

February 2020

Volume 62 ... no. 2



Pterostylis atriola* (snug greenhood) is a small multi flowering, Tasmanian endemic greenhood orchid. Its Type Location is the Snug Tiers but is found in more locations across the state. Photo by*Geoff Curry



The
TASMANIAN
ORCHID SOCIETY

GREENHOOD



One of the successes of any good society or club is the quality of the guest speaker/s it has at its meetings.

Geoff Curry, besides having a great sense of humour, is an excellent presenter of his Australian reknown knowledge of Tasmanian orchid species. His passion for conservation and his love of the Tasmanian flora and fauna is to be admired. On Monday February 17th 2020 Geoff and President Peter Willson attended the Kempsey Orchid Spectacular in 2019. They will be giving us their thoughts and impressions of the trip.

The general meeting will commence at 7.30 pm. at Legacy Hall 1/159 Macquarie Street Hobart.

*February is a normal **competition** night... will you “bench” by 7.15 pm your orchids for Division 1 and Division 2.?*

Competition Floral arrangement is “Let the Sunshine In”

Contents

Special Interest articles.

President' Report p 3

Annual General Meeting p 5.

Cultural notes p 8.

Jan. Meeting results 8/9

February Sunday get together p 6.

Ian Woodgate thoughts p. 11.

Temp. & Humidity p12 to 13.

Air movement in Orchids p.13/16.

Editors fertilizer story p 17

Copy Deadline is the

4th March 2020

**OFFICE BEARERS for
2019/20**

PRESIDENT

Peter Willson ...62484375

Senior Vice President

*Vicki Cleaver ...
62602158*

Vice President

Glenn Durkin ...62492226

**SECRETARY/Public
Officer**

*Bev Woodward
0413136413*

secretary@tos.org.au

TREASURER

*Christine Doyle...
62729820*

noel.doyle3@bigpond.com

JUDGING Registrar

Jim Smith

PUBLICITY OFFICER

Vicki Cleaver

**COMMITTEE
MEMBERS**

Noel Doyle

Peter Manchester

Shirley Jackson

Andrea Gerrard

Jim Smith

**TAS. ORCHID SOCIETY MAJOR other EVENTS
THROUGHOUT THE YEAR...**

Sunday 23rd February – TOS BBQ @ Tolosa Park site no 5
starting at 12.00 noon. Bring chair, drinks, plate/cutlery and
a salad &/or sweets to share. Meat/ bread/ sauces provided.

Saturday 7th November – Sarcophilus & Masdevallias Show

GREENHOOD editor Peter S Manchester 0477432640 ...
milingandi@vision.net.au

WEB MANAGER Alan Millward 62722031
alfont123@gmail.com

**TASMANIAN ORCHID SOCIETIES GENERAL MEETING
DATES**

February 17th – Kempsey Orchid Spectacular with G. Curry & P.
Willson.

March 16th – Gary Hill on his trip to China and AGM.

April 20th - Orchid Society auction

May 18th – Autumn Show & culture talk

Conference to be held on the Saturday 3rd October, Town Hall
...**Chairperson** Sally Johnston

Committee meetings for 2020 are ... March 3rd, others listed later.

The GREENHOOD editor endeavours to assure the reliability of articles and dated
information. The opinions and views are those of individual authors are not of the
Tasmanian Orchid Society Inc. and disclaims all liability against any statements made.

From the Desk of the President Peter Willson

What an excellent session Ian Woodgate conducted for us at our January Meeting. He advised us of his preference for Ausgrow chip for [Laelia/Cattleya](#). He prefers to grow his Cymbidiums in a combination of Fernmania/Coco Fibre and Tas Orchid Society mix. His session was well accepted and some interesting questions and concerns were answered. He is a believer in using the natural fertilizers including Blood & Bone/Dolomite Lime/Liquid Worm Fertilizer and Charlie Carp. It was interesting what growing media he prefers for [Masdevallia](#).

Geoff Curry will be our main presenter at our February Meeting. He will talk and give a power point presentation of our trip to the Kempsey Speciosum Spectacular. This show is really spectacular and is held next door to the property of Ted Walmsley who is recognised as a master Speciosum grower. I encourage you to read his growing techniques through GOOGLE - "How to Grow Dendrobium Speciosum the TedWalmsley Way". Like Ian Woodgate he is a firm believer in the naturals of Lime, Blood and Bone fertilizer and grows in medium Ausgrow Bark.

Before this show at Kempsey we attended the ANOS Conference in Brisbane. This was a conference and show. One private grower from GRANTHAM (near Toowoomba) whose orchid collection was wiped out in the Brisbane Floods of 2011, had 95 Speciosum plants on the display tables. My estimate total number of Dendrobiums on display at this show was 240. Also there were lots of the other Dendrobiums that people grow as hanging plants and on mounts. The debate will still be argued long after I stop growing Orchids. Doctor Mark Clements, author of the book "The Allure of Orchids" made reference, at the Conference, to KEW - ENGLAND in the naming of orchids and the ongoing debate.

All members are invited to submit floral arrangements for judging in the following months on the following topics.



February – “Let the Sunshine In”

March – A Musical Theme

April – Easter Theme

A. *Tasmanian Orchid Society Orchid Mix* ...prepared by the Tasmanian Botanical Gardens staff for our members to purchase. **Bags are available now.** The T.O.S Orchid mix (40 litre bags), are available at \$15 for members and \$20 for non-members. The keeper of the mix is our President Peter Willson. Please phone Peter on 62484375 who lives near Cambridge to decide for PICKUP time and payment.

B. 2020 COMPETITION PLANTS ... for this February meeting.

Members are asked to bring along their competition plants they bought from Noel and Christine to the February meeting.

February is the month for **Dendrodium Gilleston Jazz `Lisa`**, our 2020 competition plants. If you didn't purchase one they will be available again at the meeting.

Let us see how well your plants are growing (or not), and share your cultural tips, or find out where you may be going wrong.

C. Tasmanian Orchid Society payments and treasury matters.

Members should be aware that the Treasurer is Christine Doyle and can be contacted by email: noel.doyle3@bigpond.com by phone 62729820 or at all general meetings. Should payment be required preferred method is by direct debit?

Direct Debit details are ... Tasmanian Orchid Society Inc. BSB – 067000 CBA Acc. No. 28035122

Please put your name/s in the description area and inform Christine by sending an email.

Cash / cheque can be paid directly to Treasurer Christine Doyle at a meeting or posted to GPO Box 467 Hobart 7001.



Yes, it is 2020 ... another year in our journey of life!

Thank you for your past membership of the Society as we very much value your attendance and contribution to this dynamic and active Society of Orchid grower.

As of the 1st January 2020 membership renewal dues are required.

Dual & family renewal membership is \$25.00 p.a. and \$20.00 for individual's renewal.

These can be paid by Direct debit, cheque or by cash at any meeting. Direct Debit details are given above.

WAS IT YOU !! – the treasurer received a stamped envelop with \$20 in it .. there is no indication who has sent it and no address ... contact Christine QUITELY if it was you.



The TASMANIAN ORCHID SOCIETY

ANNUAL GENERAL MEETING for 2020.

Notice is hereby given that the Annual General Meeting of the Tasmanian Orchid Society Inc. will be held at Legacy Hall, 159 Macquarie Street, Hobart on Monday the 16th March 2020 to commence at 7.30 pm.

As the Society is operational in this new year 2020, it is now time to be thinking about the election of officers. This is a very important role of this society's successful operation. We are a very successful group of orchid growers, but success is not only due to personal growing but the communicating together, of sharing of our knowledge, displaying our successes, helping new members. Any successful organisation needs an active committee to lead on behalf of its members.

So would you consider being part of the committee of the T.O.S. ?

Please consider being a committee member of this Society.

Below is a nomination form Please complete and hand it to the 2019/2020 Secretary or President.

Positions vacant are President, 2 vice Presidents, Treasurer, Secretary and 5 committee members.

AgainPlease consider being part of the team.

.....**Please print this page, fill in below and hand in**.....

TASMANIAN ORCHID SOCIETY INC.

I (full name)

of (address)

desire to nominate for the position of on the Tasmanian Orchid Society committee Inc. for the next 12 months.

Signed mob./home no.....

Iand I.....

being financial members of the TOS endorse this nomination. Dated

2020 FEBRUARY SUNDAY GET-TOGETHER

Sixteen members (and 2 dogs!) of the Society attended the February 2nd Sunday get together at Shirley Jackson's place in Glenorchy. It was a great occasion to meet again and not only talk orchids and see Shirley's set up but talk about the weather members have experienced and how they have managed their orchids in their environment.

The editor attended the get together and although no small forum on orchid housing discussion, readers of this newsletter may be interested of some other points of interest of how Shirley manages her orchid growing. As members know Shirley is a Division 1 member and is one of the most successful and well-respected members in the orchid growing fraternity.

The place has basically 4 areas and a work shed.

- a. A cosy / warm house,
- b. Dendrodium / Cym. house
- c. Masd . . . everything else house
- d. Orchids in the garden

Each house is very individual because of its special shading and positioning.

House b. has a wall of white 50% shade cloth. The roof has Perspex.



Shirley showing Noel how to grow Dokrillias !!!

Houses c. has under the Perspex roof, a shade cloth that is whitish with black stripes within it. Shading are on a series of strings which can be pushed open or pulled back depending on the amount of light Shirley wants to allow in.



It is very effective. *Ask her for details of the make and the cost.*



Shirley informed the group that the temperature got up to 41 degrees last Friday 30th Jan.

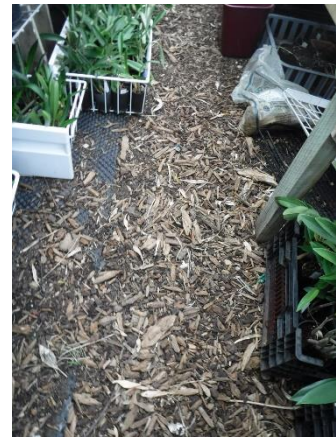
All shade houses have digital reading probes, indicating temperatures and humidity.



All shade houses have fans ... from small computer fans to small room fans which give a greater volume of air.

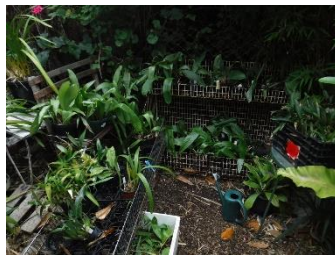


One interesting aspect is the floor of the houses. There is nothing really special about them ... mainly bark and wood chips which helps to keep the humidity up. She obviously gives them a hose every time she waters. Scattered throughout the orchid trays are small shallow water.... To help the humidity stay up..



Shirley has placed many of her orchids .. Cymbidiums; Dendrodiums, Speciosums; oncidiums etc. Throughout her garden.

It shows that you do not need to grow orchids only in shade houses.



Thankyou Shirley for an enjoyable afternoon showing us how you grow your orchids in your shade houses and in the garden.



	WATER REQUIREMENTS	FERTILISER REQUIREMENTS	PEST CONTROL	OTHER COMMENTS
AUSTRALIAN NATIVE DENDROBIUM	Water twice weekly.	Half strength balanced fertiliser fortnightly.	Watch for aphids, red spider mite in dry times. Use Folimat or Kelthane.	Requires 50 per cent shade.
CATTLEYA/LAELIA Alliance	Water twice weekly.	Half strength balanced fertiliser fortnightly.	Watch for aphids, red spider mite in dry times. Use Folimat or Kelthane.	Needs good light.
COELOGYNE	Water twice weekly.	Fortnightly with a balanced fertiliser at half strength.	Watch for aphids, red spider mite in dry times. Use Folimat or Kelthane.	Grow low in house to get shade from other plants.
CYMBIDIUM	Water twice weekly.	Fortnightly with low nitrogen fertiliser at half strength.	Watch for aphids, red spider mite in dry times. Use Folimat or Kelthane.	Requires 50 per cent shade.
DENDROBIUM (Soft Cane)	Water two to three times a week.	Fortnightly with high nitrogen fertiliser at half strength.	Watch for red spider mite in good light.	
MASDEVALLIA	Water two to three times a week.	Fortnightly with low nitrogen fertiliser.	Watch for aphids on new growths and flower buds.	Keep humidity high with floor wetting and misting.
ONCIDIUM	Water two to three times a week.	Fortnightly with a low nitrogen fertiliser.	Watch for aphids on new growths and flowers.	As much sun as possible without burning.
PAPHIOPEDILUM	Water twice weekly.	Fortnightly with a low nitrogen fertiliser.	Watch for mealy bugs in new growths.	
PLEIONE	Water two to three times a week.	Fortnightly with a low nitrogen fertiliser.		Requires 50 per cent shade.
GENERAL COMMENTS	Any genera mounted on cork, wood or tree fern will need watering with a dunking twice weekly being beneficial.			

The listings are BASIC cultural information for our HOBART area. It is stressed that the information contained in these charts is to be used as a brief, basic guide depending on your own particular environment. Growing conditions vary from grower to grower depending on many factors, eg type of housing, potting medium, local weather conditions and the area where you live. Should you require more detailed information on any particular cultural aspect, it is suggested you seek the advice of advanced orchid members of TOS or a specialist orchid nursery.



January Meeting Results of members who were successful.

Results were compiled by show steward Jim Smith and sent to the editor Peter Manchester. The qualified judges of TOS are Vic. Dawes, Marcus Smith, Ian Woodgate and Jim Smith. Trainee judges assisted in judging the entries.

No entries were received in the classes of *Cymbidium* Hybrid over 90mm, Australian Native Tuberos. *Gomesa* Species or Hybrid Australian Native Other Sp./Hyb. *Oncidium* and Allied Sp./Hyb; *Masdevallia* and *Dracula* Sp./Hyb. Australian *Sarcochilus* Sp./Hyb.

Judges Vote 1st. Division

Cymbidium Hybrid over 90mm	1st.	<i>Cym.</i> Panama Red 'Rouge Homme'	N & C Doyle
	2nd.	No Entry	
Cymbidium Hybrid 90mm and Under	1st.	<i>Cym.</i> Black Stump 'Come in Spinner'	I Woodgate
	2nd.	No Entry	
Laeliinae Species and Hybrid	1st.	<i>C.</i> Pink Lady 'Misaka'	G & G Chequer
	2 nd	<i>Rlc.</i> Perfect Choice 'Purple Lady'	M Smith
Oncidium and Allied Sp./Hyb.	1st.	<i>Onc. ariasii</i>	M Smith
	2nd.	<i>Milt.</i> Bronze 'Rippling Delight'	N & C Doyle
Gomesa Species or Hybrid	1st.	<i>Gom. uniflora</i>	J & B Smith
	2nd.	No Entry	
Masdevallia and Dracula Sp./ Hyb.	1st.	<i>Masd. bonplandii</i>	I Woodgate
	2nd.	<i>Masd.</i> Curacao 'Hamish'	I Woodgate
Other Orchid Species	1st.	<i>Brs. verrucosa</i>	M Smith
	2nd.	<i>Prom. crawshayana</i>	I Woodgate
Other Orchid Hybrid	1st.	<i>Ascf.</i> Cherry Blossom	J & B Smith
	2nd.	<i>Z.</i> Helen Ku 'Blackberries'	B Woodward
Australian Sarcochilus & All. Sp./Hyb.	1st.	<i>Sarco.</i> Elise 'DB#1'	N & C Doyle
	2nd.	<i>Plchs.</i> Rumrill	J & B Smith
Best Species Orchid		<i>Onc. ariasii</i>	M Smith
Best Hybrid Orchid		<i>Cym.</i> Black Stump 'Come in Spinner'	I Woodgate

Best of Best	<i>Cym. Black Stump 'Come in Spinner'</i>	I Woodgate
Orchid of the Month	<i>Onc. ariasii</i>	M Smith

Judges Vote 2nd. Division

Cymbidium Hybrid 90mm and Under	1st.	<i>Cym. Ferngrove 'Moss Gully'</i>	I Crocker
	2nd.	No Entry	
Laeliinae Species and Hybrid	1st.	<i>L. purpurata var. sanguinea</i>	
		<i>X purpurata var. venosa</i>	I Crocker
	2nd.	No Entry	
Gomesa Species or Hybrid	1st.	<i>Gom. Alosuka 'Claire'</i>	D & V Cleaver
	2nd.	No Entry	
Other Orchid Species	1st.	<i>Paph. hirsutissimum</i>	M Kemp
	2nd.	<i>Dryadella hertzii</i>	S Greatbatch
Other Orchid Hybrid	1st.	<i>Phal. Unknown</i>	S Greatbatch
	2nd.	<i>Disa New Jersey</i>	D Hartley
Best Species		<i>Paph. hirsutissimum</i>	M Kemp
Best Hybrid		<i>Phal. Unknown</i>	S Greatbatch
Best of Best		<i>Paph. hirsutissimum</i>	M Kemp
Orchid of the Month		<i>Paph. hirsutissimum</i>	M Kemp

House Plants

1st.	Tradescantia	S Greatbatch
2nd.	Succulent	H Bogut

Floral Arrangement

1st.	"Celebration"	G Allen
2nd.	"Celebration"	A Gerrard

Popular Vote

First Division

1st	<i>Cym. Black Stump 'CIS'</i>	I Woodgate
2nd	<i>Chsch. nakompanomensis</i>	N & C Doyle
3rd.	<i>Onc. ariasii</i>	M Smith

Second Division

1st.	<i>Disa New Jersey</i>	D Hartley
2nd.	<i>Phal. Unknown</i>	S Greatbatch
3rd.	<i>Paph. hirsutissimum</i>	M Kemp

House Plants

1st.	Begonia	A Gerrard
2nd.	Succulent	H Bogut
3rd.	Tradescantia	S Greatbatch

Floral Arrangement

1st.	"Celebration"	W Glidden
2nd.	"Celebration"	G Allen
3rd.	"Celebration"	A Gerrard

Some interesting information that has come out of the last January meeting on the 20th. the editors interpretation ... !

Ian Woodgate gave an interesting talk on what media he uses for potting his orchids.

He talked about growing, use of fernmania, fertilizing, use of charcoal and watering.



- Fernmania is the largest tree fern harvesting operation in Tasmania. After extensive study of the effect of harvesting and tree fern availability by Tasmanian Government agencies are fully licensed to harvest tree ferns in well defined areas in Tasmania under controlled conditions. For a few years they have produced a pulverized form and a solid form which can be bought in bags or as slabs which can be cut by saws etc. If you haven't tried it it is worth experimenting it as a media for growing orchids.
- Ian gave his thoughts as follows
 - a. If one uses fernmania not really necessary to fertilize .. if you do only once or twice a year
 - b. If you grow orchids in a solid cover shade house don't use fernmania.
 - c. Seamungas is good as a fertilizer
 - d. Consider a flat solid form of the tree form and grow on the grown horizontally, especially if you wish to grow *D. kingianum*. Australian native grow well on on the solid form of the tree form
 - e. Soft cane dendrodiums do not grow well in fernmania. But they need max light. maximum light.
 - f. Ian Woodgate grows his cymbidiums in fernmania
 - His potting mix is 70% fernmania + 30% coco fibre + quartz gravel + charcoal.
 - They appear to like it.
 - g. His Saccs. are grown in fernmania with Aus Gro (fine to medium) nuggets + gravel + perlite.
 - h. His Masdev. are grown in the same mix as Saccs.
 - i. Oncidiums are grown in 50% fernmania and coco fibre.
 - j. Ian does not use use fernmania for Laelias/ Catalyas
 - k. He finds the Society's mix too fine and needs to be sifted.
 - l. Ian likes to use charcoal in his mix because it takes the acidity out of the mix.
 - m. Another alternative is using crushed egg shells.
 - n. Ian does not water his orchids a lot especially the cymbidiums. In winter he does not water when the temperature falls below 8 degrees.



In conclusion don't over fertilize, don't over water and uses media/mixes that work for you.

One of our “ keenest “ members brought along a masdevallia that had burnt /or dead tips on the leaves. The question was asked of the meeting Why? How did it occur and how to avoid this problem.

Because many of the questions were not answered in the discussion the editor puts forward some information about

Masdevallias and Draculas grow throughout Central and South America and can be found as far north as southern Mexico and southward to Peru.



They are, for the most part, **cool growers** and can be found at high elevations in the mountainous cloud forests where they thrive **on the high humidity**. Some grow right at the snowline; it is not uncommon to see them become lightly dusted with fast melting snow.

Still others grow in warmer and somewhat drier conditions where the plants do get some drying between rains. The colours and flower shapes are mind-boggling. Some of the hybrids have been found to have more vigor, making them easier to grow and bloom while retaining the intriguing colors and shapes.

Temperature

There are a few Masdevallias that do well in warmer areas where summer night temperatures infrequently fall below 20-22 degrees C. They are Masdevallia floribunda, striatella, kuhniorum, bicolor infracta, rima rima alba, bangii, minuta, attenuata, and echo. Other Masdevallias, including Draculas, prefer night temperatures from 5-16 °C. and day temperatures not reaching much above 24-27 °C. Remember, the colder you grow them, the sturdier the plants will be. **Also, flowers will develop over a slower period giving you a larger size bloom as well as better color and shape.** During summer it is almost inevitable that there will be some hot spells, sometimes lasting several weeks. When this occurs the plants will be stressed. Keep the plants shaded, reducing leaf temperatures.



Humidity

Keep the humidity high, at least 70%, and provide **plenty of air movement.**

If you keep the plants drier at the roots during hot spells you will avoid stem rot, which can occur very quickly and devastate newer growth and sometimes the entire plant. **Misting the leaves lightly will keep them from shriveling.** Once temperatures begin to cool off, resume regular watering. **Very often during stressful heat waves you will notice, especially with Draculas, some leaf tips**



turning brown or becoming lightly spotted. This is generally stress-related and will stop once normal conditions resume. In greenhouses, grow the plants as close to the evaporative coolers as you can. If you don't have a greenhouse, grow your plants in an air-conditioned room or in a basement under lights.

Light

In nature, these plants grow in areas that are very shady, around 1200 lumens (phalaenopsis light) and also in areas with fairly high light, in excess of 3500 lumens. Plants with heavier, thicker leaves generally need more light (cattleya light). Those with softer, thinner leaves prefer shadier conditions. Be careful in the summer not to overexpose the plants to light.



Watering ****



Like all orchids, Masdevallias and Draculas like clean water. Only distilled, rain water or reverse osmosis water should be used. If you examine their roots you will discover many fine hairs similar to root structures on Paphiopedilums. It is best to water these plants as they approach dryness. Thick, heavy-leafed plants prefer a little dryness at the roots. Thin soft-leafed varieties do not, unless there is heat stress as mentioned earlier.

This is a good article from the American Orchid Society on air movement in orchid growing houses.

The simple secret to good orchid growing is achieving a balance between the six or so factors; light levels, temperature, humidity and air movement, watering, potting and potting media, and nutrient supply, as they relate to your plants.

This isn't really difficult, but it does require **knowledge, understanding and careful observation.**

Humidity and air movement are best handled together because they are intimately linked in both positive and negative ways. First let's look at each factor individually and then we'll take a look at their relationship to one another.

Humidity

Virtually all orchids do best when humidity ranges from 40% to 70%. Even those that are adapted to growing under rather desert like conditions such as Zelenkoa (Oncidium) onusta are

exposed to periods when the humidity is in this range. In this particular example, the species flourishes in coastal deserts where breezes from the pacific bring nightly dues and resultant relatively high humidity even though it may not rain for long periods.

Investing in an inexpensive humidity gauge is a necessity for all but the smallest collection if you want to grow orchids well.



In virtually all parts of the Australia, at some part of the year, it will be necessary to add supplemental humidity to the growing area. In some parts of the country such as the North and North east, humidity during the summer months will be adequate to even excessive while winter humidity levels may be too low, especially following strong cold fronts. In Tasmania, the situation may well be reversed in cool winters and relatively low humidity during the warmer summer months. If you grow your plants in areas where supplemental heating is a requirement such heat sources dry out the air making humidity measurements critical. **Having a simple humidity gauge takes the guesswork out of the growing area. Also keep in mind that humidity is usually highest at night and lowest during the afternoon peak of sunlight and warmth.**

There are a number of ways to increase humidity in your growing area.

If you only have a couple of plants, addition of some ferns or other houseplants to your growing area may be sufficient. These plants do a reasonable job of adding humidity to the air around them. For small collections grown under lights or windowsills, humidity trays may be sufficient. These trays are nothing more than a water-holding tray filled with small gravel (aquarium gravel works well). The gravel-filled trays are filled with water to a level just below the surface. To prevent plants sitting on constantly wet gravel the plants are placed on small saucers or pieces of plastic or metal grid placed on top of the trays.

The next step up in the humidity game would be an ultrasonic humidifier or one of those fog-generating ultrasonic devises you see sold for terrariums. If you are fortunate enough to have a greenhouse or grow your plants outside, you might want to invest in a set of misting nozzles Bunnings now sell the) connected to a timer or humidstat but just simply wetting down the growing space during the mid to late afternoon may be sufficient.

Air Movement

Orchids like air movement.

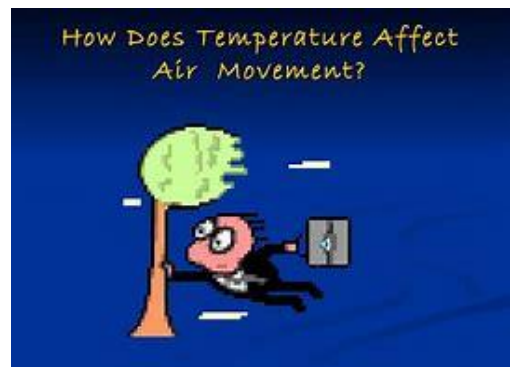
Indoors, an overhead paddle fan set on the slowest speed or a small oscillating fan set to face **AWAY** from your plants may provide adequate air movement.

Air movement at night is just as important as air movement during the daytime so fans should run continuously. One of the mistakes that new growers make, especially those with new greenhouses, is to put their fans on a timer and shut them off at night! Don't forget that what you are trying to simulate is a buoyant atmosphere and close, humid nights are anything but buoyant. If you don't believe that, try walking on the beach in August at Kingston without a breeze.



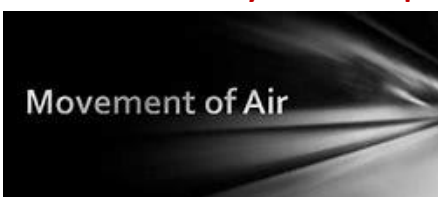
What is adequate air movement?

The answer depends on humidity to a certain extent (see below), however in general enough to cause GENTLE movement of thin foliage is about right. A hurricane is a hurricane - not air movement. If the leaves of your cattleyas are moving you might have too much air movement depending on humidity levels.



How are the two factors related?

Simply put, the higher your humidity, the higher can and should be your air movement. Air movement is beneficial to your orchids but, under certain circumstances it can be detrimental as well. If you have adequate humidity, air circulation helps to carry stale air away from your plants and replace it with fresh air. This is especially important on hot humid nights. High humidity coupled with minimal air movement is **a terrific recipe for the growth of fungus or physiological problems created by the buildup of moisture within the leaf tissues.**



Moving air keeps leaf temperature

down. Some orchids close the pores that allow transpiration of air and water from their leaves during the day. The leaves of these plants can rapidly become overheated and damaged without adequate air movement to cool them. Air movement avoids the stratification of cool moist air below the growing area and warm dry air above, where the plants are and “dead spots” are minimized and, equally important, damp stagnant areas - breeding place for disease - are eliminated.



However, where natural humidity is low rapid air movement can be destructive by draining away humidity in the growing area, drying out the plants and retarding growth. Under these situations the roots of the plants simply cannot take up enough moisture to balance that lost through the foliage resulting in shriveling of the leaves and growths and, in the worst cases death of the plant.

When balance of humidity and air movement is achieved, coupled with adequate water at the roots, your orchid plants will thrive and their physical appearance will clearly be healthy. That look is hard to explain but it's one of those things that once you've seen it you will recognize it.

Many orchids have growth cycles that involve the formation of pseudobulbs that are full and smooth in their early stages followed by the formation of features like angular edges or furrows at maturity but outright wrinkling isn't normal. Even the pseudobulbs of Dendrobium that are curious, flattened canes that look like they've been pressed are still smooth and firm when these factors are balanced.

Many orchids have thick, fleshy leaves but their surfaces should be smooth and their texture should be firm. Leaves that appear to be wrinkled or crumpled aren't normal. Lastly, the roots of plants grown in an environment with balanced humidity and air movement will be plump and their tips will remain green and active throughout the growing season.



Fertilizing Orchids .. I have never been more confused .

my journey... Peter S Manchester

I don't know of any other subject on the culture of growing orchids that is more hotly disputed and full of misinformation. So many different stories, techniques and opinions. I joined the orchid society to learn the basics from the experts. After 2 years I could not say that I have a clear and confident approach to feeding orchids.

Perhaps you may be interested in my journey I came from a father, after his retirement, who started growing orchids .. in the 1970'/ 1980's. I can remember him telling me his story.....

Through the 1970 and 80s all the go was **Auqasol** and **Thrive**... weakly & weekly.

Sometimes because he liked catching fish he used fish emulsion and Nitrosol with an occasional Seasol (Liquid Blood and Bone) for an organic natural "hit", once again weakly & weekly. A sprinkling of dolomite lime once a year. He went to Smithton to get it.



I can hear him saying how much he enjoyed rotating these fertilisers and fondly remember the ocean smell of the seasol and the earthy musk of the Nitrosol and the beachy Fish emulsion with a bit of the old Charlie Carp (ground up pest fish) from under the hoes in Trevallyn. All balanced up to create quite a smogasboard of delights for his orchids. He even used to add trace elements once a month in the form of a powder dissolved in his green galvanised watering cans. His mate Rex Johnson used to come over and spend time doing it together. **How often do our orchid growers do this these days.?**

Evert Friday morning (mother would be out shopping because she couldn't stand the smell), he would mix up a differnt fertilizer and apply it with the watering can. About 30 minutes work, but then he only had 200 orchids not 1800 when he passed away. His thoughts were that if the blends were not exactly right then another fertiliser the following week may fill the nutritional gap.

This appeared to work fine up until the end of 1980's until the collection became a little large and all those watering cans weren't so much fun anymore.

Yes , he got the addictive bug ... he got larger ... bought lots from the mainland in particular northern NSW (Tamborine Mts.) , brought them back in a car on the old Empress.

He built and set up 3 orchid houses, also setup a timer related orchid fertiliser plumbing system . I remember asking him what fertilizer he uses now....” Son it is a secret” .. here it is in a large jar.. it looked blue ... extra special from South Australia. ... It was his secret weapon to win the grand champion... which he did .. I still have a small bottle of it.

What now ... the following may be of interest to our readers and members. I have never heard some of our members tell us of their “secret weapon” but.....

*The world standard for orchids is a product called **Peters Soluble from the USA and Holland**. It comes in High N for growth periods and High K for blooming months. It had more calcium than any other soluble fertiliser and that appeals to me, I’ve become a fan of calcium, and its effect on disease control via strong cell walls. So I have started using Peters 30/5/20 + 7 Ca by the small bag using an EC meter to get the strength right.*



Peters is low in phosphorus to allow the calcium to be soluble and not bound to it.

I use 8/9 month professional Osmocote Exact . This works all year around and adds that extra phosphorus we need for great blooming.

I feed from August to May each year at a Peters EC reading of between 0.8 and 1.1mc.



I apply Osmocote once per year each October. A two finger pinch for 50 and 80mm pots, a three finger pinch for 100mm pots, a 4 finger pinch for 125mm and 140 mm pots, 1 teaspoon for 180mm and 200mm, and 2 teaspoons for 300mm pots.



With the Peters 1 heaped teaspoon per 9 litre watering can. Peters is low salt so you almost can’t overdo the frequency of feeding cycles in the warm months.