PAPHIOPEDILUM SOCIETY OF NSW INC.

# NEWS LETTER vol. 2 no. 10

October 2017

**Meetings held at the Ermington Community Hall, River Road, Ermington, NSW 2115 on the 3rd Wednesday of the Month. No Meeting for Dec. All Visitors Welcomed**
**Editor : See Ting Ho email :stho@optusnet.com.au**

## *Minutes from the September 2017 Meeting.*

Meeting was opened at 8.05pm by President Dr SeongTay with a welcome to all present.
Apologies were received from:- John McAuley, Garrie & Lesley Bromley, Ian & Irene Chalmers, Sylvia Lee Joe, Jan Robinson, Bob Bishop, Nola Briscoe Hough, Graeme Scott-Harden.

Visitors were welcomed:- Mitchel Nysoupe, Sam and Joyce Atwal, Judy Major and Steve Levi.

President Seong then outlined the following to members.

- Another successful St Ives Fair display with us gaining 3rd prize for the Society. Thanks to Rod, John and Gary for set up. Gary spoke encouraging members to indicate they would like to have a go at setting up the display next year. Nice to have new fresh ideas.

- Outlined the new (3rd) growing competition starting tonight.
*Paph. platyphyllum:* there are 33 members taking part.

- Next meeting is our Auction night so please save up there will be some lovely FS plants for sale. Catalogue to be sent to members prior to meeting.

- Described to members the nights raffle plants, which include *Paph. malipoense, Paph. dianthum, Paph. parishii*, to name just a few.

- With the assistance of the Secretary growing competition plants were distributed.

Meeting adjourned for supper.

Upon resumption of the meeting our President then gave us a fascinating PowerPoint presentation on growing species paphiopedilums. Seong focussed on temperature, showing the locations the species are found in and the wide variation in conditions some experience. He also grouped some of the species together illustrating those that can be grown in similar conditions. Other factors such as light, water, growing medium were also discussed.
Seong received several questions after the presentation,

illustrating the interest it sparked.
A round of applause followed the presentation.

Show Marshall – Craig, then presented to the meeting the night's winners.

Champion species *Paph. malipoense* Shown by SeongTay
A lovely tall, well flowered and coloured form.
Champion Hybrid Paph Saint Swithin "Elaine" Shown by Jonathon Clark
Again, a lovely large plant with exceptional colour.

Congratulations to the winners who received vouchers for the sales table.

Raffle was drawn with the winner taking home a near flowering plant of *Paph malipoense.*

Seong sincerely thanked all the members who assisted setting up/pulling down, brought food for supper and the members who prepared supper.

Safe trip home.

Meeting closed at 9.40pm


**18th October 2017 – Meeting Night. Auction Night. 5 Plants per Vendor, 15% Commission. Growing Competition Judging :Phrag Hanne Popow x kovachii. Last Benching for 2017 Point Score.**

**15th November 2017 – Last Meeting for the year, Christmas Social Night/Presentations of Point Score Competition, Extra large raffle etc. Growing Competition Judging : Paph insigne. Start of 2018 Benching Point Score**

***December 2017 – No Meeting***

# Members Notice Board

***This section is for you – the members. If you are looking for a particular plant (Paphs of course), have some growing issue and need advice or you just want to share some pictures or ideas you have, just email the information to the Editor.***

The Auction Listing has been emailed out. There are some good quality plants on offer...a good chance to get good quality division which is not normally offered elsewhere. Even though there is no phone bids etc...why not ask a friend who is attending to bid on your behalf.

# Growing Tips for the Month

Unfortunately Rod told me he has run out of things to talk about, so we don't have his input for now. Thanks Rod for all the Growing Tips.

Let me fill the gap until we find some new ideas to entertain you with your growing.

Most of you would be repotting your paphs by now and perhaps already finished. During repotting...it is a good time to inspect the plant. Inspect the underside of the leaves and the root system. Have a good look....looking for the following:

1. Are there a lot of dead roots. The roots should be light brown, solid if you feel with your finger and some will show active growing tips.
2. Dead roots are usually dark brown to black in colour and if you squeeze it with your finger...it will feel hollow inside. Some will simply fall off or you will need to remove them. I simply pinch them off. There should not be a lot of dead roots....just a few if any.
3. See if there are short roots that have aborted in growing... paphs roots generally do not regenerate when damaged. If you can see short stumpy aborted roots...you need to figure out why this is happening. Paphs are not prolific producers of roots...so when a precious new root abort...that is not good.
4. Take care when removing your potting mix...some of the mix will stick to the roots firmly...if you pull them off....it will also damage the healthy roots. I tend to leave them if they do not fall of themselves when you pull the plant out of the pot.
5. Inspect the underside of the leaves...are there scale, mealy bugs etc. Clean them up.

   If you have a lot of dead roots...you need to work out why it is happening...too wet perhaps?..damage to the roots from placing a stake through the root? too dry perhaps? Too much strong fertilising perhaps.?
   Similarly if you see aborted roots..work out why it is happening...too dry perhaps when the root was developing? The plant was a little wobbly...thus shaking when watering or the wind blowing..causing the root tip to damage and aborting? Too strong a fertiliser being applied...burning the root tip perhaps?
   You are the only one that can know what you have done...make the necessary adjustment for the new growing season. Next repotting ...check and see if you adjustment you made has improve the growing. Ask for advice from the experience grower....trial and error...but remember what you have done!!
   Good Growing – See Ting Ho

## BENCHING RESULT FOR September 2017

**Species of the Evening**
*Paph. malipoense* Seong Tay

**Hybrid of the Evening**
*Paph.* St. Swithin 'Elaine' J. Clark

**CLASS 1. Multifloral Species**
1.*Paph. philippinense* J. Clark
2.*Paph. rothschildianum* J. Clark
3.*Paph. lowii* 'Rainbow Warrior' J. Clark



**CLASS 2. Sequential Species**
1.*Paph. liemianum* Seong Tay
2.*Paph. victoria-regina Var. kalinea* J. Clark


**CLASS 3. Brachypetalum Species**
31.*Paph. wenshanense* Seong Tay

**CLASS 4. Parvisepalum Species**
1.*Paph. malipoense* Seong Tay
2.*Paph. delenatii fma. album* Seong Tay
3.*Paph. vietnamense* Seong Tay

**CLASS 5. Paphiopedilum/Sigmatopetelum Species**

| | |
|---|---|
| 1.*Paph. hirsutissimum* | Rod Nurthen |
| 2.*Paph. fowlii fma. album* | Seong Tay |
| 3.*Paph. mastersianum* | Seong Tay |

**CLASS 7. Species Seedling**

| | |
|---|---|
| 1.*Paph. armeniacum* | J. & M. Bartlett |
| 2.*Paph. lowii* | C. & G. Scott-Harden |

**CLASS 8. Complex Hybrids Red**

| | |
|---|---|
| 1.*Paph.* Hunter's Red 'Northbridge' | Seong Tay |
| 2.*Paph.* Hunter's Red 'Northbridge' | Seong Tay |


**CLASS 9. Complex Hybrids Yellow/Green**

| | |
|---|---|
| 1.*Paph.* Fassifern 'Majestic' | Seong Tay |
| 2.*Paph.* Sherline 'Rondo' | Seong Tay |
| 3.*Paph.* (Winston Churchill x Sally Ann Durin) x Winstear | J. & M. Bartlett |



**CLASS 11. Complex Hybrids Spotted**

| | |
|---|---|
| 1.*Paph.*Jannine Banks x Amanda | Rod Nurthen |
| 2.*Paph.* Sparsholt 'Jaguar' | Seong Tay |


**CLASS 12. Complex Hybrids Other Colour**

| | |
|---|---|
| 1.*Paph.* Pathfinder Union 'Central' | Seong Tay |
| 2.*Paph.* Lippewunder | S. T. Ho |
| 3.*Paph.* (Lyrello x Mandy Lu) x Small World | S. T. Ho |

**CLASS 13. Mulifloral Hybrids**

1.*Paph.* St. Swithin ‘Elaine’ J. Clark
2.*Paph.* St. Swithin ‘Sunnybank’ J. Clark
3.*Paph.* Berenice ‘C.J.C.’ J. Clark

**CLASS 14. Sequential Hybrids**

1.*Paph.* Yongala ‘ Rock ‘n Roll’ J. Clark
2.*Paph.* Transvaal ‘Big J.R.’ J. Clark

**CLASS 15. Brachypetalum Hybrids**

1.*Paph.* Nathaniel’s Scarlet S. T. Ho

**CLASS 16. Parvisepalum Hybrids**

1.*Paph.* Norito Hasegawa S. T. Ho

**CLASS 17A. Maudiae Type Hybrids, Coloratum**

1.*Paph.* Hung Sheng Red Apple x Hung Sheng Flame Seong Tay
2.*Paph.* Hsinying Lexus x Hsinying Rubyweb Seong Tay
3.*Paph.* Pulsar x Hsinying Purchase S. T. Ho

**CLASS 17B. Maudiae Type Hybrids, Albinistic**

1.*Paph.* Hsinying Dragon Emma Seong Tay

**CLASS 18A. Novelty Hybrids**

| | |
|---|---|
| 1.*Paph.* Mazurka | C. Nidagal |
| 2.*Paph.* Virginia Moffett | Rod Nurthen |


**CLASS 19. Other Cypripedioideae Hybrids**

| | |
|---|---|
| 1.*Phrag.* Hanne Popow | S. T. Ho |

**CLASS 20. Hybrid Seedling**

| | |
|---|---|
| 1.*Paph.* Hung Sheng Magic x Hung Sheng Flame | J. &M. Bartlett |
| 2.*Paph.* Cherry Glace x *sukhakulii* | J. & M. Bartlett |
| 3.*Paph.* Doctor's favourite x Ice Castle | J. & M. Bartlett |

**Registered as Shave Ice**

56plants benched



***Note: This article was written some time ago....so 'new' is at time of writing.***

# *Paphiopedilum gigantifolium*

## a new slipper Orchid Species from the Island of Sulawesi (Indonesia)

Dr. Braem, Guido J., Baker, Margaret L. & Baker, Charles 0.'

Braem, Guido J. (Schlechter Institute, Naunheimer Str. 17, D-35633 Lahnau, Germany). Baker, Margaret L. & Baker, Charles 0. (3526 S. E. Johnson Creek Blvd., Portland, Oregon 97222-9213, USA.)
— *Paphiopedilum gigantifolium* Braem, Baker &Baker — *Orchidees. Culture et protection 30 :*5-12, 1997

A new orchidaceous species (subfamily *Cypripedioideae* Lindley, genus p*aphiopedilum* Pfitzer, subgenus *Polyantha* [Pfitzer] Brieger, section *Mastigopetalum* Hallier) from Sulawesi (Indonesia) is described.
Key words: *Orchidaceae, Cypripedioideae, Paphiopedilum, Paphiopedilumgigantifolium,* taxonomy, ecology, Indonesia, Sulawesi.

**Introduction**

The general interest in the plants generally referred to as 'slipper orchids' has been omnipresent for many decades. Whereas the first record of a tropical slipper orchid being cultivated in Europe dates back as far as 1760 *(Paphiopedilum purpuratum* as *Cypripedium sinicum),* the most numerous 'discoveries' date from the second half of last century. A new 'run' on the species began after the legal restrictions for the cultivation of these magnificent orchidaceous plants were enforced, thus raising the demand for species belonging to the genera involved. The most extraordinary stages in the 'modern' history of the genus were the 'rediscoveries' of the Chinese taxa belonging to the subgenus *Parvisepalum* Karasawa & Saito, the discoveries of *Paphiopedilum supardii* Braem & Loeb (1985), *P. emersonii* Koopowitz & Cribb (1986), *P. sangii* Braem (1987), *P. markianum* Fowlie, *P. helenae* Averyanov (1996) and the rediscovery of *P. sanderianum* (Rchb. fil.) Stein in 1985. It has been predicted (on several occasions, by one of us (G.J.B.]) that remote and inaccessible areas would yield further species. Therefore, it is less than surprising, that a new taxon of the genus *Paphiopedilum* can now be described from the island of Sulawesi.

**Description**

*Paphiopedilum gigantifolium* Braem, Baker & Baker is an herbaceous plant, growing in leaf litter on the floor of the forest. The leaves appear uniformly green (as is characteristic for all species within the subfamily) but show a slight marmoration when held against the light. They are (±) 60 cm long and (±) 8 cm wide, fleshy, rigid, the apices obtuse. The inflorescence is about 60 cm long, terete, (±) 9 mm in diameter, green, densely covered with reddish-brown hairs. The floral bracts are large, (±) 6.5 cm long, distinctly folded, each side about 2.2 cm wide, green, with the exception of the apex densely covered with reddish-brown hairs. The inflorescence is multifloral. The type specimen carries 5 flowers (at the time of description four open and one in bud. It may be assumed that well-established and well-cultivated plants will bear more flowers, possibly of a somewhat larger size. The flowers are large (flowers of more established plants may turn out to be somewhat larger), in their natural condition 6 cm across, 6 cm high and 8.5 cm deep. This extreme depth results out of the distinct reflexing of the lateral petals and the position of the dorsal which stands at an angle of only 55 degrees to the pouch and thus protects the opening.

Dorsal sepal ovate, acuminate, 4.8 cm long and 2.4 cm wide, green with the prominent veins of the basal 1/3 to 1/2 purple (much more distinct on the inside than on the outside). The outer surface densely covered by dark reddish-brown bristles.

Synsepalum narrowly ovate, acuminate, 4.3 cm long, 1.9 cm wide, green, with two major veins purple for about 1/3 of the length (again better visible on the glabrous inside). The outside densely covered with dark reddish-brown bristles.

Lateral petals elongate-subulate, 1.1 cm wide near the base, tapering to a more or less blunt apex, twisted in their apical part, reflexed at about 55 degrees to the pouch. Overall length (±) 8 cm, yellowish-green, covered with multiple, irregular reddish-brown spots, that are largest along the longitudinal middle, the upper edge, near the base, with a few small tufts of reddish-brown bristles.

Labellum 5.4 cm long, infolded upper part (±) 3 cm long and 0.8 cm wide at the base, lower part transformed into a pouch, (±) 2.4 cm long, (±) 2.3 wide, yellowish green, the pouch and about 1 cm of the infolded upper part covered with reddish-brown. Outside glabrous, inside glabrous with the exception of the bottom and back where there are some small excrescences. The infolded margins of the upper part of the labellum extending (±) 4 mm into the pouch. The upper margin of the pouch not indented. The back of the pouch, however, shows at the apex an extraordinary large indentation.

Staminode 2.6 cm long, 1.4 cm wide and 1.2 cm deep, complex, the staminodal shield (±) 1.7 cm long, 1.4 cm wide and 0.6 cm deep. Front part more or less rectangular, the upper margin rounded, the lower margin with a broad isthmus, glabrous, yellowish-white, with a hue of reddish-brown near the sides; side parts indented and covered with brown bristles.

**Differentiation to other species within the genus**

*Paphiopedilum gigantifolium* is easily distinguished from all other species within the genus. Its overall characteristics put it in subgenus *Polyantha* (Pfitzer)Brieger.Section *Mastigopetalum*Hallier. Here it differsfrom all its co-members by a number of floral features and by its overall floral morphology, but especially by the curiously reflexed petals, the position of the dorsal and by the morphology of the staminode and the staminodal shield. The new species seems to be closely related to *P. rothschildianum*(Rchb. fil.) Stein and *P. supardii* Braem& Loeb.

**Etymology**

*gigantifolum :*referring to the extraordinary dimensions of the leaves.

**Climatic and Cultural information**

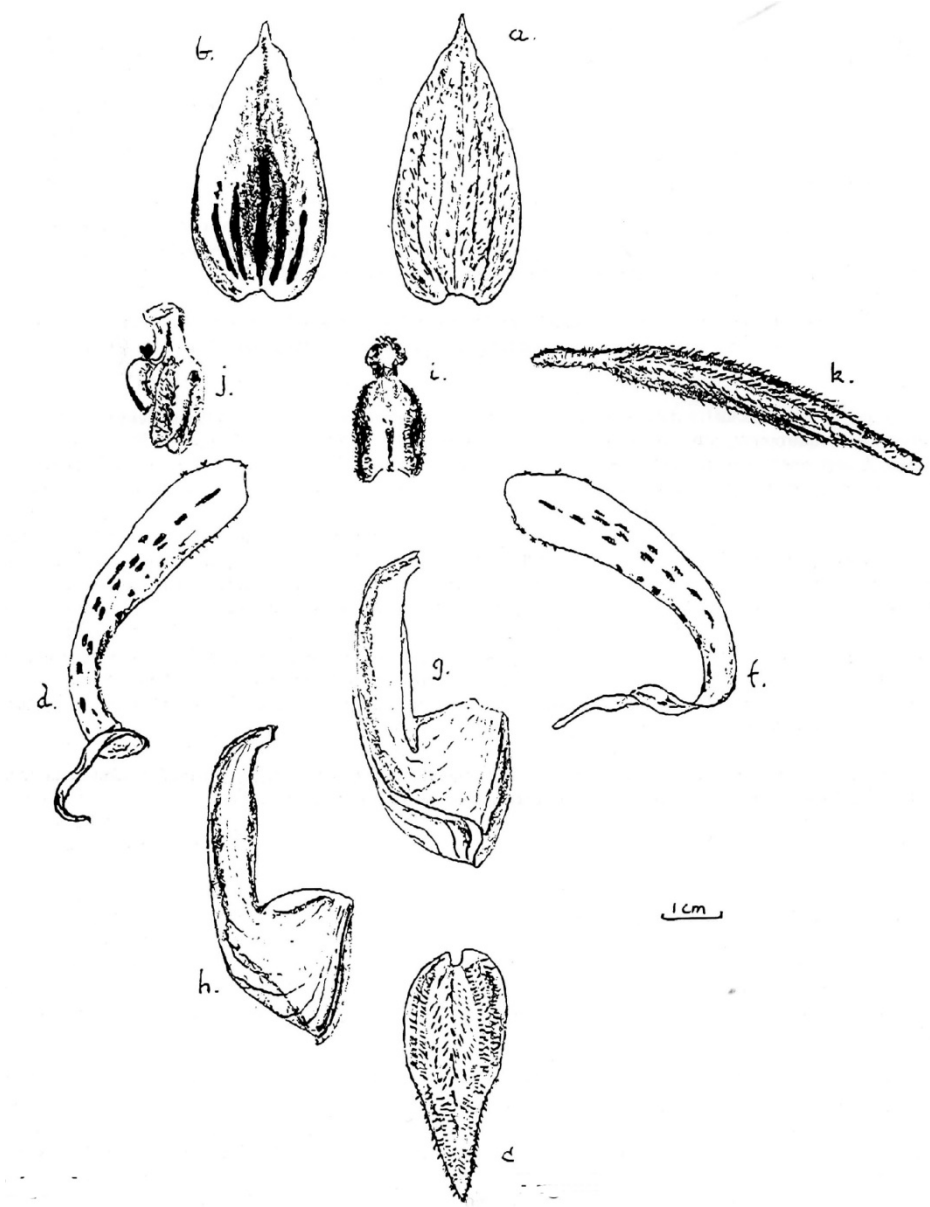
Distribution and Habitat :Sulawesi.
*Paphiopedilum gigantifolium* Braem, Baker &Baker was discovered in the northern part (somewhat north-east of Donggala) of the Indonesian island of Sulawesi. The plants grow in steep ravines in shaded conditions at elevations around 700 m (2300 ft) above sea-level, always in the vicinity of running water.

C,

Climate :Station #97072, Donggala, Sulawesi, Indonesia, Lat. 0.7S, Long. 119.7E, at 20 ft. (6 m). Temperatures are calculated for an elevation of 2300 ft. (700 m). Record extreme temperatures are not available for this location (see table 1, page 8).
Blooming in Europe :April-May

**Cultural Recommendations**
Light :1200-1800 fc. Plants grow in deep shade, so light should be greatly filtered or diffused. Plants should never be exposed to direct midday sun. Strong air movement should be provided at all times.
Temperatures :Throughout the year, days average 80-82°F (27-28°C), and nights average 66-68°F (19-20°C), with a diurnal range of 13-15°F (7-8$^0$C).
Humidity :Averages are not available for this location (station #97072), but records from nearby stations in the region indicate probable values near 80% year-round.
Water : Rainfall is light to moderate throughout the year, but is probably greater in the mountain habitat than is indicated by the climate data from the coastal weather station. Cultivated plants should be watered often while actively growing, but drainage should be excellent and conditions around the roots should never be allowed to become stale or soggy.
Fertilizer :1/4-1/2 recommended strength, applied weekly when plants are actively growing. Many growers prefer to use a balanced fertilizer throughout the year; but others use a high-nitrogen fertilizer from spring to mid summer, then switch to one high in phosphates in late summer and autumn.
Rest period :Growing conditions should be maintained all year. Water may be reduced somewhat for plants grown in the dark, short-day conditions common in temperate latitudes, but they should not be allowed to dry out completely.
Growing media :No conclusive data is yet available about the cultural requirements of these plants. We have assumed their requirements are similar to *P. rothschildianum* (Rchb. fil.) Stein and *P. supardii* Braem& Loeb, however.a very open, well drained media that remains moist but not soggy should probably be used. The addition of chopped *Sphagnum* to the potting mix should prove beneficial, especially for plants grown in drier areas with low humidity. Because plants are large and become top-heavy after several years of growth, they are more easily managed if grown in a heavy, relatively shallow clay pot with a wide base. Plants should be repotted before the medium breaks down or becomes sour. Because of the plant's high water requirements, repotting may be needed as frequently as every year, particularly if a generous amount of moss has been used in the potting mix. Plants may be repotted at any time, but it is usually best done in autumn or winter so the plant has a chance to recover and become re-established without the additional stress of high temperatures. Although specific growth habits have not been reported for these plants, other closely related species often do not produce roots on new growths for 2-3 years. Although, first results indicate *P. gigantifolium* Braem, Baker & Baker to be somewhat easier to root and establish as some of its relatives, care should be taken when dividing to ensure that each division has roots.
Miscellaneous notes :The bloom season shown in the climate table is based on reports from the cultivation of the type specimen in Europe. Further information about this aspect is not as yet available.

Drawing made by Mrs. Gudrun Braem




Legend
a. Dorsal sepal, outer surface
b. Dorsal sepal, inner surface
c. Synsepalum
d. & f. Lateral sepals
g. Labellum (longitudinally cut in half) inside
h. Labellum (longitudinally cut in half) outside
i. Staminode, frontal view
j. Staminode, side view
k. Ovary

Paphiopedilum gigantifolium Braem, Baker & Baker

## ***Summary of Seong's Presentation September Meeting***

This article is written in response to requests from some of our members for a summary of the talk I gave at the September 2017 meeting.

**Growing Paphiopedilum Species**

There are 97 species of the Genus Paphiopedilum accepted by the World Checklist of Selected Plant Families (WCPS) but we very infrequently see them benched at orchid meetings or at shows except for some of the common ones like Paph. villosum, Paph. hirsutissimum, Paph. charlesworthii, Paph. fairrieanum and a few others. Even well known species like Paph. rothschildianum and Paph. sanderianum are very rarely seen in Sydney.

I grow about 80% of the Paph species and I would like to encourage more people to grow them so that we can all enjoy a larger variety of Paph species at meetings and shows.

There appears to be more Paphiopedilum species names than the 97 accepted species as many of them are synonyms or even multiple synonyms of the same species. So be careful when buying species as you may be buying the same species labelled under different names.

(A list of the Paphiopedilum species accepted by WCSP is included at the end of this article as well as a list of the commonly used synonyms.)

Much information about the different Paph species and their culture can be found on the internet. Although a lot of the information is very useful, one has to be aware there are also many inaccuracies. So be careful and cross-check the information.

Paphiopedilum species are perceived to be more difficult to grow than hybrids. This is not true. They can be grown as successfully as the hybrids if we know where the species come from, in particular the latitude and altitude of their natural habitats, which gives us an idea of how cold or hot they can be grown, and how much light they require, two important aspects of growing the Paph species.

Paph species from regions closer to the equator will require heating but will tolerate cooler conditions if they are from higher up the mountains. Species from regions further away from the equator require less heating and will tolerate even cooler conditions if they are from high up the mountains. There is a drop of about 6.4 degrees Centigrade for every 1000 metres of altitude.

All the Paph species will grow nicely in a controlled environment where the temperature is between 12 degrees C minimum and 34 degrees C maximum. However, not everyone has the luxury of having such a growing environment. We are very fortunate in Sydney that the climate is not too harsh except for the occasional summer temperature of 50 degrees C.

Knowing the temperature and light requirement of the species will enable many of us to determine what species can be grown without heating during winter. The growing medium, type of pots, fertilisers , humidity and frequency of watering are similar to the hybrids.

I have made a list of the species that can be grown under different temperature and light conditions. It is important to slowly acclimatise your plants if you are moving them from a low light area to a high light area, otherwise they can easily get burnt.

**Warm – light shade:**
druryi , exul, glaucophyllum, moquetteanum, ooii, primulinum, philippinense, praestans, randsii, stonei.

**Warm – medium shade:**
dayanum, fowliei, godefroyae, gigantifolium, glandiferum, javanicum, kolopakingii, lawrenceanum, leucochilum, lowii, niveum, parnatanum, sanderianum, supardii, venustum

**Warm – deep shade:**
adductum var. anitum, barbatum, liemianum, mastersianum, schoseri, urbanianum.

**Intermediate – light shade:**
acmodontum, argus, bullenianum, concolor, fairrieanum, gratrixianum, haynaldianum, hookerae, jackii, lowii, papuanum, purpuratum, sukhakulii, tranlienianum, wardii, wilhelminae.

**Intermediate – medium shade:**
adductum, appletonianum, bellatulum, callosum, delenatii, emersonii, hangianum, helenae, hennisianum, micranthum, sangii, villosum, wenshanense.

**Intermediate – deep shade:**
braemii, javanicum, malipoense, parishii, superbiens, tonsum, vietnamense, violescens.

**Cool – light shade:**
argus, charlesworthii, henryanum, hirsutissimum, spicerianum.

**Cool – medium shade:**
tigrinum

Cool – deep shade:
barbigerum, dianthum

The above is only a guide and must not be relied upon completely. It is necessary to experiment and test out your own growing environment with lesser quality plants in your collection before you put your entire collection under these conditions.


Heated glasshouse with light shading


Unheated glasshouse with light shading
Temperature of 0 to 5 degrees C in winter

**The 97 Paphiopedilum species accepted by the World Checklist of Selected Plant Families (WCSP):**

| | | | |
|---|---|---|---|
| acmodontum | fairrieanum | malipoense | stonei |
| adductum | fowliei | mastersianum | sugiyamanum |
| appletonianum | gigantifolium | micranthum | sukhakulii |
| areeanum | glanduliferum | moquetteanum | supardii |
| argus | glaucophyllum | niveum | superbiens |
| armeniacum | godefroyae | ooii | thaianum |
| barbatum | gratrixianum | papuanum | tigrinum |
| barbigerum | guandongense | parishii | tonsum |
| bellatulum | hangianum | parnatanum | tranlienianum |
| bougainvilleanum | haynaldianum | philippinense | urbanianum |
| braemii | helenae | platyphyllum | vejvuratianum |
| bullenianum | hennisianum | praestans | venustum |
| callosum | henryanum | primulinum | victoria-mariae |

canhii
charlesworthii
ciliolare
coccineum
concolor
cornuatum
dayanum
delenatii
dianthum
druryi
emersonii
exul
hirsutissimum
hookerae
inamorii
insigne
intaniae
jackii
javanicum
kolopakingii
lawrenceanum
leucochilum
liemianum
lowii
purpuratum
qingyongii
randsii
richardianum
robinsonianum
rothschildianum
rungsuriyanum
sanderianum
sangii
schoseri
spicerianum
stenolomum
victoria-regina
vietnamense
villosum
viniferum
violescens
wardii
wenshanense
wentworthianum
wilhelminae

**Synonyms commonly encountered:**

Paph. affine = Paph. gratrixianum
Paph. amabile = Paph. bullenianum, Paph. linii, Paph. robinsonii
Paph. ang-thong = Paph. godefroyae var. ang-thong
Paph. anitum = Paph. adductum var. anitum
Paph. appletonianum = Paph. cerveranum, Paph. hainanense, Paph. waltersianum, Paph. wolterianum
Paph. baccanum = Paph. schoseri
Paph. barbatum = Paph. nigritum
Paph. birkii = Paph. callosum var. sublaeve, Paph. thailandense
Paph. bodegomii = Paph. wilhelminae
Paph. boxallii = Paph. villosum var. boxallii
Paph. braemii = Paph. tonsum var. braemii
Paph. bullenianum = Paph. amabile, Paph. linii, Paph. robinsonii
Paph. callosum = Paph. crossii
Paph. celebesensis = Paph. bullenianum var. celebensesis
Paph. cerveranum = Paph. appletonianum, Paph. hainanensis, Paph. wolterianum, Paph. waltersianum
Paph. chamberlainianum = Paph. victoria-regina
Paph. crossii = Paph. callosum
Paph. curtisii = Paph. superbiens var. curtisii
Paph. elliotianum = Paph. rothschildianum
Paph. esquirolei = Paph. hirsutissimum var. esquirolei
Paph. fowliei = Paph. hennisianum var. fowliei
Paph. glanduliferum = Paph. gardinerii
Paph. gratrixianum = Paph. affine, Paph. villosum var. gratrixianum
Paph. hainanense = Paph. appletonianum, Paph. cerveranum, Paph. waltersianum, Paph. wolterianum
Paph. helenae = Paph. barbigerum var. helenae
Paph. huonglanae = Paph. emersonii var. huonglanae
Paph. jackii = Paph. malipoense var. jackii
Paph. kalinae = Paph. victoria-reginae var. kalinae
Paph. leucochilum = Paph. godefroyae var. leucochilum
Paph. lockianum = Paph. glanduliferum var. lockianum
Paph. lynniae = Paph. lowii var. lynniae
Paph. moquetteanum = Paph. glaucophyllum var. moquetteanum
Paph. nigritum = Paph. barbatum
Paph. papuanum = Paph. ziekianum
Paph. parnatanum = Paph. usitanum
Paph. platyphyllum = Paph. stonei var. latifolium

Paph. praestans =  Paph. glanduliferum var. praestans
Paph. richardianum = Paph. lowii var. richardianum
Paph. robinsonii = Paph. bullenianum
Paph. roebelenii = Paph. philippinense var. roebelenii
Paph. schoseri = Paph. baccanum
Paph. sublaeve = Paph. callosum var. sublaeve, Paph. birkii, Paph. thailandense
Paph. thailandense = Paph. birkii, Paph. callosum var. sublaeve
Paph. tigrinum = Paph. markianum
Paph. topperi = Paph. kolopakingii var. topperi
Paph. victoria-reginae = Paph. chamberlainianum
Paph. virens = Paph. javanicum var. virens
Paph. volonteanum = Paph. hookerae var. volonteanum
Paph. wolterianum = Paph. appletonianum, Paph. hainanense, Paph. waltersianum
Paph. wenshanense = Paph. conco-bellatulum
Paph. wilhelminae = Paph. glanduliferum var. wilhelminae
Paph. ziekianum = Paph. papuanum

**Seong Tay.**