

## Bulbophyllum orchid culture for the Riverina region of NSW

Bulbophyllum is an extremely large genus with over 2800 species and is the largest genus within the orchid family (2, 5). They are native to Australia, South-east Asia, Africa and South America (2) with the greatest diversity found in Papua New Guinea where they are thought to have originated (3). Within Australia there are at least 26 bulbophyllums known in Queensland and New South Wales and include *B. globuliforme* and *B. minutissimum* (7). Most grow in tropical rain forests or cloud forests. All are sympodial and are either epiphytes or lithophytes (1).

Most have a cylindrical pseudobulb with a single leaf but there are many from Africa and Madagascar that have two leaves (1). The flowers are highly specialised to attract specific insect pollinators and many have a strong pungent odour to attract mainly flies (1,2). Others have a pleasant sweet fruity fragrance to attract fruit flies (5). *Bulbophyllum beccarii* in bloom has been likened to smelling like a herd of dead elephants (if you know what that smells like?) (5).



They mostly flower in spring, early summer or early autumn (4) but in the right conditions can flower year round (5). They typically have a creeping rhizome that rarely branches from which the bulbs develop. They have very short fine root systems (1). Due to very different origins, species have widely varying growing requirements.

### Temperature requirements

They are regarded as warm to intermediate growers. Most require warm temperatures from 21-27°C but will be 'comfortable' in a temperature range of 7 to 35°C (4). They will not tolerate frosts. They need a temperature drop of about 6-8°C at night for flowering (3). Those that originate in high altitude areas of Papua New Guinea prefer lower temperatures and may not be suited to hotter climates (4). *Bulbophyllum lobbii* (see photo) is said to prefer cooler conditions and is successfully grown in the Riverina environment in a glasshouse in winter and shade house during summer. This species grows from north-east India to the Phillipines (7). Brian Milligan, a Melbourne grower, sets the bare minimum winter temperature to grow and flower this species successfully as 11-12C (7).

The minimum temperature for the tropical forms is considered to be 10°C and 15°C for equatorial species (6). In the Riverina environment they would require additional heat in winter unless grown indoors.

They can be grown indoors providing they receive good light.



## Light

They need intermediate light about 1500-2000 fc which is less than Cattleyas but more than Phalaenopsis (moth orchids) (3).

## Humidity and air movement

They prefer high levels of humidity (about 70%) and very good air circulation year round (2, 3). Good air movement is important to reduce the problem of leaf fungal disease due to frequent watering (4). Frequent misting or growing them on water filled gravel trays would be necessary over summer in the Riverina climate when humidity is typically very low (20%).



## Water

Due to their shallow fine root system they need to have constant moisture around their roots, however depending on their origin, some need a distinct wet and dry period to flower (1). The potting mix should never be allowed to dry out completely (2). They can be kept slightly drier in winter (4).

## Potting medium

Due to their creeping habit and very short roots they grow well on tree fern slabs, or can be grown in baskets, shallow pots or very shallow saucers (1). Net pots are favoured as they give good airflow (3). Sphagnum moss pads mounted on cork slabs have been found to be good by some growers or sphagnum moss in wooden baskets is also suitable (4). Good airflow must be maintained around the roots while maintaining constant moisture and good drainage (2). Some growers use sphagnum moss to retain moisture and humidity (2) but a mixture of small bark and perlite is also suitable. Repot as infrequently as possible. Repotting is best done in spring or autumn when new growth appears at a frequency of about every 3 years (2).

## Fertilizers

A balanced weak liquid fertilizer about once per month to weekly is recommended (2,4). They also enjoy fish emulsion and other organic fertilizers (4).

## Fungicides.

As they need to be kept moist, fungal infections can be a problem and monthly applications of a fungicide may be required and good air movement will reduce the problem (4).





#### **Acknowledgements and further reading**

The information in this guide has been obtained from local growers and the references listed below.

1. Gardening Australia Flora's Orchids. ABC Books (2005).
2. Caring for bulbophyllum orchids. Carter and Holmes Orchids.  
<http://www.carterandholmes.com/bulbocare.html>
3. Bulbophyllum orchid care. Orchid care Tips. <http://www.orchid-care-tips.com/bulbophyllum-orchid.html>
4. Cultural tips for bulbophyllums. Elanbee Orchids.  
<http://members.optusnet.com.au/bdobson/Bulbophyllum%20Culture.html>
5. Bulbophyllum. Wikipedia. <https://en.wikipedia.org/wiki/Bulbophyllum>
6. Growing orchids in cool climate Australia. Ed by MJ Fraser, J Wright and W Ferris (2013). Orchid Society of Canberra.
7. Bulbophyllums and Cirrhopetalums by Brian Miiligan.  
<http://www.oscov.asn.au/articles2/bulbop.htm>

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These notes are intended as a guide only and are composed from available information and local experience. The Wagga Wagga Orchid Society and its members are not responsible for any loss or damage.