

Growing Pleione Orchids

Posted by Denis Hughes on 20 June 2014

The genus Pleione is a group of small, semi-hardy, popular orchids of great beauty. They are easy plants to grow given the right conditions. In recent years artificial hybridization between various species and cultivated forms has led to a wide variety of exciting and colourful hybrids.

I have been growing Pleiones since 1962 and have been enjoying them with increasing interest each spring. Over the past decade, it has become particularly exciting as new species have been discovered and new hybrids developed. Over the last few years I have been working with Alister Blee to raise new cultivars of Pleione from seed. In 1988, Phillip Cribb and Ian Butterfield from Great Britain published *The Genus Pleione*. It remains the most comprehensive text on these plants. Ian Butterfield has also done extensive hybridizing within the genus and has registered many hybrids, often named after volcanoes.

Natural Distribution

There are about 16 species widespread from Central Nepal, eastwards to Taiwan, and from Central China, down to southeast Burma, northern Thailand and Laos.

Habitat

Pleiones grow in a wide variety of mountainous habitats, at altitudes of between 1000 - 4200m. They grow in a wide range of conditions, from almost bare branches of forest trees, mossy limbs, fallen rotting logs, moss covered rocks, soil filled pockets on cliff faces and occasionally on grassland.

Climate

The summers are wet and relatively warm. In winter (which is the dormant season for Pleione) it is cold and dry. During this time the plant is dormant, with no leaves or live roots - just a plump pseudobulb. Species which grow at higher altitudes are often covered with snow for part of this time.

Cultivation

- Do not overwater during spring when the new roots are emerging at the base of the new shoots. The compost must be only slightly damp, to force the new roots to search for moisture.
- When the plants have developed root systems do not let them dry out during the growing season. Keep them well watered and well fed.
- Plants should be given a suitable rest period during their dormancy in the winter months, with low temperatures and dry compost.
- Pleiones should be grown in shallow clay pots or pans as they are shallow rooting plants. They are community plants and are best grown close together in groups. The pots should be cleaned after use and sterilized before re-planting to reduce the possibility of fungal attack.
- In many parts of New Zealand and southern Australia (especially Tasmania, Victoria and southern New South Wales), Pleiones may be grown outdoors.

They must have the appropriate soil conditions. This can usually be achieved with a raised bed in a shaded site where winter rain may be controlled. For example, under the eaves on the shaded (south side) of the house. It is important that out of season frost must not reach these plants when in growth. Remember to take precautions for slugs and snails, which love the tender leaves. Some of the more vigorous forms of *Pleione formosana* are worth trying first.

Compost

Many combinations of compost have been successfully used. The mix I have used with excellent results over the last few years consists of:

- 1 part Crushed Pine Bark
- 1 part Rotted Pine Needles
- 1 part Coarse Peat Moss
- 1 part Chopped up Sphagnum Moss (lengths about 6 mm long)

Use the coarsest part of the mix in the bottom of the pot and the fines for around the pseudobulbs. If only growing a few plants, an easy mix to convert is, a good indoor plant potting mix with the addition of 25% chopped sphagnum moss. As flowering approaches add 5 ml teaspoon of 9 month Osmocote Plus per 200 mm pot or 5 litres of mix. Do not compact the mix. Keep it soft, open, and well-drained.

Propagation

Mature pseudobulbs will have a natural increase of between 2 to 4 times for the vigorous forms of *P. formosana* and hybrids such as *P. Versailles*. One to three small pseudobulbs should appear at the top of the old pseudobulb with one or two flowering sized bulbs also produced.

Major Pests

- Aphids - Transmit virus and distort the leaves and flowers
- Bees - May dislodge the pollen and cause the flower to collapse.
- Mealy Bug - Suck the sap of the plant.
- Red Spider Mite - Indicates that conditions are too dry, may also transmit virus.
- Scale - Suck the sap of the plant.
- Slugs and snails - Chew the leaves and flowers.

My Growers Calendar for Pleiones

This is the routine that I use for my plants. As I live near at the southern tip of the South Island of New Zealand, growers in warmer climates may need to modify this slightly.

July: Pot up pseudobulbs just before growth commences. Place coarse compost in the bottom of the container, finer grade on top. Insert pseudobulbs to half their depth. Compost at this stage should be only damp. Do not water until buds appear.

August: Flower buds appear at the end of the month, so this generally means that you should begin watering. Keep compost on the dry side to begin with. Overwatering at this stage can damage the roots and lead to rot which could be fatal to the plant.

September: The majority of plants are in bloom now. While plants are in growth they benefit from air movement. An oscillating fan in a well ventilated shaded greenhouse (or growing close to a ventilator) is beneficial. At this time of year I use 30% shade which is maintained throughout the growing season. In more Northern areas a shadehouse or sheltered shaded patio is ideal, however more shade would be required.

October: As the flowers fade the leaves begin rapid growth. Begin to liquid feed with Peters Orchid Special Fertiliser at 50% normal dilution rate. If using osmocote, liquid feeding will not be necessary. Remove old flower stalks to prevent seed being produced. This will help increase vegetative propagation.

November - February: The maximum tolerable day temperature is 32°C. Plants benefit from a humid atmosphere and have a high water requirement. This is when your potting mix must hold both large quantities of water and air. Last seasons pseudobulb will turn brown, scrink and wither. Plants may be placed outside in a cool, semi-shaded corner or in a shade house. If liquid feeding, change to Peters Blossom Booster at 50% normal rate at the end of January.

April - May: When the leaves begin to turn yellow reduce watering, as growth has finished for the season. In about 3 weeks the leaves turn brown and the roots die. Do not panic, as this is normal! This is the stage harvesting may begin. Care must always be taken with the dormant buds at the base of the pseudobulbs, as these produce next seasons plants and flowers.

Selected Species

For the beginner, *P. formosana* is the first choice. There are some lovely cultivars now available, in various shades of pinks to pure whites. We also developed the cultivar, *P. formosana* 'Silver Lining', the only known variegated *Pleione* with white edges to its leaves. Other species worth growing are the deep pink to purple *P. bulbocodioides* and the rich rose-purple *P. speciosa*. You need really cool conditions to succeed with the recently re-discovered yellow flowered *P. forrestii* from China or the natural hybrid *P. X confusa* (*forrestii* x *albiflora*).

Recommended Hybrids

There are now many hybrids to choose from. I grow well over forty different cultivars. Some of the best are;

- *P. Alishan* (*Versailles* x *Formosana*)
- *P. El Pico* (*Versailles* x *Bulbocodioides*)
- *P. Erebus* (*Versailles* x *Vesuvius*)
- *P. Piton* (*Formosana* x *Yunnanensis*)
- *P. Shantung* (*Formosana* x *X confusa*)
- *P. Versailles* (*Formosana* x *Limprichtii*)
- *P. Vesuvius* (*Bulbocodioides* x *X confusa*)

I hope the above notes help you get as much pleasure out of your *Pleiones* as they have given me over the years.

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