

# Orchid of the Month for July, 2014

## *Prosthechea cochleata*

by Bruce Adams

Wherein the “Orchid of the Month” gets hijacked by a travelogue of our trip to the tropical paradise of Belize.



**Figure 1: *Prosthechea cochleata***

I’m not a world traveler, but when my wife and I had the opportunity to stay in Belize at the home of an old colleague, we couldn’t say no. After all, imagine all of the orchids I would see growing in the wild, in their natural state as nature intended. With over three hundred species of orchids native to Belize (1), I felt certain I could see dozens of them growing naturally, photographing them to my heart’s content.

As often turns out, the fantasy was better than the reality. I hiked steep trails up to magnificent waterfalls, scoured the coastal scrubland, made my way through Mayan ruins, but I found only one wild orchid, *Brassavola nodosa*, growing just a few hundred feet from the Caribbean Sea. *B. nodosa* is known to be salt tolerant(3), and this close to the saltwater it had to be! This plant was growing on a nearly dead stump of a tree in an open sandy lot which was likely slated for development. While I did enjoy spotting wild *Philodendrons*, *Passiflora*, *Begonias*, *Anthurium*, *Heliconia*, and lots and lots of ferns, I only saw the one *Brassavola* in the wild. There was some consolation in seeing the many, many cultivated specimens of *Oncidium sphacelatum*, in peak flower in late February.



**Figure 2: *Brassavola nodosa*, the Lady of the Night Orchid.  
Indeed, its flowers had a powerful aroma at dusk.**

As the saying goes, “Gold is where you find it.” So, as our trip was nearing its end, our friend, Paul, took us to Ian (not of Jethro Tull fame) Anderson’s Cave Branch Jungle Lodge. The resort is known as a jumping off point for many day-trips, including caving, zip-lining, snorkeling, and exploring Mayan ruins. But I was there for the orchids. Paul told us that they had a very nice botanical garden right on the lodge site. Ella Anderson, one of the founders of the resort, had an interest in orchids, and had set up a lathe house where she grew many native orchids of Belize. After ten days of nearly fruitless orchid hunting, it was satisfying to find many of the native orchids of Belize growing and blooming in Ella’s lathe house. We saw *Cynoches ventricosum*, *Epidendrum imatophyllum* and *stamfordianum*, *Notylia barkeri*, *Oncidium altissimum* and *ascendens*, and of course, *Prosthechea cochleata*.(4)

There was an absolutely beautiful specimen of *Cynoches ventricosum* blooming. Its flowers were easily five inches across. What they lacked in color they more than made up for in form and fragrance.



**Figure 3: *Cynoches ventricosum*.**



**Figure 4: The "swan-like" column of *C. ventricosum*.**

I was pleasantly surprised to see a showy *Notylia barkeri*. I normally don't think much of small, white flowers, but the spike was quite long, with over one hundred spirally arranged, intricate little flowers, each about one quarter inch wide. I knew that I had to get me one of those!



**Figure 5: *Notylia barkeri***

*Epidendrum stamfordianum* was in full bloom, with its large spikes of spotted yellowish flowers, and white, forked lip.



**Figure 6: *Epidendrum stamfordianum*. As showy as any hybrid!**

*Oncidium ascendens* could be found in many locations in the gardens. We caught one in the act of being visited by small bees.



**Figure 7: *Oncidium ascendens***



**Figure 8: Coming in for a landing on *Oncidium ascendens*. See inside the circle!**



**Figure 9: It can get pretty crowded on those little orchid lips!**

And now, the star of our show for today, *Prosthechea cochleata*. *P. cochleata* flowers are not beautiful in the conventional sense. They are not particularly fragrant. They are not richly colored, nor do they possess the flat round shape so beloved by judges. The lip is a translucent greenish yellow backed by a dark, almost black purple. The yellow extends as stripes to the base of the lip. The thin, wavy petals and sepals are a light chartreuse. *Prosthechea* flowers are non-resupinate. You may ask, “What does non-resupinate mean?” Most orchid flowers have their lip on the bottom. Orchid flowers develop with the lip uppermost, but then twist one hundred and eighty degrees so that the lip becomes the lowermost petal in the flower. This creates the “landing strip” for so many of orchids’ insect pollinators. So a flower that does the one hundred and eighty degree twist (thank you Chubby Checker) is called resupinate. But *P. cochleata* flowers retain the lip uppermost, giving them the peculiar cockleshell appearance, hence the species name. I think that the upside down flowers actually resemble a squid. Whatever undersea life you think it looks like, *P. cochleata* has a strange beauty all its own.

*Prosthechea cochleata* is the national flower of Belize, where it is referred to as the Black Orchid. It has a wide range, being found in Florida, the Caribbean Islands, Central America, southwards to Columbia and Venezuela.(2) Perhaps this range explains its ease of culture, considering the varied climates in which it grows. Indeed, *P. cochleata* seems to tolerate anything I can throw at it. It has bloomed for me with too little sun, burning sun, too little water, too little humidity, too much heat. You name it, *P. cochleata* can take it. I wouldn’t suggest dowsing it with kerosene and tossing a lit match at it, but who knows?

*Prosthechea cochleata* has been crossed with *P. trulla* to make *P. Green Hornet*. It's darn near impossible to tell the difference between the hybrid and the species. A case in point: My plant came without a label. I brought it to the society's show and tell table twice in two years. The first year, it was identified without a doubt as *P. Green Hornet*. The second year, the very same person confidently identified it as *P. cochleata*. See? Even the experts can be stumped! I prefer growing species to hybrids, therefore I have decided that my plant is *P. cochleata*, and not *P. Green Hornet*. So there!



**Figure 9: *Prosthechea cochleata***

I purchased *P. cochleata* at a society auction for just a few dollars, as part of a “beginners” package. It seemed to be growing in sphagnum moss, as that was all that I could see in the pot. But the next year when I repotted it, I discovered that the plant was growing in bark, with only a top dressing of moss. Who was I to argue with success? So I carefully cleaned off the roots, potted in a clay pot with medium to large size *Orchiata* bark, and topped the plant with good quality New Zealand sphagnum. The plant now has four growths, four spikes, and is already starting new growth at the base, even as it flowers. I give it my typically lazy one-size-fits-all culture, which is watering twice a week in the hot months, once a week or less in the cool months, and feeding frequently at a low concentration. Since I tend to forget to feed, I always add a bit of slow release fertilizer to my plants, such as Osmocote.

These days we see *Phalaenopsis* orchids everywhere; at the grocer, the home improvement stores, even the drug store. But if you want a plant that it just as easy to grow, has long

lasting flowers, and is not only different, but outright strangely beautiful, then you should get your hands on a *Prosthechea cochleata*.



**Figure 10: Please "beak" kind to all the native plants and animals of Belize!  
The Keel Billed Toucan (*Ramphastos solfurantus*) is the national bird of Belize.**

#### Footnotes

- 1) Belize Botanic Gardens orchid list: <http://belizebotanic.org/orchid-list/>
- 2) The Internet Orchid Species Photo Encyclopedia, *Prosthechea cochleata* entry (listed as *Anacheilium*): <http://www.orchidspecies.com/anacochleata.htm>
- 3) The Internet Orchid Species Photo Encyclopedia, *Brassavola nodosa* entry: <http://www.orchidspecies.com/brassavolanodosa.htm>
- 4) Ian Anderson's Cave Branch Lodge <http://www.cavesbranch.com/>

#### Sources

- 1) Orchids by Hausermann: [www.orchidsbyhausermann.com](http://www.orchidsbyhausermann.com)
- 2) Marlow Orchids: <http://marlowsorchids.com/>
- 3) Santa Barbara Orchid Estate: [www.sborchid.com/](http://www.sborchid.com/)

\* Many nurseries sell this plant as *Encyclia cochleata*. Do a search for both *Prosthechea* and *Encyclia* to find sources.

*About the author: Bruce Adams has been growing orchids for 38 years, since he got his first Orchid, *Oncidium retermeyerianum* (now *Lophiaris lindenii*!) from Orchids by Hausermann. After ten years, he killed that plant and has been looking for another one ever since. (Update: He has located a source, and plants are shipping as this is written!) His plants split their time between summer in the great outdoors, and a cool greenhouse in the winter, as well as on the windowsill. He is also the author of the novel, The Palace of*

Dreams. *His ideal life would consist of writing and growing orchids, while living in Hawaii with his lovely wife, Linda.*

*Note: All photographs are always of Bruce Adams' own plants, unless otherwise indicated, and remain his personal property. Photographs and text may not be copied, posted on any website, nor otherwise used in any way without his express permission. In this installment of the Orchid of the Month, only the photograph of Prosthechea cochleata was grown by Bruce Adams, although all the photography is his. All other photographs were taken in Belize at Ian Anderson's Cave Branch Lodge and various other locations.*