 3336) or protectant fungicide like mancozeb. Alternate systemic and protectant fungicide use.
	Large circular to irregular spots on lower surface of mature cattleya leaves OR uniform tiny spots on the lower surface of leaves. Tiny, slightly sunken, purple brown spots, can be thousands of tiny spots. Upper leaf surface becomes chlorotic.	Cercospora Leaf Spot caused by <i>Cercospora</i> species	Sanitize plant, reduce leaf wetness. Systemic fungicide like thiophanate methyl (like Cleary's 3336) or protectant fungicide like mancozeb. Alternate systemic and protectant fungicide use.
Dendrobium	Light yellow spots on leaf undersides. Spots enlarge in circular pattern, may become slightly sunken and purple-black with advancing margin remaining yellow. A yellow green area may be noted on top of leaf. Old spots are purplish black.	Cercospora Leaf Spot caused by <i>Cercospora dendrobii</i>	Sanitize plant, reduce leaf wetness. Systemic fungicide like thiophanate methyl (like Cleary's 3336) or protectant fungicide like mancozeb. Alternate systemic and protectant fungicide use.
	Tiny sunken yellow lesions on either leaf surface which continue to enlarge into circular or irregular patterns, eventually causing leaf drop.	Septoria Leaf Spot caused by <i>Septoria selenophomoides</i>	Sanitize plant, reduce leaf wetness. Systemic fungicide like thiophanate methyl (like Cleary's 3336) or protectant fungicide like mancozeb. Alternate systemic and protectant fungicide use.
Miltonia	Water soaked spots on the tip or margin of a leaf, often on newly developing leaves, which spreads to pseudobulb. Pseudobulb becomes yellow to orange, and looks like it is eaten or burned away. They become tough and leathery.	Miltonia scorch or bacterial tip burn and streak caused by unidentified bacteria	Cut away diseased parts. Apply Physan or captan as bactericides and copper based fungicides (will cause flower damage).

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Oncidium	Tiny, slightly sunken, purple brown spots with a raised light tan center on the leaf underside. With age, the entire spot becomes sunken and may coalesce with other spots. Upper leaf surface becomes chlorotic.	Cercospora Leaf Spot caused by <i>Cercospora</i> species	Sanitize plant, reduce leaf wetness. Systemic fungicide like thiophanate methyl (like Cleary's 3336) or protectant fungicide like mancozeb. Alternate systemic and protectant fungicide use.
Paphiopedilum	Small round to oval water soaked spots often in the middle of the leaf. Color changes from light brown to very dark chestnut brown enlarging in all directions.	Brown Rot caused by the bacteria <i>Erwinia cyripedii</i>	Physan or captan as bactericides and copper based fungicides (will cause flower damage). May become systemic within host if it reaches the crown or stem and therefore incurable so the plant should be destroyed.
Phaius	Tiny sunken yellow spots on leaf undersides. As disease advances, spotting is visible on both leaf surfaces, enlarging to about 1/4 in. They are sunken purplish-black with a raised margin of darker color	Cercospora Leaf Spot caused by <i>Cercospora epipactidis</i>	Sanitize plant, reduce leaf wetness. Systemic fungicide like thiophanate methyl (like Cleary's 3336) or protectant fungicide like mancozeb. Alternate systemic and protectant fungicide use.
Phaius	Orange yellow patches on leaf underside enlarging in circular pattern which may eventually cover the entire lower surface. Top surface of leaves becomes chlorotic.	Rust caused by <i>Uredo behnickiana</i>	Isolate and sanitize plants. Apply Captan fungicide.
Phalaenopsis	Small water soaked lesion which turns brown or black, may have yellow edges	Bacterial Brown Spot caused by the bacteria <i>Pseudomonas cattleyae</i>	Physan or captan as bactericides and copper based fungicides (will cause flower damage).
	Dark greyish green lesion that rapidly enlarges, affected areas are soft decayed, brown in color and offensive smelling	Bacterial Soft Rot caused by the bacterias <i>Erwinia carotovora</i> and <i>Erwinia chrysanthemi</i>	Physan or captan as bactericides and copper based fungicides (phytotoxic)
	Base of stem turns light yellow , later dark brown, and infections spreads to roots and leaves. White fungus growth can sometimes be seen on stems. Rapid collapse and rotting of roots, pseudobulbs and leaves. Thrives at 85°F and high humidity.	Collar Rot (syn Southern Blight or Orchid Wilt) caused by the fungus <i>Sclerotium rolfsii</i>	Apply Captan, Cleary's and Dithane weekly for three weeks. Apply Cleary's as a drench after repotting. May have to remove infected plants and destroy them.
Vanda	Uniform tiny, slightly sunken, purple brown spots on the lower surface of leaves. Upper leaf surface becomes chlorotic and may become purple brown with age	Cercospora Leaf Spot caused by <i>Cercospora</i> species	Sanitize plant, reduce leaf wetness. Systemic fungicide like thiophanate methyl (like Cleary's 3336) or protectant fungicide like mancozeb. Alternate systemic and protectant fungicide use.
	Tiny dark purple elongated lesions on either leaf surface. Lesions are parallel to veins elongating into diamond shaped areas. With age, may turn tan and raised black fruiting bodies develop.	Guignardia Leaf Spot caused by <i>Guignardia</i> species	Sanitize plant, reduce leaf wetness. Use Captan,, mancozeb or thiophanate methyl based fungicides. Repeat applications required.