

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 *Aerangis 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* were 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 *Aerangis 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 *Aerangis 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 *Aerangis splendida* and *Aerangis distincta* are easy to see, both in the plant and in the flowers. Mature plants of *Aerangis 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.
- [2] A specimen *Aerangis distincta* demonstrating the modest size and beautiful fan-shaped arrangement of foliage. 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
mystacidii
oligantha
somalensis
splendida
stelligera
thomsonii
ugandensis
verdickii var. *rusituensis*
verdickii var. *verdickii*

Madagascar

citrata
concupipetala
coursiana

cryptodon
decaryana
divitiflora
ellisii
fastuosa
fuscata
hyaloides
macrocentra
monantha
pallidiflora
pulchella
seegeri

Madagascar and Comoros

articulata
boutonii
modesta
mooreana
rostellaris
spiculata
stylosa

Madagascar and Réunion

× *primulina* = (*citrata* × *hyaloides*)
punctata

São Tomé

flexuosa

Comoros

hariotiana
hildebrandtii
humblotii

Annobón

megaphylla

produce a new plant, it is not as common. Mature plants of *Aerangis 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 *Aerangis 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 *Aerangis distincta* and *Aerangis 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 *Aerangis 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)



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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 *Aergs. splendida* and an outcross of *Aergs. distincta*. We had good germination of the seed of both, but whereas the *Aergs. distincta* thrived, the *Aergs. splendida* stalled out as protocorms. The *Aergs. distincta* have been replanted 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 *Aergs. splendida* like, but they are months (if not years) behind the *Aergs. distincta*, though both species germinated about the same time. We mentioned this to Isobyl and she related similar experience with her seedlings of *Aergs. splendida*, and we concur that this, in part, is why *Aergs. 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 *Aergs. 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 angraecoids, 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

- [3] The flowers open flat and can be up to 3 1/2 inches (9 cm) across and are tinged with salmon-pink. Grower: Botanica Ltd.
- [4] After just a day or two, the petals begin to reflex (point backward). They have a light gardenia-like fragrance; strongest after dark. Grower: Botanica Ltd.
- [5] After several days, the petals will be completely reflexed — very interesting from above. Grower: Botanica Ltd
- [6] In Malawi, *Aerangis distincta* is found growing on tree trunks and small branches in riverine or evergreen forest, typically near a river, usually between 3,300 and 5,800 feet (1,000–1,750 m), but occasionally lower.

(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).



[7] Notice the strongly triangular, deeply lobed leaves of *Aerangis distincta*. Grower: Botanica Ltd.

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



in collections and in its native habitat; and encourage others to do the same. Share pollen, seed and information!

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Center) for researching AOS awards for us and to Julian Shaw (Registrar; The Royal Horticultural Society) for providing us registration information.

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 30 years and in that time have grown in many settings. For the last 10 years, their orchid growing has focused on the ex situ propagation of endangered angraecoids and the education of hobbyists and growers (website www.botanicatld.com).

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*, 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.

Cattleyas



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