

Growing Paphiopedilums in Temperature Climates (Sydney)

General Conditions

Paphiopedilum are fan shaped plants which produce flowers comprised of a usually largish dorsal segment, a prominent pouch from which they derive their common name and two petals which are held horizontally or else droop to some extent. In the famed Paph sanderianum, these petals can be as long as several feet. The synsepalum is the segment found behind the pouch and is a segment formed by the fusion of the lateral sepals. In addition, Paphs differ from other orchids in having 2 anthers carrying a sticky pollen paste rather than the typical pollinia masses. Each fan growth when mature will produce a terminal inflorescence carrying one or more flowers. Paphiopedilums are derived from species found naturally in Asia and the Asia-Pacific region. There are about 90 to over 115 or so species.

Paphiopedilum come in many different varieties, some of which require special attention to their culture, but the vast majority can be managed successfully if basic universal cultural requirements are met. It is not absolutely critical that you need to know specific requirements of each species or hybrid, but of course, if you do supply the special treatment appropriate to each type, you will be rewarded with optimal results. The culture of these various types differ mostly in their desired temperature ranges for optimal growth and some peculiarities in their cultural management.

Types

Broadly, Paphiopedilum may be divided into plants with single flowered stems or those producing multifloral inflorescences. Of the single flowered type, the Complex Exhibition type and the species from which they are derived, sport plain green leaves with only slight venations (often in red flowers). This type is amongst the easiest type to grow and bear flowers which have great glossy substance and texture and often rounded shapes with large dorsal. The finest examples of these attract high prices. They come in plain green and yellows, reds to browns, spotted types and various combinations of these colours.

The Barbatum or Maudiae Type are the ones with prominent mottled foliage sometimes worth growing for their leaves alone. The flowers are a bit more slender and cruciform in shape and often carry warts, hairs and stripes. The vini-colour forms of these can be dark reds to almost black in colour.

The third group of single-flowered Paphs are those belonging to the Brachypetalum group mostly from Malaya to Thailand which are generally warmer growing and the closely related Parvisepalum group (the so-called Chinese Group) which hail from higher latitude from Vietnam to the highlands of Southern China, which are naturally more cold-tolerant. These groups and their hybrids sport flowers which are naturally rounder but with thinner substance than the two previous groups and have been something of a fad in recent times. The ease of culture in hybrids of these type when compared to the species themselves have made the hybrid highly popular recently.

The Multifloral group can be roughly divided into 2 groups, one which produces their flowers more or less simultaneously and those which produce them sequentially, sometimes over a period exceeding a year. These multifloral types, especially those in the simultaneously flowering group are much larger plants with correspondingly dramatic flowers. Because these hail from tropical climes, from moderate elevations, these plants and species require an intermediate temperature, albeit in varyingly so. The simultaneously flowering multifloral type should probably be left to those with suitable accommodation to house these larger plants.

The sequential flowered multifloral types on the other hand are smaller plants with cute cockle shell flowers. The inflorescences may last over a year with successive flowers being produce although the quality may decline with time. These are definitely easier to grow as are the hybrids between the two and other groups.

Light, Watering and Housing

In general, hybrids are easier to grow than species. Paphiopedilum lack pseudobulbs not like cymbidiums and they are generally more finely rooted. They therefore do not have the reserves in terms of moisture and nutriment to call upon which will allow them to endure the same levels of neglect as other orchids, at least not without stress and their consequences. Care should then be given to preserving the humidity around them and keeping the water up to them without allowing them to be constantly wet. Due to this consideration, they are generally better housed in some area with protection from hot or cold drying winds so that a higher humidity can be maintained without the necessity of watering too frequently. Generally, environments where ferns thrive would be ideal. Elevate plants to keep them away from snails which love the flowers. Watering needs to be thorough, 2 times a week in summer to perhaps once every 2 week in winter. Keep the potting mix "just moist".

Paphs do not require a great deal of light to grow but if insufficient, they will not flower. Generally a "dull shadow" intensity should be sufficient. Brachypetalums and multiflorals types may benefit with a little more light and moving air than the other groups. The Maudiae types can even be grown indoors.

Temperature

Paphs grow seasonally in the warmth of spring but may stop growing if heat-stressed during summer, recommencing during autumn. Most will stop growing during winter. Cultural strategy involves providing the longest growing period so that the plants may mature a growth during the growth season so as to enable them to flower in their appropriate season. Mutlufloreal Paphs may take more than a year to mature a growth and so may flower every 18 months to 2 years. Although the Maudiae types and other warmer growing types will tolerate a frost-free winter, especially if kept a little on the dry side, the plants may take longer to reinitiate growth. The shorter growing season may result in inconsistent flowering or compromised quality.

Fertilizing and Potting

A great number of potting mixes can be used successfully. A reliable mixture is one that is moisture retentive, free-draining and resistant to rapid breakdown. Mixtures of bark, coconut husk chunks, together with relatively inert material such as perlite, diatomite chips, and polystyrene chunks can be used successfully. Try to keep using the same mix on all your plants so that some consistency in optimal watering practices can be developed. Pot paphs only in pots just able to accommodate the root mass without squashing them unduly. If you are using bark Paphs generally benefit from frequent repotting and fresh mix, as frequently as annually and certainly no less than once every 2 years. An exception may be the Brachypetalums which resent roots being too disturbed. Fertilizing should be of the low nitrogen sort recommended for orchids and applied regularly and weakly, usually at half or quarter recommended strengths. Fertilizer can be withheld during period of no growth (winter) and increased during active growth. Over fertilizing will result in lush weak growth susceptible to various diseases.

Pests and Diseases

Little to no pests or diseases will affect Paphs. Even the viral diseases plaguing other genera do not appear significant in Paphs. Pests and diseases appear on paphs only under conditions of bad culture such as low humidity, overcrowding, over fertilizing. Watch out for mealy bug, aphid and mites during the warmer periods. The non-toxic or low-toxic treatments will work for these pests if treatment is applied frequently or as recommended.