

The Orchid of the Month: October

by Bruce Adams

This is the first of a new monthly feature, the “Orchid of the Month.” Each month I will feature an orchid that I have grown and bloomed under my less-than-ideal conditions. Let me start out by stating that while I have been growing orchids for thirty-seven years, I am NOT the best grower in our society. Having moved from the east coast, where I grew my plants in the perfect conditions of a 16’ X 32’ greenhouse (the Monster Greenhouse, with article to come) I now grow many of my orchids outdoors year round, subject to the range of conditions that Sacramento has to offer. I do use my available microclimates very carefully, and move plants as conditions change throughout the year. Recently I have installed a very small (4’ X 6’) greenhouse that I use during the winter months only, which I keep at 40° minimum during the winter. My plants have the occasional leaf burn, critter-bite mark, and fallen branch damage that you will find in plants growing under natural conditions.

Like many of you, while I do not have the luxury of ideal conditions, I do have the desire to grow orchids and enjoy the amazing variety these plants have to offer. My hope is that readers of this feature will be encouraged to try something new, or will learn a new method of growing an old standby. So, let’s get going!

Zygopetalum Blue Banks

Zygopetalum is a new world species, found growing in Brazil, Paraguay, Boliva, Peru, and Venezuela.¹ They are characterized by moderately large, waxy flowers of two to four inches, with greenish petals and sepals marked by purple spots that may coalesce to make the entire petal or sepal purple. Their lips are usually whitish with purplish spots, again sometimes tending toward pure purple. The flowers are usually quite fragrant, smelling somewhat like hyacinths, but to me, not as strong and more pleasing. Plants have egg shaped pseudobulbs, with one to three basal leaves and one or two terminal leaves at the tip of the pseudobulbs.²

A pedigree analysis of Zygopetalum Blue Banks shows that it is a cross of Blue Lake with John Banks. It is derived mostly from *Z. crinitum*, with a smattering of *Z. intermedium*, *Z. maxillare*, and *Z. mackayi*. Photographs of these can be found on the Internet Orchid Photo Encyclopedia website.¹



Figure 1: Zygopetalum Blue Banks

Zygopetalum culture is fairly straightforward. I've read various sources indicating a range of light intensity from 1500 to 4000 foot-candles of light. I interpret this to mean that they are fairly adaptive in their light requirements. I grow mine in the summer in the bright dappled light of a large privet tree. It gets morning and late afternoon sun, but midday shade. In the winter it goes into my little greenhouse, where it gets morning shade and afternoon sun.

Temperatures can range from 100° down to 29°, although ideal is 75° down to 57° in summer, and 60° down to 50° in winter. The buds will, of course not tolerate as wide a range as the leaves, and under extreme conditions can be expected to drop.³

Although many sites recommend humidity in the 70% range,^{3,4} or even higher, I have found no problem growing my Zygopetalum in 40% to 50% that I can achieve outdoors from my misting system. They should not be allowed to dry out, but can rot if too wet. During the winter, however, they do benefit from less water.

For feeding, the infamous "balanced fertilizer" at one half strength is often recommended. (More later.)

Recommended potting mixes vary, from bark to sphagnum, and various combinations of bark/perlite/treefern, what-have-you.

I purchased Zygopetalum John Banks as a bare root division from Orchids Fiori D'amore at the Pacific Orchid Exposition in 2011 or 2010 (my memory fails me) for the exorbitant price of five dollars. I had not grown Zygopetalums before, but I have always loved their beautiful, fragrant flowers, and with a price like that, I could not resist. I am of the opinion that, considering the limited space in my growing area, an orchid must, if possible, offer the dual benefits of beauty and fragrance. Zygopetalums fit the bill. I also understood that Zygopetalum species and hybrids could be grown under "Cymbidium conditions," which was another plus, considering that I grow many of my orchids outside year round in Sacramento, where Cymbidiums thrive.

With some trepidation, I potted the plant in New Zealand sphagnum moss. I admit that in the past, I've never been a fan of sphagnum for potting orchids. I've almost always used straight fir bark on all my orchids, and while not all my plants flourished in fir bark, I remained unwilling to change my mindset to try something new. Part of the problem with sphagnum for me was that I am basically cheap, and not willing to pay a high price for the best. The other concern was that the sphagnum would stay too wet, and

the roots would rot. Finally one day, I caved in and bought the highest quality, and therefore most expensive, grade of sphagnum. This is what I used to pot up the *Zygopetalum*. I also used a clay pot. My reasoning was that if I had worries that sphagnum would stay too wet, I could make up for the slow drying with clay, which would wick the water out through evaporation. I also liked that clay is less likely to tip over in a high wind, an important consideration when growing outdoors.

For feeding, I've become a devotee of the Michigan fertilizer. I use the version for reverse osmosis deionized water (RO/DI), since I have such a system for my marine aquarium. This fertilizer supplies micronutrients other than the usual nitrogen, phosphorous, and potassium. Using RO/DI water can be a problem if micronutrients are not added, as pure water is nothing more than, well, pure water: H₂O. I take the usual "feed weekly weakly" one step further. I feed very weakly, and often do it several times per week in the growing season. I figure that in nature the orchids get more of a constant supply of very weak nutrients, so why not try to mimic that at home? I also use a low dose of slow release fertilizer on my orchids, such as Osmocote 14/14/14 or something similar, in case I miss a feeding.

I water pretty frequently in the summer, twice per week, and as the season progresses into fall, I naturally begin to water less, since I am outside a bit less. Eventually the plant goes into an unheated greenhouse for the winter, with watering every two weeks or so. This gives the plant a cool, drier (but not dry) rest. During winter, I try to avoid any water down the crown of any young growths, so as to prevent rot. I have lost a *Zygopetalum* in the past when I allowed water to get into the crown, which led to rot and a quick death of the plant. I won't make that mistake again.

After about a year of this treatment, the plant sent out a very nice flower spike, which I promptly broke by accident. I repotted the plant, and was delighted to discover an amazing, healthy root system. I decided that this plant did, indeed, like the New Zealand sphagnum, and used it again. This year the plant flowered beautifully with a five-flowered spike of large, aromatic flowers. A second spike is emerging as well, from the same pseudobulb.



Figure 2: Second spike emerging as first spike begins to fade.

Zygopetalum turns out to be an easy to grow, rewarding genus. Plants are readily obtained from orchid nurseries, and are not expensive. Give one a try!

FOOTNOTES:

1. Internet Orchid Species Photo Encyclopedia
<http://www.orchidspecies.com/index.htm>
2. Introduction to the Orchids of Tropical America
<http://orchidsoftropicalamerica.com/index.html>
3. Orchid Species Culture: Charles and Margaret Baker
<http://www.orchidculture.com/>
4. **First Rays LLC Website**
<http://www.firstrays.com/zygo.htm>

SOURCES:

1. Casa de las Orquideas
<http://www.orquideas.com/>
2. Porter's Orchids
<http://portersorchids.com/index.htm>