



# Central Vancouver Island Orchid Society Newsletter March 2015

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Blc. Triumphal Coronation

Grown by Julia Photo by Bryan

Meetings are held September through June on a Saturday at the Harewood Activity Centre, 195 Fourth Street, Nanaimo, in the hall on the second floor, doors open at 11:30, with the business meeting starting at 12:00 noon.

**Coming Meeting Dates:** 2015: March 21, Apr 25, May 23.

**Program for for February 21<sup>st</sup>**  
**Growing Orchids in small spaces**  
with Pat vanAdrichem

### **Coming Events:**

VanOS Show, March 27-29 (also the COC in Saskatoon)  
CVIOS Show, April 9-12

**Editorial: One show down, two more to go! I want to thank everyone that sent plants to the Victoria show. We had some fantastic plants! Thanks to Don and Nancy for bringing the staging, and registration. Thanks to Angie and Donna for setting up a beautiful display, I know they were grateful to have such wonderful plants to work with. Our display received the trophy for “Best Visiting Society” Donna won best painting, Julia won best grown on a windowsill, and I won best Lycaste. A big congratulations to Julia, this was the first show she sent plants to, and she won a rosette on her first try! It was nice to see a number of our members visit the show. A big thank you to all those that returned Sunday to take the show down, and to Laurie for bringing the Nanaimo plants back from Angie. If I forgot anyone I am sorry!**

CVIOS General Meeting - February 21, 2015 Bryan brought the meeting to order at 12:00 noon with 25 members and two guests present (Dusty and John). Maureen moved acceptance of the January minutes, Sandra 2nd the motion and motion carried. Bryan indicated that this would be Shelley will soon be moving and would be her last meeting with us. We are all going to miss her and extended our best wishes to her in her new home. Refreshments: Sandra passed the list around for volunteers. We could use an extra person in March. Thank you to Connie, Donna, Mary, Keith and Laurie for bringing goodies today and REMINDERS to Mike, Clementine and Shirley for March. Programs: Nancy indicated that Pat Van Adrichem is coming in March, April is Alexey, May is Patricia Harding and H&R will be coming in June and bringing plants. Nancy will send us a list of plants that will be available from H&R so we can pre order. Shows: Victoria - March 14 &15 (set up on the 13th). Angie, Don & Nancy, and Donna will be taking care of transportation of our orchids, setting up our display and registering our plants. Laurie will be the drop of point for Nanaimo & south plants. She needs them before Thursday afternoon so she can take them to Angie. Donna will bring plants from north of Nanaimo. Check Victoria website for location and registration details. Vancouver - March 27-29. Mike will be doing this show and is still looking for a large enough vehicle to transport plant to the show. More details will follow at our March meeting. CVIOS - Our show will take place from April 9-12 at Nanaimo North Town Centre. Angie brought posters and asked everyone to take some to put up in their communities. She also brought volunteer sheets and encouraged everyone to start signing up for all the jobs that are involved in making our show a success. These include security, sales, information and draw table, ribbon judging, Thursday set-up and being a sponsor for a best in class prize. Bryan suggestion of having 4 new awards at our show got a positive response. This would include: Harry Johnson award - Best Specimen, Mike Miller award - Best Miniature, Jerry Suffolk award - Best Oncidium alliance and Dora Glover award - Best Cattleya alliance. Bryan also indicated that discussions were still ongoing regarding our changing the date of our show to the fall perhaps early October, to prevent the run of show that are currently taking place in March and April. It is felt that this might be more acceptable to all those involved as the weather is likely to be better than in February which was originally suggested.

“Tip of The Month” Will be “Nutrition, Make it Easy” with Alexey

The Dr is in! The orchid Dr will be available to answer questions

## The Fine Art of Flowering Orchids

### On a Metropolitan Windowsill

By Ursula Hoffmann

Yes, Virginia, it really is easy to grow orchids on a windowsill - just as the catalogs say. But if you want to *flower* them as well, you need a lot of recklessness, otherwise known as courage, curiosity coupled with disbelief, a desire to experiment, ingenuity, patience, stamina, and much knowledge - quite apart from the skills of a carpenter, electrician and plumber. For if you have no greenhouse and no garden, balcony or terrace where good conditions in the summer can make up for the past winter's mistakes, then there is no room for error, no shortcut to perfect culture - and perfect culture is the only way to get good bloom on a plant growing exclusively indoors.

Windowsills have built-in limitations: There is "natural" shading not only from surrounding buildings but also from dirt on the glass, and that takes time to clean. After a week of not watering to allow the drip trays to go dry, it takes me a full day to dismantle the shelves for the window cleaner to get access-and another day to replace shelves, trays, plants - only to watch the pigeons divebomb my newly shiny panes: my love for them appears to be requited. Light falls in sideways, plants lean, and flowers look out of the window. There is little temperature drop. During the summer, I get only between two and five degrees even by the open window: my highrise building, assisted by its neighbors, stores heat 'like a brick oven should.' In the winter, with the heat off, the sills stay cold, ice flowers grow on the windows and fungus on the walls. With the heat on, half of the plant grows cold, the other, above baseboard steampipes, warm and dry. With windows open from April through November, polluted air, soot, mite, locusts and similar lovable enter freely even through the screens, making for some bud blast, dirty fans and plants.

So why bother? Because that's the fun part. One rises to the challenge and borrows, steals, invents ideas, ways and means for coping with these limitations and for triumphantly overcoming them.

Let's begin with plant selection: Most authors of books on orchids have greenhouses and so need not know much about fine points of culture and even less about windowsill growing. Thus advice is often limited to statements such as "This is another pretty plant," "Water copiously," "Grow warm." Moreover, I started in the dark ages when nary a florist had ever seen an orchid plant. So I decided to tryout as many different genera as I had room for, concentrating on those said to have fragrant flowers. With a few species of mite, scale, and fungus thrown in, I then had a "mixed collection." Some plants just sat there doing nothing. Some grew beautifully, never blooming. Some grew backwards, getting smaller and smaller. And-miracle of miracles! - some plants actually grew and bloomed, including many believed to be indoor failures. Can you guess which ones I chose to keep?

Plants I no longer grow are those needing high light, such as *Renantheras* and *Vandas*, because they simply don't flower as well as they should. Anyway, light requirements must have been formulated by growers in Hawaii or equatorial Africa because my south- and west-facing windows appear to be just right for plants said to be in need of "medium to low light" or "heavy shade." Conversely, this may be due to the fact that I like to grow plants hard, that is in as much light as they can take, just short of burning. I don't grow many mounted plants either (aside from a few very favorites such as *Aerangis rhodosticta*). With the plants facing the window I would only see their backsides, and daily unhooking for watering in the sink is not only troublesome but also invites danger, as one can't see where to grab a hold not injurious to leaves and roots. If one is in love with many plants that refuse to be happy anywhere but on a plaque, I guess one could construct a wire tube for a whole collection of mounted plants and suspend it from a motorized slow-turning lazy susan fixed to the ceiling near the window, but watering this contraption daily would be an interesting experience

unless one enjoys damping down one's room, parquet floor, carpet and all. I did that once when I got sidetracked into have a phone conversation with Lu Tempera on *Jumellea* culture while my watering hose was on to fill the humidifier. I had fantastic humidity for a couple of weeks! But I now watch like a hawk while my hose is connected. I don't grow standard size spring and summer blooming Cattleyas, esp. yellow ones (they need too much light and too much of a temperature drop), nor those requiring a long period of short days. (I never did bloom my Christmas cactus at home because I always forgot to put it into the closet or to take it out again.)

But fall blooming, Brazilian, and miniature hybrid Cattleyas do fine for me provided I don't grow them to specimen size. When, a few years ago, I proudly transported a Cattleya with 18 flowers to our judging center, holding it high above my head during a rush hour subway ride, the judges crushed and mortified my maternal pride by deeming it silly-looking because only half the plant was bedecked with bloom. Naturally, the other half had sat facing the darker living room. I don't grow very many species because primary hybrids-for reasons of hybrid vigor, whatever that may be-are easier to flower, and I keep away from huge plants using up lots of light and space and producing flowers that only last for half an hour.

All of these exclusions are personal of course, strictly dictated by my own taste, temperament, and time schedule. The orchids excluded from my collection are probably all flowering beautifully on someone else's windowsill. With some ingenuity and dedication it should be possible to flower any orchid at all indoors.

Orchids doing really well for me are, in addition to the Cattleyas mentioned above, small Dendrobiums, Africans, Catasetums, most plants in the Oncidium alliance (excluding equitants, that for some reason have not liked any of the spots I offered them, but including mule-ears which appear to need much less light than the books say), and of course *Phalaenopsis* and *Paphiopedilum*. All of these are relatively easy to take care of and they grow and flower reliably and to potential. True, they are not all fragrant (but one can always spray with perfume).

Their culture, however, has to be perfect, or nearly so, and one must go to some trouble to find out what they want. Above all, one needs knowledge, preferably firsthand from observation and botanical books (rather than secondhand from someone else's cultural notes which may or may not work for whatever reason). One must read everything one can find on the plants. My favorite books are:

Alex D. Hawkes, *Encyclopedia of Cultivated Orchids*, Faber & Faber: London, 1965-with information on hundreds of species incl. description, origin and habitat, although the cultural information is outdated.

Gloria Jean Sessler, *Orchids and How To Grow Them*, Prentice Hall: Englewood Cliffs, NJ, 1978-with some very detailed and good cultural information.

Sander's *Lists of Orchid Hybrids*-for the exact parentage. Duane J. Erdmann, *Notes on the subgenus Brachypetalum*,

Rochester, 1982-for precise and comprehensive information on this section (the dwarf white *Paphiopedilum* species, and applicable to their hybrids).

Lance A. Birk, *The Paphiopedilum Grower's Manual*, Pisang Press: Santa Barbara, CA, 1983.

Robert H. Hamilton, *The Orchid Doctor*, compiled by Robert H. Hamilton, Richmond, Canada, 1980-for help in diagnosing problems, and reasonably up-to-date information on remedies.

All sorts of specialized publications on various regions, climates and genera.

Various periodicals on orchids, first among them of course *The Orchid Digest* and the *A. O. S. Bulletin*.

Other sources of information are the lectures and fellow growers at orchid meetings. But one must take care to ask the right questions. Why doesn't my plant bloom? can't be answered unless you add a lengthy explanation of how you have grown it so far. What plants sat next to this one? . . . gets you a better answer than the question, what kind of light it needs. But one must also take care to interpret every "answer," to translate it from the other's growing experience to one's own. Very often it is not specific enough or doesn't make sense. Try "dunking" a plant potted in bark or cork-it will at once turn into an unpotted one. How do you let a plant become "almost dry" before "watering copiously"? What is "chilling"? How can you "pot wet and keep the roots dry until healed"? And what is "a semi-dry rest"? Philip Gould (in *The Orchid Review*, 1982, 251) writes: "Will someone please tell me where to get a hold of some semi-dry water and indeed, having acquired some, how often I should not use it? And furthermore, my orchid which enjoys a semi-dry rest must, by my powers of logic, be enjoying a semi-wet rest as well, which is not much of a rest at all." As another example, the advice that plain-leaved and mottled-leaved Paphs can be grown side by side is quite true for a controlled environment such as a greenhouse. But only some of them will flower when you try that on windowsills.

On the other hand, a description of native habitat and climate gives you a pretty good idea of your plant's needs. I looked up the ancestors of all my primary hybrid Paphs and then calculated the balance, assuming for instance that when *P. bellatulum* (which likes it cool, shady and damp) is crossed with *P. glaucophyllum* (wanting warmth, bright light and dryness), the resulting *P.* Charles Sladden needs intermediate conditions in all three areas. If he doesn't bloom he probably didn't get enough of a temperature drop, in which case he might spend 14 nights on the bottom shelf of the refrigerator - provided you live alone, have understanding friends, and buy your vegetables one day at a time.

Observation is another must. Look at your own and at other people's plants and learn to interpret what you see. No, I don't just mean the obvious, such as diagnosing whether the bite marks are from a slug or a vampire; or the more difficult, whether the spots on your leaves are from mites, fungus, bacteria, or virus. If the leaves lean toward the window the plant wants more light. If they are not the perfect shade of green, you have the wrong amount of light or temperature or fertilizer. If you have two plants of the same genus, such as *Phal. amabilis* and *Phal. violacea*, the *Phal. violacea* leaves are much wider-indicating that they need less light and higher humidity: wider leaves can make more food and have a bigger surface for transpiration. If the roots or leaves are very thick they can store water and therefore need it less often. If the roots stay above the pot, they are looking for air and humidity; the medium may be decomposed or too wet or too dry, etc.

Assessment is necessary, though when one has caught "The Disease" it's very difficult to sit down and think. Oh yes, I know. I just like nothing better than to buy orchids! But it's nearly fatal for them, my pocketbook, and me. There is no point, for instance, in buying very expensive plants not able to flourish in one's conditions, and then to be cheap when it comes to paying for equipment or electricity. There is also no point in having very many plants when you don't have time to take care of them, or in growing them in a fast-drying medium when you don't like to water, or to indulge your compulsion to experiment, etc. One really does need to get one's priorities straight and to develop "a system."

This system consists of available light, temperature, air, humidity, watering, feeding, and one's own lifestyle and temperament, all delicately balanced against each other. One element rising might require raising or lowering the other, all depending. So we can't just ask a fellow grower how often he waters-we need to know what the rest of his system is like. A greenhouse or a lighted basement room, for example, allows complete control of all factors, really being like giant test tubes, and in them one could create a "jungle" without pots or medium, with 90 percent humidity and storm-like breezes and daily downpours. My "system," though based on compromises, is somehow more sympathetic to me, my apartment, and my neighbors.

Setup: I have extended my windowsills to two or three feet depth, and installed 8" deep shelves above them, using extension poles and egg crate. The shelves should not be deeper nor too close together or there wouldn't be enough light for the plants behind those directly by the window. Underneath some of the widened windowsills are light-carts, and behind them are teacarts with casters, easily movable.

There is not too much one can do to increase light or to vary its direction. My windows face south and west and also get reflected morning sun from some buildings in the southwest. I neither have the time nor the inclination to hover over them every day in order to "hang a layer of cheesecloth for two hours when warranted." Rather, I rely on the abovementioned "natural shading," refrain from having my windows cleaned in mid-summer, and advance plants toward the south window gradually (the rate of 6" a week is safe). The direction of the sun's rays varies in any case: they extend ten feet into the room in the winter but don't hit the top shelves; and in the summer when the sun is higher in the sky, they hit everything in the south windows except the top shelf, but only to about one-foot depth. From mid-November to mid-May I use supplemental lights, a few 75-150 watt bulbs and Slimline 4-foot, 2-tube fluorescent fixtures at about mid-distance between ceiling and sill level. Anything larger would cut out too much outside light and thus defeat the purpose. In the near future I plan to experiment with low-sodium lights to try to bring down my electricity consumption. These supplemental lights not only provide light on gray winter days but also a little extra heat while they are on, and, consequently two or three degrees more toward the nightly temperature drop. They have helped me flower quite a few plants previously recalcitrant. My living room is quite warm all year round, and I can't control the temperature, or only if I were willing to sacrifice the contents of my bank account through the simultaneous running of humidifiers and air-conditioning. But my bedroom is small and has a door, so I can use the air-conditioning during hot summer nights, keep the heat off in the winter, and the windows open during spring and fall, making for more or less intermediate temperatures. As implied above, the windowsills stay rather evenly cold during the winter, easily allowing for experiments with the temperature. It must have become clear by now that I like to experiment and don't believe anything I read and hear until I have tried it out myself. So a year ago I put a big tray with a whole assortment of plants, all of them dry at the roots, on a sill during a winter storm-with the window open. After a couple of days, all the cool growers had frozen to death but the *Phalaenopsis* were just fine, and a couple of weeks later- naturally back in pampering warmth proceeded to spike!

The living room windows are open all summer to admit fresh (???) air, and there is a large oscillating fan in every room. (I tried out oscillating vs. steady breeze on myself and found it much more pleasant.) My bathroom window is open all year round, in the winter making me take very quick and drafty showers. Well, it saves water and soap and the fresh air has got to be healthy. Moreover, my orchids and I have an unspoken contract (no, we don't talk to each other), that of any happy marriage: we make equal concessions to each other's comfort, and anyone not satisfied can move out to orchid heaven. (Maybe not so equal after all, but then, I have given up fried foods to keep their pores from clogging!)

The humidity is not bad. My plants stand on egg crate which lines or covers drainage trays. I prefer egg crate to pebbles as it's lighter and easier to clean (a few hours in a Clorox solution in the bathtub). The water in trays near open windows, above steam pipes and lights evaporates between waterings; that in the other trays with the aid of 2" fans laid nearly flat on the egg crate-which also creates micro-pockets of extra humidity. I also have two large humidifiers, but whether or not I use them, the humidity is generally around 50 percent, sufficient for nearly all orchids as well as luxuriant growth of fungi on the walls below my windows. Only *Miltoniopsis*, *Masdevallia*, some mini Africans and Dendrobiums need higher humidity at the time their flowers open, achieved near those little flat-

lying fans and with some extra moist moss. Though other people have success with daily misting, I don't like it; for me, the advantage gained of a few minutes of extra humidity is not worth the risk of fungal or bacterial infection. An occasional stuck leaf or flower gets a gentle shower until unstuck and is then blow-dried. Carl Withner recommended I string a shower curtain across my living room to keep humidity higher and more constant, but I reminded him that I live here too!

For the novice, watering is the hardest thing to learn, and the books on culture are no great help at all. The old saw, "If your Cattleyas look dry, water tomorrow; if it's your Phals, today; and if it's your Paphs, you should have watered yesterday," may tell something about relative need but doesn't define "the dry look." I never did manage to gauge need for water by weight of pot, especially when I didn't know what was inside. I never did figure out how to keep plants "evenly damp," which is quite impossible when you think about it, or how to water them "copiously." I find it a lot more helpful to remember that most orchids are originally epiphytic or semi-terrestrial - which must be the same as semi-epiphytic: meaning that in nature, all of them get blow-dried by the wind between rains and fogs, and therefore also need air inside pots. Not only the pseudobulbs but also the roots store water, and so all orchid roots should go at least a bit dry between waterings. Moreover, no orchid has ever been killed by under-watering, while dying from over-watering is almost the only thing orchids do really fast. So one must first learn when not to water.

All plants "rest" from time to time, meaning that they are not making any growth. Most plants, including Phals and Paphs, rest right after having bloomed, some Cattleyas, Dendrobiums, Oncidiums do so after having completed new growth and before showing spikes; many plants rest in midwinter. The resting period may be as short as one week or as long as several months. Most culture books, when they make any mention of the subject at all, are not very specific, though it is vital to water some plants very lightly during the resting period, and some not at all. Otherwise you either kill the plant or you get only new vegetative growth instead of flowers. Again one needs to know its natural habitat and climate, and one must observe the roots. When in active growth, the root tips of Paphs are whitish, those of most other plants green. (When the whole root is green it is still wet even though the mix may already look dry.) Lee Soule's recommendations on wet/dry cycles are very helpful, with standard size Cattleyas (excluding those crossed with Sophronitis) on a seven-ten day cycle; Oncidiums on a three day cycle; Vandas, Ascocendas, and equitant Oncidiums on a one day cycle. A bit of common sense is good too. I water the cool growers only lightly during heat waves for example, on the assumption that they are under stress, therefore not growing, and definitely unable to afford any loss of roots from over-watering at that time. Another way to judge frequency of watering is to consider the thickness of leaves or roots, or the plant's habitat: a lithophyte on an exposed rock, an epiphyte high up in a tree, or a plant with thick roots needs more air, or a shorter wet/dry cycle, than one growing low down or in moss.

I never water my plants (don't take this out of context!), but only the roots, on each side of the plant. Occasional drops and spills on the leaves are dried off right away with kleenex or a Q-Tip, or tipped out of the crown. I learned that from the late Don Richardson whose greenhouses were festooned with rolls of toilet paper for the purpose, to prevent spots or rot.

Generally, one should water in the morning, but cool growers like having their roots cooled on hot evenings. For other plants, the water must be room temperature or else Phals, for example, get bad leaf spot. If one uses water that has stood overnight it should first be agitated to replace oxygen lost during standing.

Oh, how I envy Janet Howe who simply puts on her wetsuit and aims the garden hose into her greenhouse, and Ben Berliner and Richard Kaufman too have publicly confessed to their craving for waving the watering wand in their greenhouses where of course they can water away with impunity. But who would want his apartment to turn into a swimming pool, with run-off to downstairs neighbors?

Ideally, an indoor grower should take his plants to the sink for perfect control of water temperature, splashing, thorough leaching, close inspection, drainage. But when one has another time-consuming "hobby" (read: a job) and a bad case of orchidophilia (read: several hundred plants) this method is a little cumbersome. So, in yet another compromise solution, much less stylish than my friends' way, I abbreviate the process by using a long indoor watering hose. Mini-Reel or Water Whiz works best; garden hoses produce a flood (I tried that too); and other indoor hoses, even more of a trickle. So watering is slow work but I do it thoroughly and seriously because it is the only factor within the "system" over which I have perfect and total control. And I hate it! But I admit to guilt feelings over that: for years I have been having nightmares dreaming that I forgot to water.

I use Rands Aircone Pots exclusively. They are transparent, making it easy to see when to water, to repot, whether one has mealybug in the mix; they are plastic which holds moisture longer and warms up during the day, helping the temperature differential; they are lightweight, essential for my flimsy plastic shelves; they are square and deep and need no crock, saving space. I try to repot at the correct time, just as new roots are starting, unpot very wet or under running water to keep root damage to a minimum, repot with dry mix in the smallest possible pot, top with sheet moss, and water. If I have time I water once more with fertilizer and a little vitamin B against transplanting shock-though I have never gotten any, and neither have my plants. Then I put the plant, provided it has a healthy root system, right back in its place and on its regular watering schedule-on the assumption that the new mix dries out a little faster than the old did, giving the plant a little extra air and time to adjust. I use Waldor's Off Mix for nearly everything, seedling grade for pots up to and including four inches, medium grade for large ones. It holds moisture very well which works fine for under-potted plants and people who hate watering. The only exceptions are plants requiring quick drying or resentful of repotting: they are in straight bark or a mixture of treefern, charcoal and perlite; similarly, a few miniatures which resent repotting are in tiny pots in black osmunda or in dust-fine treefern (use your blender, so what if your milkshake tastes funny), or on their original small treefern poles standing in little pots and held in by old wine corks. Plants with naturally rising rhizomes, e.g., *Onc. varicosum*, are also in osmunda; when repotting I lower the plant, osmunda and all, and add a new higher vertical chunk on the growing side. Tiny seedlings are in sheet moss and a plastic sweater box terrarium.

Ideally, one should frequently and regularly feed all plants in active growth, only excluding those in bloom, dormancy, or under stress from root loss, wrong temperature, some illness, or whatever. They should be fed, that is watered, with an extremely diluted balanced fertilizer at every watering, preceded by a thorough leaching. Fertilizing in place? But I have no spare faucet for a Merit Proportioner and dislike brushing my teeth in Peters. (No, I haven't tried that one.) Syfonex, Hozon, etc., require a minimum of 25 lbs. water pressure, too much for my indoor hose. (That's where the garden hose came in-remember the garden hose?) That leaves fertilizing at the sink even when it is 50 feet distant from hundreds of plants. But again I cheat a little. I use liquid fertilizer maybe once a month in the spring and early summer, and also slow-release food: Osmocote in early spring and Mag Amp in the fall, in a little sheet moss sandwich to keep it moist for release of fertilizer, to keep it from being watered out of the pot, from burning roots through direct contact, from being blown about in the breeze, and from rolling out when I turn the plant over. But I have learned to use much less than indicated in the manufacturer's instructions, which seem to be designed for the sale of more fertilizer and frequent torrential downpours: Osmocote once and for all solves the problem of meristemming Paphs-the first one I tried it on reacted as if it had swallowed a fertility pill and produced about 20 new growths at the base of a single leaf fan. Unless that is desired one had best recite, with apologies to Madame Browning: "How do I feed thee? Let me count the grains" . . . with a grain per accent per plant. This activity, too, has contributed to my notion that orchids should be seen-in bloom, but not heard-to cry for food and water.

Hunting for pests, on the other hand, is an oddly satisfying experience, particularly after an irritating commute: one gets to concentrate on something else and rid of one's aggressions. I have developed great respect for mealybugs because they are true gourmets, traveling many mealybug miles to discover the choicest morsel, and clever at running to a hiding place when they feel themselves to be observed. One must have the Q-Tip out and the alcohol bottle open if one wants to turn the moment of discovery into one of truth. Scales, on the other hand, are quite contemptible, falling and feeding where they may, too lazy to hide and seemingly satisfied to eat Captan paste. They, too, are engaged in hand to bug combat, and the leaves then wiped with a mixture of Ivory Liquid and alcohol to get all the babies and that last mother. But I hate and fear mites; they are so insidious. I blame my frequent infestations on the open windows and the pigeons (remember the pigeons?), yet don't like to spray with Kelthane because the smell lingers for days, and if one has to spray (where else?) in the bathtub one had better stick to showers afterwards. But the detergent "409", as recommended by Ed Wright in the *AOS Bulletin*, works quite well as a miticide and moreover cleans the tub. Unfortunately mite bite can lead to secondary fungal infection, and hot long summers bring fungus and bacterial rot. I combat them mostly with Captan and Physan, respectively. Both are reasonably safe for the plants and for me. I don't have too many other problems because I am careful to repot every newly acquired plant even when in spike, and to sterilize my scissors on the gas stove.

One final point to consider is placement of the individual plants. The aim is of course to find the perfect microclimate for each. In this undertaking one must really employ one's powers of observation, memory, and knowledge, and above all curb one's impatience. When a plant sits somewhere doing nothing for a couple of years it might not necessarily be in the wrong spot, but simply adjusting to being exiled from sunny, warm Hawaii to a gray, drafty metropolitan windowsill. Or it might not be mature enough to flower. But then again, it might just need the tiniest adjustment of conditions. Closer proximity to a lamp might help its need for more light, warmth, temperature differential. Closer proximity to a fan can keep it a little cooler or dry it out faster. A small shift to the right or left will make a difference in terms of distance to the heating element as well as in terms of the light: the left side of my south windows, e.g., gets later and thus warmer sunshine than the right, and with the rays falling in at a different angle, while the left side of my west windows gets no sun at all. This is obvious, but one must consider it. For more extreme demands there are plastic bags, the tops of humidifiers, and temporary refrigeration. If one wants neat-looking monopodials they must be placed with their fans parallel to the window and periodically turned 180 especially when they have begun to lean toward the light. The window in a tiled bathroom, with the addition of a multi-tier kitchen spice shelf, is a great place for plants liking cool summers, high humidity, and frequent showers so long as one beware of splashing them with dandruff shampoo. And the window nearest one's favorite watering place is most convenient for plants needing frequent attention. Flowering plants can be away from the window, temporarily ceding their spaces to other plants. Some plants even need different spots in different seasons. It's a lot of fun to move plants around and beats moving furniture or pictures, but one must do it carefully to prevent sunburn. And when one has found the right place, one ought to remember it and learn to leave well enough alone instead of trying to see whether someplace else might also work - or so I keep telling myself.

It appears then that placement is the trickiest and most challenging aspect of indoor growing - enormously frustrating when one makes a mistake, enormously frustrating when one gets it right because one can never pinpoint the exact reason. But when one at last discovers the first bud on that long-time procrastinator, when the flowers are greeted with admiration by other growers who can barely believe that one has bloomed that magnificent orchid at the window, one feels a surge of pride and happiness that makes it all incredibly worthwhile.

Orchid Digest, September-October 1984