

## The Genus *Calanthe*

When some of us hear the name *Calanthe* we think, "Yes, we know all about that genus, there's only one species and that's *Calanthe triplicata* the Christmas orchid, grows in the Queensland rainforests." Oh boy, how wrong. *Calanthe triplicata*, **does** grow in the rainforests and flowers around Christmas, so it **is** called the Christmas orchid, or Christmas lily, however, it is only one of about **150**, usually broad-leafed, occasionally, deciduous, terrestrial, ornamental herbs distributed throughout Africa, Asia, Indonesia, and Australia.

*triplicata* (syn. *Calanthe veratrifolia*) was the species on which the genus was founded. Although my research does not mention the founder, Robert Brown, an early British botanist who worked on the Orchids of Australia, was the gentleman who named the genus in 1821. The name *Calanthe* means 'beautiful flower' in Greek, an allusion to the attractive flowers of many of the *Calanthe* species. *triplicata* was first flowered in cultivation in a Chelsea (U.K.) nursery about 1822-1823, when a collection of plants was sent from Australia.

*Calanthes* are closely related to the *Phaius*, and carry 8 pollinia, in two groups of four. The most conspicuous difference between the two is in the lip of the flower.

Friedrich R. R. Schlechter, an outstanding German orchidologist and botanist, in 1914, divided the genus *Calanthe* into 8 sections, however, the

most obvious division is into two groups, as follows,

Group 1. Those species that have large, conical or egg-shaped pseudobulbs that shed all or most of their leaves at the beginning of the rest period.

According to Henry Teuscher this group seems to only have 5 species:-

- a. *Calanthe vestita*
- b. *Calanthe cardioglossa*
- c. *Calanthe labrosa*
- d. *Calanthe rosea*
- e. *Calanthe rubens*.



*Calanthe vestita*

Group 2. Those species which have small pseudobulbs usually hidden by the bases of the leaves. Many of these species are never entirely without leaves, but some shed all their leaves and rest as a tight bud. The leaves are large, usually papery, folded and sometimes stalked.

This group, again according to Teuscher, includes

- a. *Calanthe triplicata*
- b. *Calanthe mexicana*
- c. *Calanthe engleriana*
- d. *Calanthe furcata*
- e. *Calanthe emarginata*
- f. *Calanthe reflexa*
- g. *Calanthe pulchra*
- h. *Calanthe weneri*
- i. *Calanthe masuca*

As a general rule species will not hybridize with species outside their group, although, there are exceptions, one being *Calanthe Elwesii* which is *Calanthe (regnierii x veratrifolia)*. That hybrid was first flowered and named in 1903. Another being *Calanthe Branchii* (*Textori x Bryan*) which, when it appeared in the January 1915 issue of the *Orchid Review*, was referred to as the third successful attempt to cross the two groups.

The genus *Calanthe* has the honour of having the first artificially made hybrid to flower. Mr John Dominy, a nurseryman and orchid grower, for the firm of Veitch and Sons of Chelsea in the 1800s, cross pollinated two green leafed species, *furcata* and *masuca*. According to Dr Lindley, the eminent English botanist and Orchidologist, the resulting hybrid 'combined the peculiar hairy forked spur and deeply lobed lip of the white *Calanthe furcata*, with the violet colour and broad middle lobe of the lip of *masuca*. One might have said that the flowers were just intermediate between the two.' Dr Lindley proposed that the hybrid be named *Calanthe Dominyi* in honour of the renowned gentleman who made the crossing. Lindley made

a study of the genus in 1854 and described 38 species from Japan, Indonesia, Philippines, Mauritius, Malaysia, Sri Lanka and the Himalayas.



*Calanthe triplicata*

By 1909 when Rolfe and Hurst published their *Orchid Stud Book 21* hybrids had been named. Many of these hybrids are still cultivated.

Prior to 1946 quite a number of *Calanthe* hybrids appeared but since that date limited breeding has been done. Featherhill Nurseries, Elf-Fleet of New Zealand and 2 U.S.A. nurseries registered hybrids using the genus *Phaius* with *Calanthe* but in limited numbers. The Eric Young Foundation, Murakami and Fujita of Japan and Lauralin of U.S.A. seem to be the only nurseries that have registered *Calanthe* hybrids in recent years.

**Cultivation** Although all of the above *Calanthes* are usually considered terrestrial i.e. grown in soil, many growers do not use soil. Gravel, peat, fern fibre, leaf litter, sand, bark and perlite can be used.

The species that have a definite rest period should be dried off as the leaves yellow and fall. Then it is possible to

(Continued on page 8)

(Continued from page 7)

separate the clumps into 1 to 3 pseudobulbs. Dust the wound area with Sulphur, or something similar, and trim away all dead roots leaving only enough to anchor the bulb after repotting. Put the cleaned 'bulbs in a tray of damp sphagnum moss (or a dry place or just lay the pots on their side, whichever you prefer) in intermediate to cool conditions and leave until new roots appear. (This could be 6 to 8 weeks) Northern , in her book 'Home Orchid Growing' and William Cavestro in an A.O.S. Bulletin both suggest that the bulbs be separated in Spring, when the new growth is just commencing from the base of the old bulbs. Then pot, several pseudobulbs per pot make a good display, in small containers, in a coarse terrestrial mix or cymbidium mix, and water sparingly until the new growths and roots are visible. They prefer a more open mix than the evergreen types. Good drainage is essential. Bottom heat will stimulate the new growths. Alec Pridgeon in his book 'What Orchid is That' suggests a peat / perlite mix.. Plants in active growth should receive plenty of water and weak applications of liquid fertilizer. The new leaves need more shade than the mature plants. These deciduous plants, according to Rentoul , will



*Calanthe veratrifolia*

grow and flower quite well in Cattleya conditions. William Cavestro suggests that 'the major point in the culture of deciduous *Calanthes* rests in abundant watering, light and heat'.

The evergreen types need to be kept watered all year around with most water being given in the hot months.

They grow best when allowed to grow into clumps. Most species will grow well under intermediate conditions, however, there are always exceptions. This group will also grow in Cymbidium mix, although the inclusion of oak leaves may be an assistance. The roots are more like cymbidium roots and the leafed pseudo-bulbs will remain vigorous only as long as the root system lasts. (Rentoul)

The broad leaves are subject to fungus attacks so benefit from growing in an area where there is plenty of air movement.

Avoid watering late in the day giving the leaves time to dry out before nighttime.

*Calanthe* leaves are loved by red spider , scale & mealy bug so appropriate measures should be taken..

This genus will not tolerate poor growing conditions.

Helen Edwards