

## *Paphiopedilum & Phalaenopsis* with Ken Smart of (K. & H. Orchids)

I have always been interested in horticulture and when living in Inverell, NSW, I used to grow a lot of dahlias, roses, gladioli and particularly chrysanthemums. Of course the first year I was here I tried to grow chrysanthemums and dahlias but found it was too hot.

We were passing Zupp's Motors one Saturday night and saw the Orchid Show so we called in and that's where it all started, I bought half a dozen catts. That would be close on 26 years ago. Following that I went to McKinney's and bought about 100 seedlings and mericlones of cattleyas. The following week I went to Sunshine and bought another 100 or so. They were all in two inch pots and looked rather silly in a large shade-house. It wasn't long after that a friend of mine rang and said that somebody had a collection for sale which I bought. Quite a few were in flower and that just about filled the house up.

One night at a QOS meeting they had a panel discussion; a member got up and described the problems he was having with his *Phalaenopsis*. One of the panel members acknowledged that he was having the same troubles and handed it on to another member of the panel who said that his were not much different. The third member spoke about how frustrating they were and how difficult to grow. On the way home that night I decided that that was a challenge for me and I was going to grow



Ken & Heather Smart

*Phalaenopsis*. Not long after that one of the well known members of QOS, Eric Vosten, had most of his collection up for sale as he was moving down the coast. I ended up buying his orchid house and also quite a few *Phalaenopsis*; they were flowering and growing well. I had Stuart Heyden to call on for any help I needed. I did a couple of crosses and started flasking and of course once you start flasking it doesn't take long to fill your house up with phals. I suppose I had growing phals for four or five years and was on an orchid tour that called up to Daryl Watson's place. Daryl had all these slippers out, one in particular I remember was Paph. chamberlanianum and I thought "by gee they are nice". I could never really take to the complex type but I did like the species, so I started growing some species slippers and then the primary hybrids. Again I started flasking and it was only a matter of time before the slippers had nearly pushed all the *Phalaenopsis* out the door and for the last 15-16 years I have mainly been growing the slippers.

Because of the time in flowering them, the *rothchildianum*, *stonei*, *praestans* etc can take 10 years or more, I have now decided to go back to something that will flower a lot earlier for me and that is *Phalaenopsis*. I actually flowered quite a lot last year that I took out of the flask in February of the year before. I had them in spike within 14-15 months. I will still have a nice collection of slippers but I am not going to do any more flasking with them.

With the slipper seedlings I find that it is preferable to keep them in the *Phalaenopsis* conditions i.e. with a minimum of 12°C in winter you can then keep them moving.

With the adult plants I grow them outside and they seem to grow right through the winter. I have had them with spikes that appear in May June and you see them continue to grow and they are all in flower in July/August so our climate is quite suitable for growing slippers just under shade cloth but growing the seedlings inside helps during the first 12 months.

With the Chinese species we find that we can grow them in our climate but we do not flower them as well as they do down south. I think they need the cooler nights to initiate the spikes. I have sent some *armeniicum* and *micranthum* to the southern states and within a few months the growers ring me up and tell me they are in flower whereas I've had up to a hundred or so here that I've brought in from overseas and been lucky to flower 7 or 8.

If you are growing *rothschildianum*, *praestans* and *sanderianum* they are much slower in their growth rate than *sukhakulii*, *charlesworthii* and some of those others like *chamberlainianum* and that sort of thing. That's why *sanderianum* is so rare; it's so slow. I haven't flowered a *sanderianum* and I don't know anyone in Australia that's flowered a seedling. I think it's got to take something like 12 to 15 years.

The *Phalaenopsis* I grow in an enclosed house I wouldn't be able to grow them outside like I do the slippers. I also water them more often and fertilise them more often. I found that they prefer a little more shade than the slippers as they were getting too yellow and some were tending to burn a little so I put up an additional layer of Marix cloth in one house and extra shade cloth in the other. This has solved the problem. With my flasking I am now concentrating mainly on the *Phalaenopsis*, experimenting with the colour combinations and also the large whites. I have a very nice dark pink, a purpley red. It's something that appeals to me so I will do something with that. I have found that a lot of people want yellows.

I rather like the harlequins but this is an area that I think our judges have got to look at. You can have a plant with 6 flowers on a spike and they will all be different. Even one petal can be different from the other. They are getting AMs in America but according to our standards they wouldn't be awarded. I think that the Judging will eventually come around and accept them. Some of the early ones were not very well shaped. I had some harlequins out last year that were big and good shapes. I've done a bit of breeding with them; I don't know how I'll go but hope for some good results.



*Paph. micranthum*

I used to keep the temperature of the Phalaenopsis house at 18°C when it was only 2/3 of its current size and always used to have flowers for the QOS Spring Show. Now using the same gas heater I can only keep it at about 14°C but on a real cold night it will get down to 12°C. At these temperatures the flowers are later with only a few out for the spring show. If you want early flower the temperature needs to be kept to a minimum of 16°C. On very rare occasions the maximum gets up to 38°C. I do use foggers and fans to maintain the air movement and humidity. When the foggers come on the temperature will drop by 3-4°. They remain on for about 2 minutes at a time.

Bacteria can be a big problem with *Phalaenopsis*. When I was growing them 15 to 20 years ago I had troubles but now we have that Hy-San that Wolfgang sells and the stabilised chlorine that Murray Shergold sells. I spray with one of these products once a month. This bacteria looks like a big watery grey mass on the leaves that can double in size in 24 hours. It is very easily spread when watering. Water splashing from one leaf to the next will transfer the bacteria from plant to plant. It often starts on the tender new leaf that comes from the heart of the plant and is sometimes referred to as heart rot.

I have always grown my orchids in a bark and charcoal mix and in recent years have added perlite. If I have charcoal available I now use 1/3 bark, 1/3 charcoal and 1/3 perlite. I like to keep them just damp and with an open mix such as this I can't get into trouble with them getting too wet. I'm still using Debco bark, I think it's much the same as the bark that comes from South Australia. I have tried the peat and perlite mix but for me it has not been as satisfactory as bark and charcoal so I stick to what gives me the best results. It could be that I'm doing something wrong with the peat and perlite. There are many growers that do well in peat and perlite but I seem to get them too wet. I definitely get them too wet in sphagnum.

My main fertiliser is Peters. I have used others but in the American *Phalaenopsis* magazine they talk a lot about the Peters products so that's what I've been using and



*Phal. Sogo Cherry Ray*

there's no doubt about it they grow well so I'll continue to use it. This fertiliser does readily absorb moisture so a large bag for someone with a small collection may prove difficult. An airtight drum would help.

With the watering restriction I have to get up early to get it all done by 7am. I use the weight of the pot to gauge whether the plants need to be watered. That's one of the reasons I like to use all the same mix. I go out in the evening or morning and if there are ½ dozen pots that are light I will water them early the next morning. That's every second or third day or in winter it might be every 3 or 4 days but it is determined by the weight of the pot. I always fertilise one water and water the next. Now when I water I don't always just water. Some times I add calcium nitrate or I sometimes put in magnesium sulphate (Epsom Salts). The reason I put in calcium nitrate is that it toughens the cells up in the leaves and particularly with the *Phalaenopsis* it stiffens them up and stops them being as floppy and makes them more resistant to fungi infection.

To keep pests etc under control I do spray regularly. I used to use a lot of Fongarid but that's become very expensive so I now use Octave, these are both systemic fungicides. I do this about every 3 months or so. I also use Mancozeb about every 4 to 6 weeks as a preventative. For ants and cockroaches, that's about all I get, I use Dursban/Lorsban.

NOTE: It is responsibility of all persons using chemicals to read the safety instructions supplied and only use where and as recommended by the manufacturer.

