

# Cribbia

by Brenda Oviatt and Bill Nerison

A Charming Genus — Grow All Four Species

WE TYPICALLY WRITE our Collector's Item about a single species but this time we chose one that belongs to a genus that contains just three other species, so we'll show you all of them! All four species of *Cribbia* occur in tropical Africa and are smallish epiphytes. Everyone growing orchids has room for these in their collection; the biggest challenge, should you decide to grow one, is finding one. This is a charming genus that deserves a place in every good species collection. There is, however, an unfortunate shortage of these lovely orchids in the commercial trade.

We grow many orchids that “announce themselves” with their fragrance when one enters the greenhouse. What has always intrigued us about *Cribbia confusa* and



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*Cribbia pendula* (the two species we currently grow) is the volume of sweet fragrance they release for being small plants bearing such fragile-looking, translucent flowers.

The genus *Cribbia* was established in 1986 by Karlheinz Senghas to better place the species *brachyceras*, which was, at the time, the single species in a section of the genus *Rangaeris*. He named the new genus in honor of Phillip Cribb of the Royal Botanic Gardens, Kew. *Cribbia* was considered monotypic (a genus comprised of just one species) for nearly 10 years. The examination of collections from Cameroon led to the addition of a second species, *Cri. confusa*, in 1996 by Cribb. In 1997, two species from São Tomé, *Cri. pendula* and *Cribbia thomensis*, were added by Cribb and Isobyl la Croix. As of this writing there are four species in *Cribbia* but continued taxonomic work is likely to change this. The “new” genus is very close to *Diaphanathe* and *Angraecopsis*.

We acquired our plants from la Croix in 2003, and of the genus she relates, “All the species look pretty similar vegetatively, and I can remember the surprise I got when first *Cri. thomensis* and then *Cri. pendula* flowered in my greenhouse. I realized at once



BRENDA OVIATT

## Key to the Species of Cribbia

1. Lip obovate, spur ascending; inflorescence pendent ..... *pendula*  
 Lip lanceolate, ovate or elliptic; spur pendent; inflorescence erect or suberect ..... 2
2. Lateral sepals more than 10 mm long; spur usually shorter than the lip ..... *confusa*  
 Lateral sepals less than 7 mm long; spur more or less equal or longer than the lip. .... 3
3. Lip elliptic or lanceolate, spur more or less equal to lip in length..... *brachyceras*
4. Lip ovate-subcordate; spur longer than the lip ..... *thomensis*

that *Cri. thomensis* was another species of *Cribbia*, but I wasn't sure at first even what genus *Cri. pendula* belonged to, I wondered if it might be a *Diaphananthe*. “

At this writing, there have been no hybrids made using any of the *Cribbia* species. Only three plants have received AOS awards; *Cri. pendula* ‘Peace’ received a Certificate of Botanical Recognition (CBR) in 2006 and *Cri. pendula* ‘Fairy Dust’ was awarded a Certificate of Horticultural Merit (CHM) in 2009. *Cribbia confusa* ‘Grace’ was awarded a CBR in 2012.

#### THE FOUR SPECIES

***Cribbia brachyceras*** (Summerh.) Senghas 1985

The “oldest” plant in the genus has been known previously as an *Aerangis*, *Angraecopsis*, *Azadehdelia* and *Rangaeris*. It was first described by Victor Samuel Summerhayes in 1934 as *Aerangis brachyceras*. It is epiphytic, found on mossy tree trunks and also sometimes growing lithophytically on mossy rocks at rather high altitudes (5,000–7,300 feet [1,500–2,200 m]). Due to the habitat where it grows, this species requires cooler temperatures, especially at night, and prefers high humidity during its growing season. Of the species in the genus, it is the most widespread, being found in Guinea, Kenya, Liberia, Nigeria, Rwanda, Sierra Leone, Uganda, Zaire and Zambia. In their book *Angraecoid Orchids: Species from the African Region* (2006), Joyce Stewart et al. referred to *Cri. brachyceras* as being the only *Cribbia* “well known in cultivation,” yet we have never seen one available.

***Cribbia confusa*** P.J.Cribb 1996

Previously called *Angraecopsis confusa*, its name comes from its confusion with *Cri. brachyceras*; however, *Cri. confusa* has larger flowers, a shorter spur (nectary) and a longer lip. Endemic to Cameroon, Côte d’Ivoire (Ivory Coast), Liberia and São Tomé, it grows at high altitudes (4,300–7,000 feet [1,300–2,100 m]) in secondary and montane forest. La Croix said to us that, in her experience, *Cri. confusa* seemed to be the most vigorous species in the genus. Our “large” multigrowth plants are amazing, but must be watched carefully as they seem to suddenly reject that closeness and die. We’ve tried changing the potting medium to keep a larger specimen, without any luck. Instead, we now divide once they reach a dozen growths — we have fewer casualties that way.

***Cribbia pendula*** la Croix & P.J.Cribb



ERIC LA CROIX

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1997

Known only to São Tomé, this species is also from higher altitudes (6,500 feet [2,000 m]) and grows in the “mist forest.” It has the largest flowers in the genus and although they appear ethereal and are translucent, they are surprisingly long lasting. As one may guess by its name, *Cri. pendula* has a pendulous inflorescence. With this in mind, we mounted seedlings we received from la Croix on tree fern plaques in anticipation of “showing off” their blossoms. The plants grew adequately, but never bloomed for us. It wasn’t until we transferred them to a bark mix in plastic pots that they began to thrive and bloom regularly.

***Cribbia thomensis*** la Croix & P.J.Cribb 1997

Like *Cri. pendula*, this species is native only to São Tomé, and is from even higher elevations (5,600–6,700 feet [2,000–2,100 m]) It is found as an epiphyte in montane forests. Of the four species in the genus, it is most easily recognized by its small, pure white flowers.

#### CULTURE

Three of the four species of *Cribbia* are found on São Tomé, so it’s of interest to know a bit more about this island. It is a shield volcano and lies on the equator off the west coast of Africa, as one in a line of volcanoes along the Cameroon line extending from Cameroon southwest into the Atlantic Ocean. São Tomé elevation rises to 6,640 feet (2,024 m) and has forests on the higher elevations where these orchids occur. It has a lengthy wet season and a short dry season. Although temperatures remain rather consistently warm (80s F [26.7–31 C]) near sea level, there is good diurnal variation at the higher elevations. These orchids will appreciate the day–night variation in cultivation.



VINCENT DROSSART

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- [1] *Cribbia pendula* produces extremely fragrant translucent flowers.
- [2] *Cribbia brachyceras* has erect inflorescences with semitranslucent flowers.
- [3] When growing in nature, *Cribbia brachyceras* is surrounded by mosses and other plants which help maintain moisture.

Annual rainfall varies dramatically on São Tomé — from 39 inches (1 m) in the northern lowlands to 197 inches (5 m) on the southwestern slopes.

All four species of *Cribbia* have tiny roots, thin leaves and not much “reserve” to speak of (unlike an orchid with pseudobulbs). We’ve tried growing them on plaques and they survived, but the plants potted in a bark mix in plastic pots thrived and bloomed, so that is now how we grow them exclusively. Beyond what we’ve already mentioned and the fact that our experience is limited to *Cri. confusa* and *Cri. pendula*, we recommend growing these species similarly. A good quality bark-based medium works well.



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KENNETH STOLZ

We are transitioning ours to Orchia, with a larger grade (power; ½-inch [1.25-cm]) at the bottom of the pot, and a smaller grade (classic; ⅜-inch [0.95-cm]) at the top; never allowing the plants to become overly dry. We keep them in relative shade with good air movement and they tolerate temperatures into the mid-90s F (around 35 C). Pot culture seems to protect them from our dry summer air. As stated under *Cri. confusa*, we've found that they seem to reach an "optimum" maximum size (for us it's about a dozen growths in a 3–3½-inch [7.5–8.9-cm] pot) and then they decline. We've found it best to divide them (preferably *before* they decline) in late spring or early summer here in the northern hemisphere.

As we write this, it's July 30 at 3 pm on a beautiful sunny day in Montana. Outside the light level is 9,970 footcandles (fc). Inside the greenhouse where we have the cribbias, the light reading is 320 fc at the brightest spot. The *pendula* are just completing their blooming and have been beautiful for over three weeks. There are 1–2 rogue spikes on the *Cri. confusa*. Their best blooming, for us, is typically in April.

We grow many of our orchids mounted and strongly feel that reverse osmosis (RO) or rain water is essential for them. Although we no longer grow our cribbias mounted, we prefer and use RO water for *all* of our orchids. It's important in

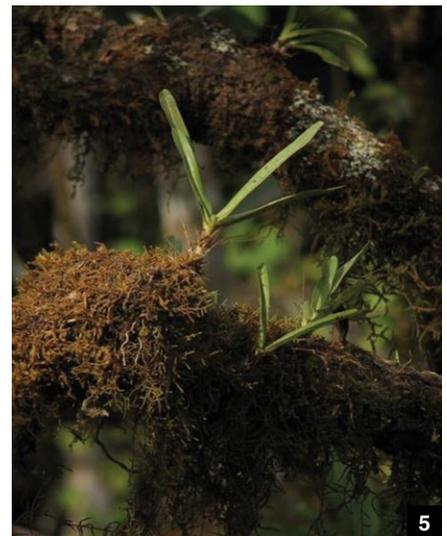
our case because our well water contains approximately 250 ppm of total dissolved salts and the pH can be as high as 8.0 during some times of the year. A small collection of orchids can also be cared for with distilled water that has nutrients added. We strongly recommend testing the water you use on your orchids and remove some of the guesswork. We use ½-strength fertilizer and periodically flush with clean water. We rotate fertilizer formulas and always provide micronutrients.

#### HOPE FOR SURVIVAL

As we stated at the beginning of this article, with regard to all four species of *Cribbia*, the biggest challenge, should you decide to grow one, is finding one. This lack of availability threatens the survival of unusual species not available in the commercial market. If habitat loss continues at the present rate, they *must* be in private collections if they are to be saved from extinction. The commercial trade has not deemed them worthy of growing — yet, talk to anyone who has grown these and a smile comes to their face. They are a miniature jewel, a treasure in a good collection. If you find one for sale, buy it, nurture it and share it with others!

#### Acknowledgments

We'd like to thank Isobyl la Croix for her sharing first-hand knowledge about this genus with us, for making them available for purchase when operating Uzumara Orchids and for the use of Eric



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VINCENT DROISSART

[4] *Cribbia confusa* flowers are so translucent that nectar is visible in the spurs of the flowers shown here. This species produces fragrant flowers in abundance as shown by the plant, *Cribbia confusa* 'Grace' CBR/AOS, in a 3½-inch (8.9-cm) pot (inset).

[5] Notice the volume of moss surrounding the plants as *Cribbia confusa* grows on a tree branch in nature.



la Croix's photos. Thanks also to Julian Shaw (Registrar, The Royal Horticultural Society) for providing us registration information and to Marion Allen (Rocky Mountain Judging Center) for researching AOS awards for us.

The in-situ photos were taken by Dr. Vincent Droissart: Orchidaceae of Central Africa; <http://www.orchid-africa.net/>; Droissart V., M. Simo, B. Sonké, D. Geerincq and Stévant, 2015.

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— *Brenda Oviatt is an artist and Bill Nerison is an architect. They live on the Clark Fork River in Missoula, Montana, (a corner of paradise) with their daughter Marisa, son Tristan and an assortment of animals. They've been growing orchids together for over 30 years and, in that time, have grown in many settings. For the last ten years, their orchid growing has focused on the ex situ propagation of endangered angraecoids and the education of hobbyists and growers (website botanicaltd.com).*



- [6] The flowers of *Cribbia thomensis* are pure white.
- [7] *Cribbia pendula* has the largest flowers in the genus.
- [8] *Cribbia thomensis* grows amid moss on tree branches on São Tomé.