



Surrey, BC, Canada
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Orchids to Grow in a West Coast Hobby Greenhouse

Orchids boast approximately 35,000 species and over 300,000 hybrids. The lush moderate-light climate of the Pacific Northwest offers both novice and expert orchid lovers a wonderful opportunity to grow orchids in a back yard hobby greenhouse. The lower light levels and moderate year round temperatures of BC's west coast offers one of the best environments in North America for two low to medium light, cool growing alliances of orchids; *Zygopetalum* and *Odontoglossum*. These are also ideally suited to spend late spring to early fall outdoors.

Recommended Varieties:

Zygopetalum Pinaroo
Zygonaria Adelaide Meadows
Vuykstekeara Cambria
Odontonia Susan Bogdanow

Backyard growers often have only one greenhouse and one temperature zone, heated to maintain a minimum temperature of 12° to 14°C (54° to 57°F) which is excellent for these two cool loving beauties. Greenhouses can naturally be divided vertically to obtain temperature differentials. Well-ventilated lower benches are best. A shade cloth is another very inexpensive means to control sunlight and maintain cooler temperatures. Placing orchid pots on "humidity trays" is one way of maintaining proper humidity levels during summer months. A large flat tray can be filled with gravel to a depth of about 2 inches and filled to a 1 inch depth with water. As the water evaporates, it creates a higher humidity microclimate around your plants; ideal humidity for both genera is in the range of 50 to 80%.

Zygopetalum and *Odontoglossum* like to be kept evenly moist. Water approximately every 5 to 7 days depending on greenhouse temperature and natural light levels. Water more frequently when humidity is extremely low. Do not let plants sit in water. Both genera require a difference (a drop) of 10° to 15°F (6° to 8°C) between daytime and nighttime temperatures to promote healthy growth and blooming. Cool evening temperatures in late summer and early fall will promote flowering. They enjoy daytime temperatures of 18° to 22 °C (65° to 72°F) and night temperatures of 13 to 18 °C (55° to 65°F) and outside temperatures of 7° to 28°C (45° to 82°F) but avoid frost. When placed outside from late spring to early fall, they appreciate a north or east side of the house or patio with good air circulation. Repot every 12 to 24 months, using fresh fine fir bark and charcoal mixture for plants in pots smaller than 5 inch. For mature plants, use a mixture of fresh medium fir bark and charcoal.

Both zygos and odonts enjoy the good air circulation and cool breezes of late summer evenings. Zygos may develop black spotting on leaves if air circulation is not adequate. The incidence of spotting may increase during periods of cooler temperatures and poor airflow and tends to start on older leaves. It is natural for older leaves to turn yellow and fall off, as *Zygopetalum* are deciduous. Zygo flower stems develop on immature new growths in fall and winter months while odonts bloom on mature new growths with a fully developed pseudobulb. After blooming, fertilize half strength with 28-14-14 from spring to fall at every watering. This will promote new growth. In the fall, fertilize with 10-30-20 at half strength to promote flowering. Report every 12 to 24 months, as required. Use fresh medium to coarse mixture of fir bark, perlite and charcoal that drains well.