TOSKAR NEWSLETTER

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THE ORCHID SOCIETY OF KARNATAKA
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TOSKAR NEWSLETTER

Front cover –
Dendrobium delacourii Guillaumin
by Dr K. S. Shashidhar

From the Editor's Desk

21st June 2018

Well, monsoon is on right time, welcome! We had plenty of pre-monsoon showers in the month of May. In the last two months with good rains and humidity, the orchids are happy and producing abundant flowers as we see from the display in the meetings and the posts in various forums. But with the rains and the wetness and often warm temperatures the combo sometimes is ideal for onset of diseases in our cultivation, watch out for any such issues.

We thought couple of activities from the TOSKAR side will help the hobbyists and other growers. In that direction, revival of the Training and Demonstration program is an important step. Several programs have been organized by the society earlier for the growers at different levels but considering there is a constant need to update the care and culture techniques and also to make orchid growing more interesting, a series of T & D has been planned by the Society. The first of the series with an overall view of cultural requirements of orchids and specific to genus Oncidium was taken up on 9 June, 2018 at Lalbagh, Bangalore. It was well attended and lots of questions, and hands on demonstration of potting and mounting made it an interesting and interactive session. In addition to the efforts of the society, few of the members are also engaged in popularizing orchid cultivation, which is a welcome move.

To make the Newsletter more attractive, constant efforts are being made to get some good articles and growing experiences from members as well as from others. In this regard, several appeals have been made to our members to contribute, but still the members have not made up their mind, of course, few exceptions are always there. In this issue, we have some interesting articles starting from Sri. Sarat Mishra on his experience of visiting Pushpagiri in Kodagu district of Karnataka along with some good pictures. Then we have our almost regular contributor in Ms. Bala Kompalli from Kew Gardens, RHS, London, she wrote about Dendrochilums, one of the most beautiful and interesting genera. My good friend Mr. Alexander Bazing from Stuttgart, Germany, visited us last year and also came to the society meeting and shared his experience in growing orchids. He has penned an article on soft cane Dendrobiums and its culture in his

home town accompanied by some wonderful pictures. Our TOSKAR member Sri. Sreenath Rao is a very enthusiastic grower and has good collection (though I am yet to visit his place!) and has delved upon the importance of orchid roots in growing a healthy plant. I thought my presentation on Oncidiums in the T & D program should be followed by an article on its care for the benefit of the members and hence the article Oncidium Care by me. Thanks to all the contributors to make this issue an interesting and an informative one.

From this current issue, two new topics though small ones, has been started as a new initiative. One is about the Do's and Don'ts in orchid culture for the next two months and the other one being an Orchid Quiz. I look forward for a feed back and response from the members on these issues. Any suggestions to improve is welcome.

The last Bi Monthly meeting held on 28 April, 2018 again had a good display of blooming orchids by our members and while thanking them for enthusiasm in displaying their blooming orchids, I once gain give a gentle reminder to pen few articles or notes for our News Letter. Congratulations for all the members for these wonderful displays.

I presume that most of our members are going through our newsletter and I expect some feedback from them so that we can improve upon and make it more attractive, interesting and also needless to say we, feel good about it.

Orchids are not just flowers, they are feelings…….!!!

The South Indian Soul

Happy Orchid growing.

Dr. K. S. Shashidhar
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Excursion Orchid Flora of the Pushpagiri Wildlife Sanctuary in Kodagu District of Karnataka

Sarat Misra
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The Kodagu district in Karnataka, owing to its location in the Western Ghats region, has thick evergreen forest cover suited for the growth of orchids. 61 species in 31 genera of orchids are reported (T A Rao 1998) from here. It includes 26 species in 10 genera of endemic elements showing the richness of orchids in the area.
A cursory visit to the Pushpagiri Wildlife Sanctuary around Somvarpet was conducted by me on 13-14 December 2017. As many as 23 orchid species in 18 genera could be located in the area (including the entry area at Galibeedu) as follows:

**Aerides maculosa*, *Bulbophyllum fimbriatum*, *B. mysorense* (?), *Chiloschista glandulosa* (?), *Cleisostoma tenuifolium*, *Coelogyne breviscapa*, **Cottonia peduncularis*, *Dendrobium crepidatum*, *D. herbaceum*, *D. heterocarpum* (?), **Flickingeria nodosa* (?), *Gastrochilus flabelliformis*, *Oberonia brunoniana*, *O. ensiformis*, *O. mucronata*, *O. proudlockii* (?), *Pholidota imbricata*, **Seidenfia versicolor*, *Sirhookera lanceolata*, *Trias stocksii*, **Vanda tessellata*, *Xenikophyton smeeanum* and *Zeuxine longilabris*.

Analysis of the orchid flora

21 species were epiphytic and only 2 species were terrestrial in nature; many terrestrial species with seasonal growth habit could not have been located at that time in winter. Among the epiphytic, 7 species were with monopodial and 14 species with sympodial growth habits. This consisted of 9 endemic elements, of which *Xenikophyton smeeanum* is a very rare species confined to the states of Karnataka, Kerela and Tamil Nadu in India. Other orchids include *Bulbophyllum fimbriatum*, *Oberonia brunoniana*, *Sirhookera lanceolata* and *Trias stocksii* etc. *Oberonia mucronata*, *Pholidota imbricata* and *Coelogyne breviscapa* were seen frequently. 5 species, marked with asterisks, were seen with only a solitary specimen.

Important observation

The area receives moderately high (around 3000 mm) rainfall and the relative humidity is also high (around 80%) in the region. The topography is cut across by a number of perennial streams. In spite of this, there was no sight of epiphytic genera like *Eria* etc. and terrestrial genera like *Calanthe* etc. Other genera like *Acampe*, *Cymbidium*, *Luisia* and *Rhynchostylis* etc. were conspicuously absent. Only one species each of *Aerides* and *Vanda* could be located, although the above taxa are seen in other parts of Kodagu district.

The ecological aspect of such distribution of species needs a closer study, although much work has been done for this district earlier (T A Rao 1998).

Orchids of Pushpagiri Wildlife Sanctuary – by S. Misra

Bulbophyllum fimbriatum

Bulbophyllum fimbriatum

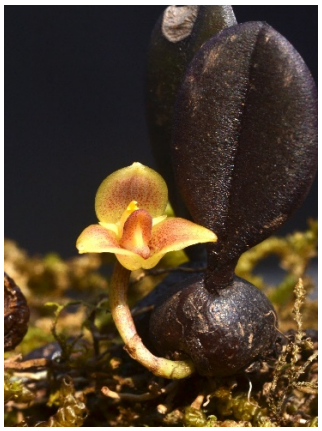
Gastrochilus flabelliformis

Sirhookera lanceolata

Oberonia brunoniana

O. ensiformis

O. mucronata



Trias stocksii

Trias stocksii

Xenikophyton smeeanum

Zeuxine longilabris

Dr. Sarat Misra near Waterfalls Galibidu

Xenikophyton smeeanum

Cleisostoma tenuifolium

My Dendrobiums

Alexander Bazing
Stuttgart, Germany

In many years of orchid hobby I have had many species of Dendrobium in culture.This is not very astonishing, because Dendrobium is a genus comprising of hundreds of different species with an enormous spread over a vast range of countries and climates. There are big and very small species and there are very showy ones. I always loved Dendrobiums with very attractive flowers, like some species from south east Asia and New Guinea.

Looking back I have to admit that there were so many unsuccessful attempts to grow them. By now I think, the reason was that I was not able to provide a suitable environment similar to what these plants have in their natural habitat. The beautiful flowers made me blind of the fact, that I could not meet the requirements of most of the showy species from New-Guinea, especially the proper light, humidity and air circulation.

My first attempts were putting them in plastic trays filled with a layer of gravel on the windowsill above the room radiator. This increased humidity, I sprayed them also, but after all they got smaller and smaller and finally died. Later, when I was so lucky to have the opportunity to build a greenhouse I tried these and other species of Dendrobiums and some of them remained in my collection (or should I say survived). I will come back to them later.

First I want to describe my general way of culture which is mainly the same for all my orchids.
My collection consists of Paphiopedilums and Cattleyas as the main part. There are also some others like Phragmipediums, Rossioglossums, Catasetums and many more, but only in small numbers.

All my orchids are in pots. Mounted orchids are to care-intensive for me, because in summer here in Mid-Europe it would be necessary to water or spray them during the day. This is impossible form me due to my work. For most of my orchids, including Dendrobiums, I use a mix on bark basis with some supplements of Seramis, styrofoam pebbles, coconut husk chips etc.

Water and fertilizer

I water the orchids 2-3 times a week in summer and once a week in winter. I mix 2/3 rainwater with 1/3 tapwater and add 300 qS of fertilizer. Every 3rd or 4th watering I flush with pure rainwater.

There are different fertilizers in use because I believe variety is beneficial. Mostly I use a fertilizer made from a colleague from the orchid society, which works very well for me.

Temperature

The minimum temperature in my greenhouse ist 15°C, which is maintained the whole year. As the Sun comes out, températures goes up to 35° C or more in summer.

Air movement

Very important, especially if the greenhouse gets crowded over the years, as is the case with mine, is a good air ventilation.

I installed two fans, one blowing horizontally, the other vertically to get good air movement. Before installing the vertical fan, there were temperature layers with very hot temperatures under the roof and much cooler temperatures under the benches.

One can take advantage out of this and can cultivate cooler growing species under the benches, but for me it is better to have a more balanced température profile.

As soon as the temperature inside the greenhouse reaches 22-23 °C 4 windows open slowly (they are mecanically driven, due to cylinders filled with wax that expands with temperature). I prefer that over electric devices, because they always work.

View of the greenhouse

Inside view of the greenhouse

Extra care for Dendrobiums

There is some extra care for these plants to ensure good growth and flowers under climate conditions. It took several years of trying out different conditions like giving a rest or not, keep them in a cooler or warmer part of the greenhouse, keep them under the roof or on the bench etc.

When actively growing, Dendrobiums can grow very fast. In our part of the world the described species grow in the summer months. Provided that it is hot and dry weather the pots dry out every day and it is not possible form me to water that often because the other orchids would suffer from this extra water.

In this phase I sometimes, often at the weekend, when I have enough time, soak the pots in a container with fertilizer (400-500 qS), means that I leave them in this

water for 1-2 hours. In case I forget them, they stay there even longer without any harm.

I believe plants benefit a lot from this procedure in regards of strong bulbs. Cattleyas are also treated like this. They can absorb enough water for the next 2-3 days and keep constantly growing.
In the growing period I also use pot-saucers for Dendrobiums. After irrigation, water remains there for 1-2 days before it is evaporated. This has the effect, that plants are able to absorb water even on days they are not irrigated.

To prevent too wet conditions and allow air movement into the potting mix during bad weather it is important to empty the saucers after 2 days.

Most of my Dendrobiums have a dormant period in winter, therefore it does not matter when on cloudy days temperatures stay at 15°C even at daytime. We have lots of cold and cloudy days in winter when light levels are to less for any growth, I guess. No fertilizer is applied in these dull winter days.

I put the dormant Dendrobiums all together in the coldest corner of the greenhouse, where temperature drop down to 12-13°C and give only water if the pseudobulbs begin to shrivel.

Some species

Moving on to a few species that I have in cultivation for many years. They proved to grow quite easily and flower every year.

Den. chrysotoxum

This species was perfectly described in one of the former newsletters.

My plant is in a 16cm pot, the plants growth habit is not very straight and compact, therefore it occupies a big space. My greenhouse is only 2,5x3,2 meters, therefore I always have to decide which plant size to keep. Believe me, it was not only once that I had thoughts about giving it away due to the above mentioned reasons.

But when in bloom, especially when there are 5, 10 or more spikes open simultaneously, it is such a beautifull sight, it may be worth keeping it for another year. The flowers itself are really beautifull and they reward you with an exellent smell. Unfortunately flowers are only fresh for a few days and normally bloom only once per year.

Den. Chrysotoxum plant

Den. thyrsiflorum

Lots of characteristics are similar to the species mentioned above. Unfortunately thyrsiflorum does not flower abundantly every year for me. There are years when only few spikes appear and there are better years.

This year, for example, my plant brought 13 flower spikes. The first one opened the day before we went for a 5 days journey, when we came back all of them were gone due to the hot weather. Bad luck this year.

Den. thyrsiflorum plant

Den. palpebrae

This is a species which is also known as Den. farmeri, or lets say there are some taxonomic things in this group I do not want to dive in.

My father and I imported this plant in the late 1980s from Thailand and it is a really durable plant. It flowers several times a year with a peak in late spring and gets no rest period.

For me it is one of the easiest plants and a beautiful sight, when a number of flower spikes open at the same time.

Den. palpebrae plant

Den. crystallinum

Also a survivor of the Thailand import in the 1980s it is different in some respect to palpebrae.

It has a very short growing period and needs a long rest. During this time I keep it almost complete dry and it looses all ist leafs.

After this long rest flower spikes appear along the pseudobulbs, always 2-3 flowers per spike, and the new growths start. Flower last for about 10 days or more depending on the weather conditions.

Den. crystallinum plant

Den. harveyanum

This Dendrobium has very nice flowers,in a bright yellow, lip and petals are fimbriated. Two or more flower spikes appear on the pseudobulb, each with 8-15 flowers.

The plants growth habit is a bit space consuming, new pseudobulbs stand upright, others are pendent and the flowers only last for a week.

Den. harveyanum flower

Den. sulcatum

Den. sulcatum flower

This is a species with upright pseudobulbs, a short growing period and a long rest.

During the rest period I give almost no water, only if the pseudobulbs begin to shrivel, a small amount of water is applied. Leaves do not fall and when flower spikes appear, there are still leaves on the pseudobulbs. Flower spikes are short with 6-10 flowers forming clusters in a dark yellow. There is a red-brown throat on the lips of the flowers.

If given a good portion of fertilizer when growing and respecting the rest period this species proved to be a reliable bloomer under my conditions.

If you come by any of the mentioned species, why not try to cultivate them? Of course, growing conditions are different in Southern Germany and South India, but from my point of view it is always worth to try out.

Dendrochilum orchid

Bala Kompalli,

Kew Gardens, RHS

This beautiful orchid genus with more than 300 species found in Taiwan, Indo-China to New Guinea, growing mostly as epiphytes and lithophytes. Most species of Dendrochilum inhabit cool, humid and often exposed habitats in lower and upper montane forest. Some species of Dendrochilum show elongated rhizome and widely spaced pseudobulbs while others show very short rhizome with pseudobulbs in clusters.

Rhizomes are more or less branched with roots produced some times from the bases of the pseudobulbs which can be dense. The leaves borne at the apex of the pseudobulb. Many species show dorsoventrally differentiated leaf blade but in species from Philippines the leaves are semi-terete as an extreme xeromorphic adaptation. Flowers of Dendrochilum are long lasting and always open simultaneously on the inflorescence. Many species have a distinct scent and many different colours of the flowers can be seen in this genus some from pale green to yellow and white while others with red or yellow. Flowering time is usually from late winter to mid spring seasons.

Care and culture:

Dendrochilum species can be grown very well in cool to warm intermediate conditions with good humidity around them. Along with high humidity, free air movement will benefit the plants to produce huge specimens and flower very well. Plants should be re-potted frequently at least once every 2 years as they produce many new growths in all directions and need very wide pots. The compost should be well drained with components like tree bark (good quality from Oak or pine) pumice stones and charcoal. Adding some fresh green sphagnum moss chopped into small pieces to the well-draining compost will keep the roots evenly moist especially during hot summer months.

Once new growths appear, it is best to give them with high nitrogen base fertilizers (21-7-21 NPK) at very weak strength as orchids are not big feeders. To enjoy more blooms, it is good to swap high nitrogen feed with high potash feed (15-7-30 NPK) around October for the next 6 months to encourage good flowering.
Tip: It always good habit to measure the conductivity of the feed with a hand held meter and for regular watering, rain water or reverse osmosis water is best for orchids

Vegetative Propagation: when repotting a Dendrochilum, Gently Remove a small cluster of pseudobulbs (around 5-6) and wrap them along with their roots in fresh green living sphagnum Moss. Leave them in a cool shady area until new growths appear then; transfer the young plant to a fine compost of bark and perlite till good roots are formed.

Some interesting *Dendrochilum* species:

Dendrochilum aurantiacum
Dendrochilum cobbianum
Dendrochilum convallariiforme var. convallariiforme
Dendrochilum filiforme
Dendrochilum glumaceum
Dendrochilum gracile var.gracile
Dendrochilum kopfii
Dendrochilum latifolium
Dendrochilum uncatum
Dendrochilum wenzellii

Dendrochilum glumaceum

Dendrochilum uncatum

Dendrochilum wenzellii

Dendrobium longifolium

Dendrochilum saccolabium

HEALTHY ROOTS = HEALTHY ORCHIDS

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Understanding orchid's unique roots is very important for a beginner, hobbyist, grower or any orchidist to successfully grow, maintain and bloom them well. Perhaps you would have noticed that some of their roots would have burrowed deep down in the potting media while others grow in whichever direction it wants to! Sort of being omnipresent! Just don't be alarmed - it is very natural, after all they are epiphytes - air growers. They are aerial roots. Orchids from their showy flowers to their peculiar roots are completely extraordinary - very different from the root balls of conventional terrestrial plants. Let us understand these curious creatures a little better. Although the orchid roots are referred to as aerial roots they are not just that and are not looking for a place to burrow down into. They live in air and absorb moisture and nutrients from air. They get their water and nutrients from rain and atmosphere. They sometimes anchor the plants. They even do photosynthesis. Even if they are stuck to tree trunks in nature they will not harm the host tree by sucking out its life-they are not parasites. Do not trim off these wanderers; just let them be.

Velamen: orchids roots have a covering called ‘Velamen’ which acts like a sponge soaking up water and protecting the roots. Special cells in the Velamen transports the Water and nutrients to Stele - a thin hairy like blood vein for orchids which subsequently transports and delivers water and nutrients to pseudobulbs and leaves. Roots of orchids are to be firm to the touch and white to green in colour. They need not be bright green all the time. They should be bright green only right after watering. If they are bright green always, it is an indication that they are drowning. The effect is like a fish being out of water! They are not designed to just sit in water. Such orchids will eventually die from over watering. Green tips of roots are normally relished by insects and are damaged, obviously affecting the healthy growth of plants and flowering. Hence protect roots from insects, spraying insect repellants.

Unhealthy roots: when you notice roots are rotten - easily identified; because they are brown, mushy and hollow - main reason is over watering. Brittle roots indicate underwatering and dehydration. If the orchid is still alive and the roots have turned mush you have a chance of nurturing them back to life. Remove all the dead and dying roots, wash with dilute - about 3% H_2O_2 and repot in a sterile media. Keep drenching the plant with vitamin B1 and sea weed extract once in 3 to 4 days. On some occasions it is difficult and tricky to differentiate between a flower spike and an aerial root - which will have a smooth tip whereas a spike will look like an enclosed fist with knuckle bumps. While repotting, ensure that aerial roots are left in the air and potted roots in the media. Aerial roots will have a thicker

Velamen and physiologically different from roots in the media. If the tip of aerial roots is green & not eaten away by insects, your orchids are healthy.

Even while you find orchids and their roots intriguing, enjoy your orchid growing journey.

1

2

Note 1. Profuse healthy roots of Hybrid Vanda inside net-house under cultivation. 2. Note healthy aerial roots with green tips *Vanda* species.

- 3

4

3. Note healthy green roots of *Dendrobium* kiekies. 4. Phototropic roots of *Cymbidium aloifolium*

ONCIDIUM CARE & CULTURE

K S Shashidhar

Oncidium Sw., belongs to the genus Oncidium which is large and diverse in its occurrence and growing habits. They produce beautiful cluster of attractive flowers. The wide range of color display of flowers from bright yellow to bronze, pink with shades of dark red makes it an attractive and interesting genus. It is a sheer pleasure to watch several blooms on a long spike of almost about a meter length. The wide range of habits from sea level to Andes mountains makes it a very popular genus to grow. This very fact makes it difficult to give generalized culture for Oncdiums. The name Oncidium is originated from Greek word 'Onkos" means tumor or swelling referring to the warty callus of the lip

It belongs to the sub tribe Oncidinae. It has as many as 600 species and they are abbreviated as *Onc* in the horticultural trade. *Interestingly, American* orchid Society named this genus as a 'dumping ground'. Subsequently, after DNA testing and much discussions, a consensus was arrived at (around April, 2013) which resulted in major taxonomic changes to *Oncidium, Gomesa*, *Odontoglossum, Miltonia* and others. The genus Oncidium was first described by Olaf Swartz in 1800 with *Oncidium altissimum* being the type species of the genus. A typical Oncidium flower looks like a doll in a dancing dress and thus the name Dancing Doll. On the other hand, there are strange looking flowers as seen in some *Brassia* where flower looks like spiders and they are pollinated by spiders and *Psychopsis* where the flower looks like a butterfly, *Miltonia* are known as Pansy orchids as the flowers resemble Pansies. In addition to the bizarre shapes and mimics, many of them have flowers with highly fragrant and beautiful aromas. They are also known as ''Spray Orchids among the florists.

Distribution: Oncidiums have wide distribution ranging from Central America to South America, from Florida to Mexico, Caribbean to Andes and to Argentina, though they are originally from South America. Most of them are epiphytes though some of them are terrestrials.

Habit: Their growing range is also wide with many of them grown in tropical rain forests and some even in deserts such as *Zelenkoa onusta* (grows in harsh conditions in Panama and Peru on brush and cacti, however, this has been placed now as a separate genus and this is the only species in that genus). *Tolumnea* and *Ionopsis* have tiny pseudobulbs which are hardly visible. On the other hand, *Psychopsis* has thick green leaves and pseudobulbs.

Based on the growth patterns of Oncidiums, they are categorized into the following types

1. Plants with green pseudobulbs and long racemes and small flowers with prominent lip. Flowers are mostly yellow, some are brown or yellowish brown. Some other oncidiums will have different colors such as white, deep red and pink in their flowers.
2. Another group is with small pseudobulbs and stiff, erect, solitary leaves. Long racemes with yellow flowers which fan out at the top. They vary in size from few centimeters to gigantic plants, they are known as Mule ears and are now placed under Psychopsis

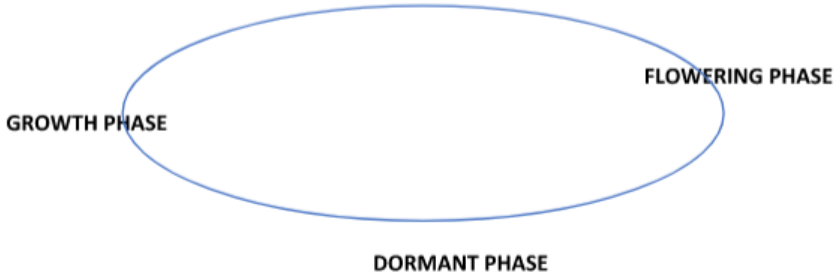
3. The earlier equitant oncidiums, having no pseudobulbs with triangular shaped leaves. Produce flowers with range of colors. They are known as Tolumnias

Keys to identify Oncidiums.

a) The most important key to identify the oncidiums is the presence of a callus like structure on their lip
b) Presence of column wings
c) Pseudobulbs with 1-3 leaves
d) Petals with wavy edges
e) Presence of basal bracts

Care and Culture

Oncidiums are sympodial epiphytes and are relatively fast growing. As in case of most of the orchids, Oncidiums also has different phases it undergoes annually. Following are the three phases which grower should bear it in mind as most of the cultural practices revolves around these.



As mentioned earlier, the Oncidium alliance has vast diversity and as such it may be difficult to prescribe any general care and culture across the alliance. For this reason, we shall confine in this article, the requirements of culture to genus Oncidium.

Of the several parameters for better culture of orchids, Light is the most important factor. However, of the various factors not one of them can be dealt in isolation such as water, potting media, as their requirement depends on other factors such as use of containers or mounting etc.

Light: There could be several factors which contributes to the blooming of orchids such as low temperature in the night, changes in day length, but single most factor determining the blooming is the light. Oncidiums loves lots of light. Morning or afternoon light is best. That means an East, shaded West, or South-facing is ideal. Some of the oncidiums prefer very bright light however, avoid the scorching light.

Light levels of 2000-4000 fc is good for oncidiums. Dark green color of leaves indicates too much of shade. Light green color of leaves is ideal. Mule eared and Equitant Oncidiums prefer more light. In your growing area, you can position the

oncidiums at the ventre or closer to the roof of the green house than other orchids. However, most of the hybrids (Oncidiums) need filtered light while growing and for blooms also. *Oncidium fuscopetalum, Oncidium baueri, Oncidium flexuosum, Oncidium dactyliferum, Oncidium cebolleta* are some of the Oncidium species which prefer warm temperatures and bright light.

Temperature: Some Oncidiums prefer warm and intermediate conditions whereas, some species like *Oncidium chapadense, Oncidium auricular, Oncidium olivaceum, Oncidium pergameneum, Oncidium picturatum require* cool growing conditions. Ideal night temperatures of 18-20 C and day temperatures of 25-30 C is good for plant growth and blooming. Many of the oncidiums can withstand higher temperatures provided humidity is taken care of.

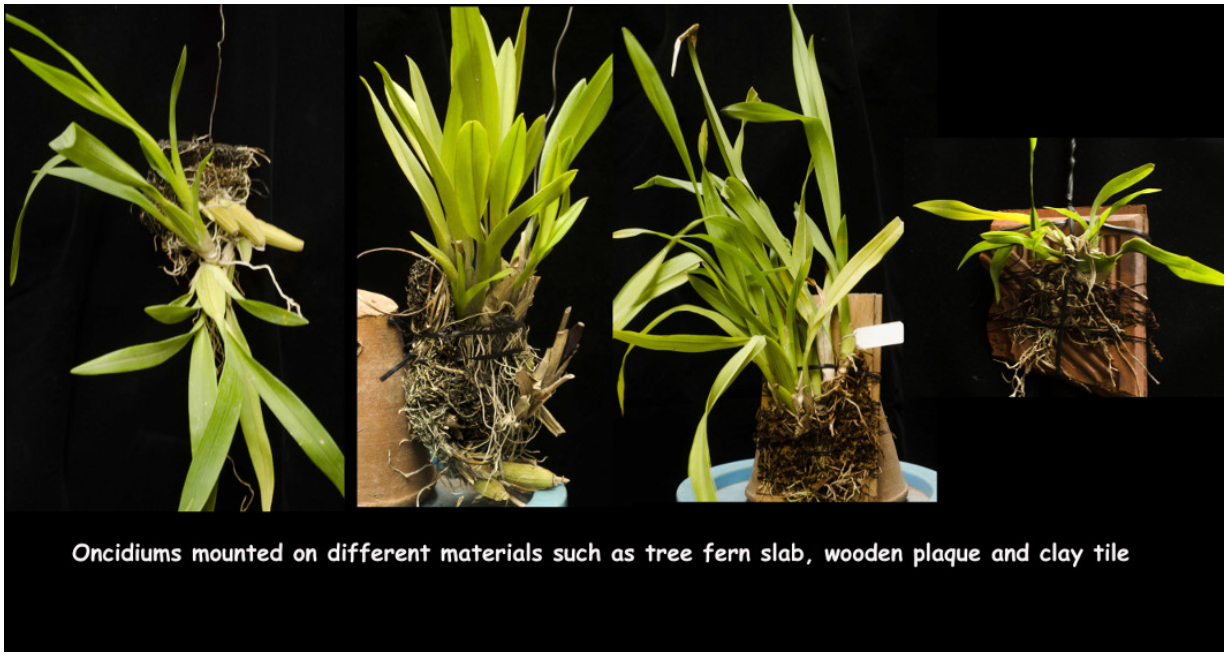
Water: For Oncidiums under culture do not go watering by schedule, check the moisture content in pots before watering. Though oncidiums require plenty of water during the growth phase, they hate overwatering and tend to rot. In pot culture provide plenty of good drainage. Our experience of providing good drainage at the bottom one third makes the plant happy. As there is a dormant period after flowering, reduce water during that period till the new growth starts. Thus, the growing stage and the blooming stage are the two phases when they require good amounts of water and then reduce the watering. Plump, green pseudobulbs indicate good watering schedule and if the pseudobulbs are shriveled, it means it is under watering. Oncidiums have plenty of roots and though thy like moisture, overwatering and lack of drainage kills them and eventually the pseudobulbs.

Media: As mentioned above, some of these parameters are inter related such as watering, pots and the media. If the oncidiums are planted in pots (now a day mostly it is plastic pots) and the media used is a combination of organic material such as pine bark, go slow on watering, even if the surface appears to be dry, the lower profile of the media will have moisture. Use of charcoal and bark appears to be good combination as use of medium like coconut husk chips render the media too wet at times.

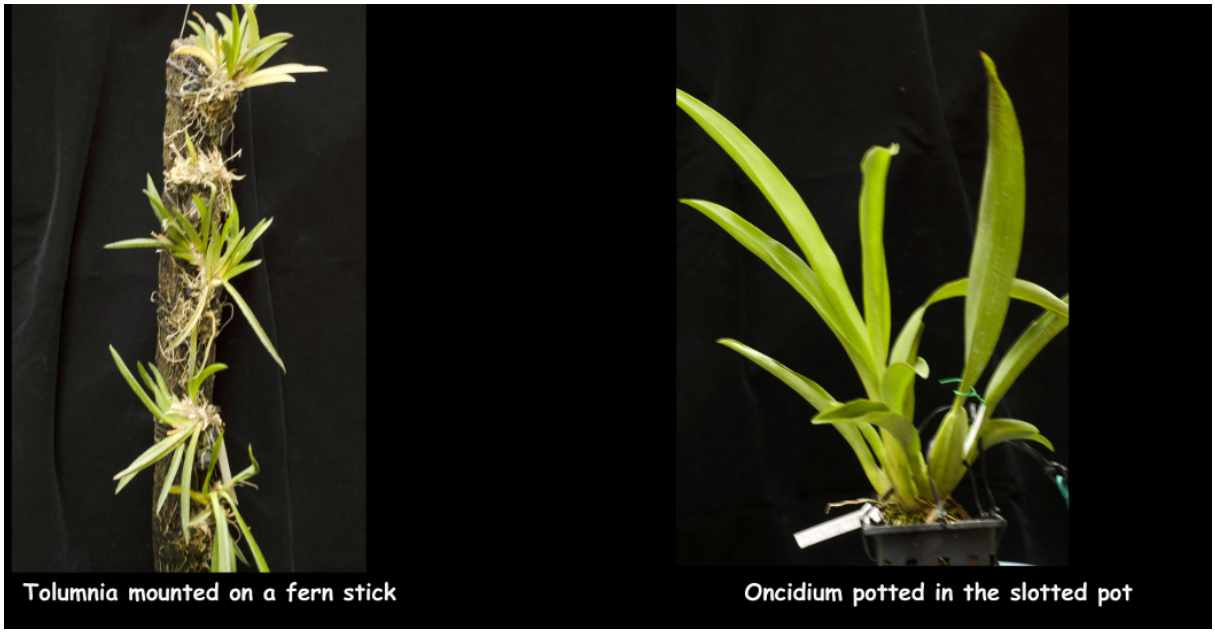
Pots and potting: Although it is ideal to use plastic pots now, underpotting is preferable rather than going in for a bigger pot. Do not pack the media to compactness while potting, allow it to be loose for better aeration. At the same time stake the plant well to prevent wobbling and this will allow it to settle down with new roots. Oncidiums do not like to be disturbed often with repotting, resort to repotting only when necessary. Plants showing symptoms of wilt and overgrowing on the edges with pale or wrinkled leaves needs repotting. While placing the plant in the pot, allow sufficient space for the growth of new pseudobulbs. Many growers use the slotted pots and also the orchid pots with holes as they provide better drainage.

Mounting: Mounting appears to have preference over pots for medium and small sized oncidiums. Mounting provided good aeration for the mass of roots. However, with mounting the watering needs to be more frequent and humidity levels are to

be maintained. But the oncidiums appear to love mounting, various material from tree branches to logs to fern barks and even wooden plaques and clay tiles have been used successfully. One has to take care of the plants especially in summer.



Oncidiums mounted on different materials such as tree fern slab, wooden plaque and clay tile



Tolumnia mounted on a fern stick

Oncidium potted in the slotted pot

Fertiliser: Application of a balanced fertilizer such as 19-19-19 of about 1 gram per

liter of water during the growth phase which is in Bangalore conditions spread from March to October is ideal. Stop fertilizing then onwards till the new growth appears.

Propagation: Oncidiums being a sympodial growth habit, produce lost of side shoots with pseudobulbs. Dividing these with each division having 2-3 pseudobulbs with ample roots is ideal. Back bulbs can be used to produce new plants with patience and care.

Propagation of Oncidium through back bulb

Seedlings of Oncidiums in a community pot

Pests and Diseases: Sometimes the lush vegetative growth during the growing phase attracts aphids attack, presence of sticky exudate which attracts the ants is an indication of presence of this tiny sap sucking insects. Use of neem-based

insecticide should take care of the problem. Often during summer, dry conditions and low humidity levels will promote scales and mealy bugs, low levels of infestation can be controlled by cleaning with a swab dipped in alcohol.

Over watering and poor drainage conditions are predisposal for black rot, cut the entire pseudobulb and apply some cinnamon powder for low level of infestation.

Some common problems observed in Oncidiums are

- Wrinkled pseudobulbs – this generally due to lack of water for the plant, either the media is dry or the roots are not able to absorb sufficient water.
- Reddish or purple leaves indicate too much of light
- Blackening of pseudobulbs and rotting

Oncidium Hybrids and Alliance.

Numerous beautiful hybrids have been produced with Oncidiums. Oncidium hybrids have been produced as early as 1913 onwards. Some of the most popular ones are,

Oncidesa Gower Ramsay (= Oncidium) is a cross of Oncidium Goldiana x Oncidium Guinea Gold.
Oncidium Green Valley Sweet produced in 2005
Oncidium Gold Dust in 2003
Oncidium Sharry Baby
Oncidium Sweet Sugar

The alliance comprises of several genera but the most popular ones are *Odontoglossum, Brassia, Miltoniopsis, Psychopsis* and *Tolumnia.*

References:

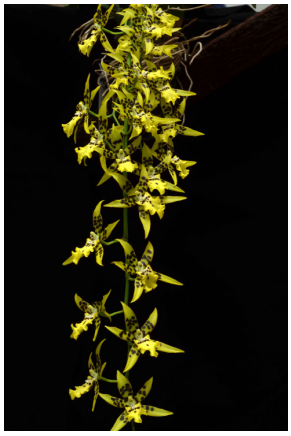
- Anon., https://en.wikipedia.org/wiki/Oncidium
- Anon., Brenanorchids.com., http://www.brennansorchids.com/onc.html. Care instructions for an orchid from the Oncidium family
- Anon., www.orchidplantcare.info/popular-orchids-oncidiums/ A brief overview of the genus Oncidium – orchid plant care
- Anon., https://www.lookingafterorchids.com/useful.../oncidium-odontoglossum-miltonia/. Oncidium Alliance – Looking after Orchids.
- Anon., https://www.sundaygardener.net/oncidium-orchids-8-mistakes-to-avoid Oncidium Orchids - * mistakes to avoid – Sunday Gardener
- Anon.., https://www.rhs.org.uk/advice/profile?pid=846 -Oncidium Orchids (Warm Section) RHS Gardening
- Shashidhar, K S, 2012, Beginners Guide to growing Orchids, International Book Distributors, Dehradun, India

Some images:

Oncidium 'sharry baby'

Odontoglossum

Odontoglossum White Fairy



Brassidium Tzeng Wen spot - Oncidium Makalii x Brassia Rex

Oncidiopsis Bartley Schwarz (Oncidiopsis Red pali x Oncidium Honolulu)

Oncidium Gower Ramsay orange Delight

Report on the Training Session held in Lalbagh by TOSKAR for members and the public during the year 2018

The Orchid Society of Karnataka was established in the year 2005-06 and since then has been focusing on its main objectives of creating awareness and popularizing orchid growing on one hand and conservation of orchids on the other hand. In tune with this, TOSKAR had initiated program of Training and Demonstration on various aspects of orchid care and culture for hobbyists. Several such programs were held earlier and also during the annual orchid shows which was attended by lots of participants. After a break, TOSKAR has restated this training and demonstration (hands on) for interested public and members. One such program was conducted on 9 June, 2018 at Lalbagh, Bangalore.

With the beginning of this program it is intended to run a series of five workshop sessions for orchid hobbyists and beginners during the current year. Each session will focus on general growing tips on orchids covering various aspects starting from how to select a plant, choosing pots and potting media, light requirements, temperature, humidity, watering, fertilizing, common pests and diseases in general and for the specific genera in the focus during the session. The session will focus on one genera and the participants will get a hands-on experience of potting or mounting and other aspects of that particular species.

The first session was held at the Conference hall in Lalbagh on Saturday the 9th June, 2018 and conducted by Dr Shashidhar Sastry one of the senior members of the Society. The workshop, apart from the general requirements of orchids had focused on the orchid genera of ‘Oncidium’. The program was inaugurated by Dr Jagadish the Joint Director, Department of Horticulture, Lalbagh, Bangalore.

There were twenty-six participants registered for the event some of them members and some from the public side who were interested in orchids. Many of the participants were already had experience in growing orchids and few of them were novices. The participants were distributed with a kit comprising of a Tolumnia plant, a plaque to mount, a culture sheet. There were participants who came all the way from Chennai and Mangalore.

In the presentation the participants were explained in detail about the various parameters important for orchid culture their management and the inter relations. The first part was in general for most of the orchids grown in Bangalore conditions and this was followed by detail culture and care for genus Oncidium.

The next program of demonstration and hands on mounting and potting of oncidiums were taken up and the participants had the experience of mounting the exquisite ‘Tolumnia’ species. This was followed by time for questions and answers. Participants got to view some exquisite flowering varieties of Oncidiums.

Participants were further eager to know the next dates for the sessions and they were informed that the same would be announced with details.

Some images from the Training Session

Inauguration of the program

View of the participants in the program

Talk by Dr. Shashidhar

Felicitation to the chief Guest

BIMONTHLY MEETING OF TOSKAR AND DISPLAY OF ORCHIDS BY MEMBERS 0N 28th April 2018 – A REPORT

A report on Bimonthly meeting of TOSKAR held on 28th April 2018 at Dr. Marigowda Hall, Lalbagh,. The meeting went off very well with about 42 members attending the meeting and four annual members joined the society.

While all the members gathered at the meeting Hall at 02.00 p.m. with their lovely orchids grown by them in bloom and arranged them on the Show table for judging, other activities of sale of orchids and accessories was conducted by Mr. Kalyanpur on the sidelines. At 3 p.m. members lined up for judging orchid hybrids & species displayed on the show table, marked the best of the orchids for the award.

After judging, monthly meeting began with reading of minutes of last BMM held in **24th February 2018 by Suresh Babu Donthi**. This was followed by Talk by Dr. R. Krishnamanohar, Professor of Horticulture, university of Agricultural Sciences, GKVK, Bangalore on: ***"Protective Structures for Orchid Cultivation".***

The presidential address was made by Dr. Sadananda Hegde, President of toskar. In his Presidential address appealed to the members to come together to work for the cause of Orchid conservation, cultivation and propagation of this unique group of plants – Orchids and also requested for more volunteers in conducting the BMMs. He Encouraged members to utilize the Orchid Clinic by bringing sick/ailing plants for diagnosis and share knowledge on symptoms and treatment

This was followed by announcement of winners in Orchid Display competition in both Orchid Hybrids and Species groups.

The winners were

Species Winners

- Dendrobium bensonia – Nageshwar Ist prize
- Root Orchid – Nageshwar 2nd Prize
- a) Calanthe Triplicate Shkunthala Manae 3rd prize
  b) Paph. Niveum – Anil Kubear 3rd prize

Hybrid Winners

- Encyclia Tempensis – Nageshwar 1st Prize
- Paph. Belroyal – Nageshwar 2nd Prize
- BLC Hairy pig – Nageshwar 3rd Prize

At the end, all the winners were felicitated. Meeting ended with happy interaction over a cup of Coffee and snacks.

OTHER ACTIVITIES:

- On 30th March introduction and demonstration session on Orchid cultivation at Suresh Babu Donthi's Residence for 50 students of Sri Ramakrishna Vidyarthi Mandiram College Students
- There was an introduction and demonstration session on Orchid cultivation at Bugle Rock Park and around 50 Organic Terrace gardeners had attended the session on 15th April 2018.
- Demonstration of How to grow orchids by Suresh Babu Donthi on 17th May 2018 between 3.00 pm to 5.00 pm at Dr. Marigowda Hall on the invitation by Sogetsu School of Ikebana and around 50 members of the Ikebana school participated in this program.
- Workshop on growing orchids – Oncidium was conducted by Dr. Shashidhar and Suresh Kalyanpur on 9th June 2018 at Conference Hall Lalbagh and around 26 novice Orchid enthusiasts took part in the workshop. Photos attached.

Some photos from demonstration session by Mr Suresh Babu Donthi

At Bugle Rock Park for organic terrace gardeners

At Bugle Rock Park for organic terrace gardeners

for students of Sri Ramakrishna Vidyarthi Mandiram College

for students of Sri Ramakrishna Vidyarthi Mandiram College

Do’s And Don’t’s

SOME DO’S AND DON’T’S FOR

THE NEXT TWO MONTHS

- ✔ **Monsoon is on be careful with watering your plants especially those in plastic pots – check moisture before watering**
- ✔ **Store as much as rain water as possible – Best for paphs**
- ✔ **Watch out for snails and slugs. Not one measure is good enough to take care, try physically removing them with baits, use metaldehyde and also use salt or lime where they are likely to crawl and reach out for the new succulent growths**
- ✔ **With more moisture and temperature, it is ideal for onset of diseases – check and take prophylactic sprays with systemic fungicides and bactericides.**
- ✔ **This is also growth phase for most of the orchids, fertilize regularly on a weekly basis but low doses**
- ✔ **Do not forget to use calcium and magnesium separately**

Orchid Quiz -1

1. **What do you understand by Orchid flower being ‘’bilaterally symmetrical”?**

   a. Flowers with two petals
   b. Flowers can be cut into two equal parts
   c. Flowers twice a year

2. **The only commercially essence yielding orchid is**

   a. Dendrobium
   b. Cattleya
   c. Vanilla

3. **The name Corsage Orchid ‘is another name for**

   a. Vanda
   b. Phalaenopsis
   c. Cattleya

4. **Moth orchid is also known as**

   a. Cattleya
   b. Oncidium
   c. Phalaenopsis

5. **Which orchid is known as ‘Foxtail Orchid’?**

   a. Vanda
   b. Paphiopedilum
   c. Rhynchostylis

The answers will be in the next issue of the NL

Photo Gallery

Rhynchostylis coelestis

Aerides houlettiana

Angraecum leonis

Ascofinetia Peaches

Bulbophyllum purpurscens

Dendrobium bensoniae

Dendrobium draconis

Eria spicata

Dendrobium Nestor

Geodorum densiflorum

Nervilia crociformis

Bulbo medusae x *auratum*