COLLECTOR’S ITEM

Aerangis distincta

By Brenda Oviatt and Bill Nerison
Images unless otherwise noted by Brenda Oviatt
WE’VE BEEN GROWING AERANGIS for many years now, and have to say that our favorite thing about them is that there’s hardly a day of the year that we don’t have one in spike or bloom in our greenhouse. They’re nearly all fragrant (to greater and lesser degrees), and most are relatively easy to grow once you familiarize yourself with their needs. When we decided to write about one, it was difficult to pick a favorite. We settled on Aerangis distincta in part because of its wider availability, its greater tolerance of changing conditions than other Aerangis (making it easier to grow well) and because it has one of the largest flowers of any Aerangis. Because there are frequently other Aerangis (e.g., Aerangis splendida) sold that are in fact Aerrgs. distincta, we explain the differences and what to look for.

The genus name Aerangis was first used by H.G. Reichenbach in 1865 and is Greek for air [aer] vessel [angos], referring to the hollow spur or nectary. Many species were previously known as angraecums, but there were enough differences to warrant a new genus. Even the novice will instantly recognize the similarities—the primarily white flowers with long spurs. As with angraecums, Aerangis are endemic to Africa and Madagascar (and locale). Aerangis distincta was described by the late Joyce Stewart and Isobyl la Croix (1987). Isobyl has told us that though it was not formally described until 1987, “there is a collection in the Kew herbarium dating from 1892. It has no flowers and was originally labeled as Aerangis alcicornis, but it is obviously Aerangis distincta.”

As of this writing there are 57 Aerangis species and two natural hybrids. Limited DNA work is being done and recently all Microterangis (Chamaeangis) species were transferred to Aerangis. Chamaeangis (the genus from which Microterangis was previously transferred) has been merged with Diaphananthe. We’re not changing all of our tags just yet.

There is considerable confusion in Aerangis species, in large part due to improper labeling. Two instances come to mind in reference to Aerangis distincta. It has been hybridized with Aerangis biloba, but this unregistered primary hybrid sometimes appears as Aerrgs. distincta and not as the hybrid. It is unknown whether they’ve been mislabeled or if growers unknowingly use just the first part of the hybrid cross name. Because of the increased flower count and flower size, there is a “wow” factor for this hybrid that is lacking in either species. There have been three AOS awards given to Aerangis distincta and the average flower count per inflorescence is three–four each. Five flowers on an inflorescence is excellent. We’ve had quite a number of people contact us with pictures of their Aerangs. splendida, and if memory serves correctly, not a single one has actually been Aerangis splendida. Most have been Aerangis distincta. Once you have a mature plant and bloom it, the differences between Aergs. splendida and Aergs. distincta are easy to see, both in the plant and in the flowers. Mature plants of Aerangs. splendida have leaves up to a foot (30 cm) long, and though they’ll occasionally branch and

[1] It’s easy to see why the flowers of Aerangis are likened to “birds in flight.” The spur or nectary on Aerangis distincta is 5–9 inches (13–23 cm) long. Grower: Botanica Ltd.

The Species and Natural Hybrids of Aerangis and Country of Origin

**Africa**
- alcicornis
- appendiculata
- arachnopus
- biloba
- bouarensis
- brachycarpa
- calantha
- carnea
  × chirioana = (biloba × kotschyana)
- collum-cygni
- confusa
- coriacea
- distincta
- gracillima
- gravenreuthii
- hologlottis
- jacksonii
- kirkii
- kotschyana
- luteoalba var. luteoalba
- luteoalba var. rhodosticta
- maireae
- montana
- mystacidi
- oligantha
- somalensis
- splendida
- stelligera
- thomsonii
- ugandensis
- verdickii var. rutilus
- verdickii var. verdickii

**Madagascar and Comoros**
- cryptodon
decaryana
diviniflora
ellisii
fastuosa
fuscata
hyalooides
macrocentra
monantha
pallidiflora
pulchella
seegeri

**Madagascar and Réunion**
- × primulina = (citra × hyalooides)
punctata

**São Tomé**
- flexuosa

**Comoros**
- harriotiana
- hildebrandtii
- humblotii

**Annobón**
- megaphylla

produce a new plant, it is not as common. Mature plants of *Aergs. distincta* are fan shaped, will branch and form clumps and are a beautiful sight even out of bloom. Their leaves though rarely exceed 6 inches (15 cm). Both species have large, similarly sized flowers, the sepals and petals of *Aergs. splendida* being more uniform in size, pure white with loose coiling spurs. *Aerangis distincta* has long lateral sepals; longer than the dorsal sepal and at least 3/8 inch (1 cm) longer than the petals. The sepals, petals and spur are almost always tinged with salmon-pink at the tips, and the spur is nearly straight. We have some plants that are more strongly colored salmon-pink than others; there is some variation, but all are beautiful!

We have specimens of both *Aergs. distincta* and *Aergs. splendida* from Isobyl la Croix. Because Isobyl and the late Joyce Stewart originally described both species, we’ve called on Isobyl for expert information. We asked her to help us provide a key of things to look for to tell the difference between them, especially when looking at an immature, out-of-bloom plant. She replied, “There is a big difference in the leaves of the two species. In *Aergs. distincta*, the leaves are almost triangular in shape, widest at the apex and with deep lobes diverging from each other. They are olive green and slightly ridged and usually dotted with black. *Aerangis splendida* has glossy, dark green leaves, not so deeply divided and with the lobes rounded. They are widest a bit below the apex and can grow up to a foot (30 cm)
long or perhaps more, in fact they are not too unlike Phalaenopsis leaves.”

In our experience reproducing these two species, we’ve had success with a selfing of Aerangis splendida and an outcross of Aerangis distincta. We had good germination of the seed of both, but whereas the Aerangis distincta thrived, the Aerangis splendida stalled out as protocorms. The Aerangis distincta have been replated and some are now growing on cork plaques in the greenhouse. We made many adjustments to the growing media in the lab and finally found something the Aerangis splendida like, but they are months (if not years) behind the Aerangis distincta, though both species germinated about the same time. We mentioned this to Isobyl and she related similar experience with her seedlings of Aerangis splendida, and we concur that this, in part, is why Aerangis distincta is more widespread in cultivation.

Aerangis distincta is known only from Malawi. Isobyl notes that plants from the northern region of Malawi flower in the wild in March and April, and those from the central and southern regions flower in November and December. In cultivation, these differences persist. In the northern hemisphere the northern plants still flower in the winter (November and December) and the central and southern plants flower in the spring and early summer (May and June). Our plants, here in Montana, bloom consistently in July and August.

Malawi, the home of Aerangis distincta, lies between 9 and 18 degrees south latitude and ranges from 200 to 9,900 feet (60–3,000 m) elevation with an average of 30 inches (90 cm) annual rainfall. A great portion of Malawi is the Great Rift Valley, and to the east of the valley is Lake Malawi. The climate is hot in the low-lying areas in the south and temperate in the northern highlands. The altitude moderates what would be an otherwise equatorial climate. Between November and April the temperature is warm with equatorial rains and thunderstorms, with the storms reaching their peak severity in late March. After March, the rainfall rapidly diminishes and from May to September wet mists float from the highlands into the plateaus, with almost no rainfall during these months. The rains are slightly later in the north than in the south. In the south, the heaviest rain is usually in January and February, while in the north, March is usually the wettest month. There is variation from year to year of course, but this does have an impact on a specific plant species like Aerangis distincta growing in different regions.

HOPE FOR SURVIVAL. In our work with rare and endangered angrecoids, it’s always a relief to find one that has been grown and reproduced successfully ex situ! Aerangis distincta is not exactly widely available, but it can be found for sale (and this cannot be said of all Aerangis). Continued efforts in quality propagation, correct labeling of species and education are paramount for species survival. What can YOU do? Pick a threatened species orchid (and there are plenty of them) and work to keep it alive and protected, both

An Aerangis Compendium

Isobyl la Croix, author extraordinaire, is writing a new book, dedicated to the memory of Joyce Stewart, covering Aerangis. She plans to include information on how the species grow in the wild, and have several photographs illustrating each species; showing the whole plant as well as just close-ups of the flowers. The book is currently in the preliminary stages and will be published by Timber Press in October 2014. As this is a “specialty book”, Timber Press will be setting up a dedicated website where people can sign up to pre-order it. We thoroughly enjoy Isobyl’s style of writing and highly recommend her books and articles. If you like Aerangis and want to know more about them, this book will most certainly be a “must-have!” Watch for advertising in Orchids and the Timber Press website (www.timberpress.com).

[8] *Aerangis distincta* leaves are slightly ridged and usually dotted with black. Grower: Botanica Ltd.
How to Grow *Aerangis distincta*

**CULTURE** We tell growers, especially novices, that it’s usually easier to grow orchids in pots rather than mounted; primarily because mounted ones dry out more quickly (thereby requiring more consistent care). There are, however, a few plants that seem best suited to mounts. We feel that *Aerangis distincta* is one of them. We grow them both ways and our potted ones never look as healthy or vibrant as the mounted ones. When we looked at our potted ones recently, we chuckled. They have the look of plants trying to escape their pots, and this seems to be the case no matter how free-draining the medium is and how comfortable it seems they should be. Also, like *Phalaenopsis*, *Aerangis* resent water sitting in their crown and this can happen more easily when they are potted. Good air movement and watering early in the day can prevent this problem.

**LIGHT** There is an ideal range of light in which *Aerangis distincta* will grow and bloom well. In too low light, they will grow fine, and if you’re content with a beautiful plant that doesn’t bloom, this will suffice (they are nice to look at even when out of bloom and that can’t be said for all orchids). Intermediate light levels are best; our best plants are in an area that ranges from 400 to 900 footcandles, depending upon time of year. They grow well, bloom well and look good. They are also tolerant of considerably more light but will look less vibrant, often a bit desiccated, and the rich green leaves tend to yellow. Despite this appearance, often they will continue to bloom satisfactorily.

**TEMPERATURE** In our greenhouse, plants get a range of 55 F (13 C) as a low in the winter and occasionally in excess of 96 F (36 C) in the summer. We’ve not found *Aerangis distincta* to be as picky about their temperature range as some of the *Aerangis*, which makes them easier to cultivate. As we write this, our outdoor temperatures have been in the mid–high 90s (35–37 C), with greenhouse temperatures in close proximity. Our oldest *Aerangis distincta* is in full bloom and has not suffered the same bud loss that some *Aerangis* will with a spike at these temperatures. With increased temperatures, our humidity also drops nearly to single digits with little effect on these plants or flowers. We’ve also had the occasional drop to as low as 40 F (4.5 C) without damage, though we’re sure they don’t want this on a regular basis.

**WATER/FERTILIZER** For those using water high in total dissolved solids, reverse-osmosis water is preferable, especially for mounted plants. We use half strength or less fertilizer and a periodic flush with clean water. We rotate fertilizer formulas and always provide micronutrients. Unlike some *Aerangis* (i.e., *Aerangis verdickii*), a pronounced dormancy does not seem to be required for *Aerangis distincta*. We’re at 47 degrees north latitude and we experience a slowdown in growth during the winter months with all plants, but we watch the root tips of *Aerangis distincta*. We’re at 47 degrees north latitude and we experience a slowdown in growth during the winter months with all plants, but we watch the root tips of *Aerangis distincta*. We’re at 47 degrees north latitude and we experience a slowdown in growth during the winter months with all plants, but we watch the root tips of *Aerangis distincta*, and if there is a visible growing tip, we continue with our regular watering regimen. *Aerangis distincta* has a vigorous, midsized root system for an *Aerangis*, and they must be allowed to dry between watering. We have a spot where the mounted plants are very happy and we don’t move them seasonally as with some orchids. They are joined with their neighbors and seem to like it that way.