



Cultural Requirements for Zygopetalum



Zygopetalums are among the easiest of the orchids to grow outdoors in southern California and are perfect companions for cymbidiums. Zygopetalums grow best under partial shade-partial sun conditions. Zygopetalums can tolerate considerable summer heat and winter chill without damage. Many growers leave their plants outdoors all year long. Temperatures up to 100 degrees F for short periods will not harm the plants although buds may drop on some susceptible plants. Buds and flowers may be damaged if the temperature drops to 29 degrees F but the leaves and bulbs can usually withstand 29 degrees F under shade cloth for a few hours. For temperatures lower than this, some protection will be required.

Light - Adequate light is the most important factor to grow and flower zygopetalums well. The plants grow best with 3000 to 4000 or more foot candles of light intensity as measured with a light meter. 55% to 63% shade cloth overhead provides this light intensity under most conditions. Plants grown outdoors will generally be a little more compact and will have tougher leaves than they will when grown indoors. During the summer, the leaves should be a yellowish green, not a deep green. Plants grown in too much shade will usually be a lush green and will often not flower well. Providing additional shade after the flowers open will hold the color and increase the flower life as well. If you provide extra shade for the flowers, remember to remove it when the flowers fall so that the plant will grow best for next year.

Watering - Zygopetalums like lots of water and prefer to be constantly moist, but not soggy wet. During the growing season, water at least once a week, more often in warmer or drier locations. The amount of water will depend on the potting mix and the water quality. Rain water or demineralized water will give the best results. Open or porous mixes needing more water than a heavy dense mix that retains a lot of water. Water thoroughly so that water runs through the pot and out the bottom. On hot days, the plants benefit from overhead misting or sprinkling to lower the temperature and increase the humidity in the growing area. During the winter, zygopetalums need less water, but should never be allowed to dry out completely. Watering every 2 or 3 weeks may be adequate, even with no rain.

Feeding and Fertilizer - Zygopetalums are moderate feeders and will do well with the same fertilizer growers use for cymbidiums. Many growers use a high nitrogen fertilizer during the growing season (February to August) and a low nitrogen fertilizer during the blooming season and winter. Others get satisfactory results with a balanced fertilizer all year long.

Pests and Diseases - The giant white fly and scale are the two most persistent zygopetalum plant pests with snails and slugs as the principal flower threats. The giant white fly can be controlled with an insecticidal soap. Wipe off as much of the colony as possible, then spray the underside of the leaves well. Scale in the leaf axils can be a persistent problem that is hard to eradicate and the use of a good systemic insecticide may be required. Slugs and snails may be controlled with the available snail and slug baits, or with a big foot and a

flashlight at night. Do not use an insecticidal soap or an insecticide spray on zygopetalum buds. We have seen severe deformation of buds and flowers as a result. In general, any insecticide should be applied during a cool, shady time of day such as early morning to minimize any potential reaction.

Zygopetalums are relatively resistant to bacterial and fungal diseases. Bacterial and fungal diseases may be a problem under wet and crowded conditions. Adequate spacing of plants on the bench and watering early enough in the day so that the plants can dry out before dark is the best prevention. Zygopetalums can be susceptible to the common orchid viruses. Always sterilize tools and the work area before dividing or repotting each plant, and use disposable rubber gloves or wash hands thoroughly after each plant.

Potting and Dividing - Zygopetalums like a slightly acid potting mix that provides good drainage. Most growers use a fine orchid bark mix with 20% sponge-rock or perlite added. Sand, coarse peat and redwood bark or shavings may be added to improve the water retention in inland locations.

Zygopetalums generally need to be repotted about every three years under normal conditions. Zygopetalums should be repotted just after the old blooms have fallen off. If the old mix is broken down, the plant should be repotted as soon as possible to minimize root rot. Broken down mix tends to hold too much water and will reduce the air movement around the roots which often causes the older roots to die back. Vigorous plants will often outgrow the pot before the mix starts to break down.

Care After Repotting - After dividing and repotting, the plants should be placed in an area with heavier shade than normal, and should be kept cool and slightly on the dry side for several weeks. This encourages the growth of new roots into the new medium. Water the repotted plants after a day or so in the new mix, and water the first time with a dilute solution of Physan or Naccosan, which is a bactericide and fungicide, to help reduce the likelihood of fungal or bacterial disease in the newly repotted plant.

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