



# Orange County Orchid Society

## Orchid Ailments

This text is reprinted from *Growing Orchids*, the 1993 Revised Edition of the American Orchid Society Handbook on Orchid Culture.

### Leaves

#### **Yellowing Leaves:**

This is a normal aging process if only old leaves on backbulbs are involved. If newer leaves yellow and soften, look for:

- too much light
- low temperature
- lack of nitrogen (especially in bark)
- loss of roots

#### **Blackened Areas on Leaves:**

The sudden appearance of brown then black areas on exposed surface of leaves on a bright, hot day, may be sunburn. Check shading; if blackened areas increase in size, it might be bacterial or fungal disease. Cut off diseased area, treat with fungicide such as natriphene, isolate plant, and dry it off.

#### **Shriveled Pseudobulbs:**

A sign that the plant is losing water content, it can be caused by:

- 1) low humidity;
- 2) underwatering, dry medium;
- 3) loss of roots.

#### **Blackened Tips or Ends of Leaves:**

This could be caused by:

- 1) overfeeding, especially in cymbidiums -- cease fertilizing and flush plant thoroughly with plain water;

- 2) excessive soluble minerals in water -- have water analyzed;
- 3) leaf dieback, a fungal infection -- cut off blackened areas and treat with fungicide.

**Brown or Black Streaking or Mottling of Leaves:**

This could be a virus infection. Send a leaf to your nearest agricultural experiment station.

**Small Spots on Leaves, Reddish Brown Turning Black :**

Probably a fungus infection favored by warmth, high humidity and poor light. Reduce humidity or dry off affected plants and treat them with fungicide.

## Flowers

**Deformed Flowers:**

If deformed flowers are produced each year by a plant, it is probably inherent. Destroy the plant.

An occasional deformed flower can be caused by:

- 1) high temperature and low humidity when buds were developing;
- 2) mechanical or chemical injury to bud;
- 3) nonrecurrent and unexplained anomaly in bud development;
- 4) virus infection. Isolate plant.

**Rapid Wilting of Flower:**

If dorsal sepal wilts or dries early, or entire flower "goes to sleep" shortly after opening, it could be caused by:

- 1) air polluted by ethylene or other gas;
- 2) too sudden a change in climate;
- 3) pollination by an unknown pollinator.

**Spotting of Flowers:**

Light brown or pinkish dots and spots on flower after opening usually indicate fungus, Botrytis, or sooty mold. Reduce humidity, increase ventilation or air movement, remove spotted and old flowers from greenhouse.

**Punctures in Flowers:**

Denotes presence of:

- 1) aphids, soft-bodied sucking insects; or
- 2) thrips, small chewing insects.

Spray with malathion.

**Bruises on Flowers:**

Either mechanical damage or red spider mites.

**Chewed or Eroded Flowers, Buds or Roots:**

Shows presence of:

- 1) slugs or snails -- use dust or bait; or
- 2) cockroaches -- use diazinon or Sevin on ground, on plants and pots.

**Color mottling of Flowers:**

This could be a color-breaking virus. Isolate plant and get an experienced opinion; destroy the plant if virus infection is confirmed.

## Roots

**Loss of Roots:**

Numerous causes, difficult to diagnose:

- 1) overwatering;
- 2) black rot, an infection of Pythium. Soak in natriphene solution;
- 3) slugs or snails. Dust with metaldehyde;
- 4) excessive salt content of water;
- 5) potting medium old and broken down. Repot after soaking plant in natriphene solution.

## Entire Plant

**White Cottony Mass or Gray, Brown, Blackish Crust on Underside of Leaves, on Flower Stem, in axils of Leaves, etc.:**

Mealybug or one of the many scale insects. Scrub with soft toothbrush dipped in malathion. Spray greenhouse regularly with malathion.