

Discovering *Blakea gracilis*

by BARBARA O. EPSTEIN

Few things are more exciting to an amateur horticulturist than the discovery of a previously unfamiliar plant or species with outstanding aesthetic characteristics; particularly so when the plant turns out to be amenable to indoor cultivation. Such was the excitement I experienced when I first came upon *Blakea gracilis* early in 1978 during a visit to a commercial greenhouse in Connecticut.¹

In the plethora of flowering specimens, one caught my eye to which I was unable to attach any sort of name. Striking in both form and flower, it was nearly four feet tall, with glossy, green foliage and single, white flowers of an almost palpable waxy texture. Evidence of what must have been a profusion of previous blossoms remained in the form of rusty red bracts. I purchased a small specimen that day and immediately began cultivating the mysterious plant in my conservatory. Three years have passed and *Blakea gracilis* has proved to be a remarkable plant.

A native of Central and South America and the Caribbean Islands, the genus *Blakea* was first described by Sir Patrick Browne in his book *The Civil and Natural History of Jamaica* (London, 1756). Browne named the plant for his patron, Martin Blake, a naturalist from Antigua who apparently supplied the funds for many of Browne's botanical expeditions. Bailey's *Standard Cyclopedia of Horticulture*, however, ascribes the name to a certain Stephen Blake, author of *Compleat Gardeners' Practices* (London, 1664). Considering that Stephen Blake is not even remotely linked with subtropical flora it seems likely

¹ Logee's Greenhouse, Danielson, Conn.

that it was Martin and not Stephen Blake whose name the genus bears.

Blakea is a member of the primarily tropical plant family Melastomataceae. The only genus of this family in our native flora is *Rhexia*, the deer grasses, several herbaceous species of which grow in New England. Although many Melastomataceae are showy and ornamental, only a few species of *Dissotis*, *Medinilla* and *Tibouchina* are grown under glass in New England. In his *Monograph of the Melastomataceae* published in 1891, Cogniaux describes 31 species of *Blakea*. More recently, Dr. John Wurdack, curator of the U.S. National Herbarium of the Smithsonian Institution, and a recognized authority on the Melastomataceae, reports at least 100 described species. Many of the other species are ornamental and worthy of cultivation, but only *B. gracilis* and *B. trinervia*, with larger, three-veined leaves, and larger, rose-colored flowers, appear to be available. Several of the Central American species are spectacular with 4–5 inch broad, pink flowers and very bold foliage, but these grow too large for home cultivation.

A literature search reveals that little has been written about *Blakea gracilis* since early in this century. In 1905 a specimen which flowered at Kew was described by S. A. Skan in the *Botanical Magazine* of 1906, accompanied by a line drawing. (Skan's description was later reprinted that same year in *Gardeners' Chronicle* with his name erroneously printed as "Shaw", an error perpetuated elsewhere.) Skan writes that *B. gracilis* was collected by Max Endres for the well-known nursery of James Veitch & Sons at the turn of the century. At that time it had been found in several locations in Costa Rica, growing in forests at elevations of up to 5,570 feet. Kew purchased its plant from the French nursery of Messrs. Lemoine & Sons in 1904. In February of 1905 it flowered in a greenhouse at Kew and was the object of great excitement. Skan mentions its rapid and spreading habit of growth, noting that at only a foot high it was already nearly two and a half feet across.

Dr. Richard Weaver of the Arnold arboretum staff recently collected and photographed *B. gracilis* in its native habitat in Costa Rica. It was found in the cool montane forests between 4000 and 5500 feet where rains and mists are frequent. Like other species of *Blakea*, *B. gracilis* is often epiphytic in the wild. It appeared to reach its best development growing on isolated trees on the slopes of the volcanoes around San José. Weaver reports one magnificent specimen which formed a skirt at least 30 feet wide around the lower canopy of a tree. Although nearly past bloom it was yet attractive because of its glossy leaves and reddish fruits, with their subtending bracts.

In indoor cultivation, a height of 2 to 3 feet can be expected, making it a fairly compact small shrub. Much branched, slender and nearly glabrous, *Blakea* presents a very appealing habit of fullness. The leaves are elliptic in outline, shiny while young, and somewhat leathery. They vary from 2½" to 4" in length, and up to 1¾" in width. Prominent longitudinal veins characteristic of the Melastomataceae, are palmate and almost parallel (5 in *B. gracilis*).



A large shrub of Blakea gracilis growing epiphytically at Las Nubes, in the mountains near San José, Costa Rica, at an elevation of 4000 feet. Photograph by R. E. Weaver, Jr.



Photograph showing the ornamental features of *Blakea gracilis*: the conspicuous buds, a flower at its peak and the glossy leaves with obvious longitudinal nerves typical of the family Melastomataceae. Photograph by P. Del Tredici.

Plump, white buds, waxy in texture, occur in great profusion and are quite attractive. Mention is made in the *Flora of Costa Rica* (Standley, 1938) that both the flower buds and the ripe fruits of *B. gracilis* are edible. They are reported to be juicy with an agreeable, though tart flavor, although I have no first-hand experience to confirm this.

The open flowers, about a half-dollar in size, are borne singly in the leaf axils and have six petals. Most descriptions mention a faint pink blotch at the base of each petal, which I have found to be almost imperceptible. Weaver reports flowers with a prominent pink stripe along the edge of each petal, in addition to the basal blotch, on plants observed in Costa Rica. Despite a description in the *Gardeners' Chronicle* (September, 1905) that "the flower is beautifully scented, and in general appearance may be said to be like a glorified apple blossom," I have yet to detect even a hint of fragrance in three years of indoor cultivation.

Twelve stamens with short filaments and large, yellow, oblong anthers joined at the margins form a semi-circle around the slender style. The anthers dehisce by minute pores at the apex. Bracts are three-nerved and are attractive in themselves after the flowers are spent. Weaver describes the fruit as reddish, approximately $\frac{7}{8}$ " in diameter (the size of a dime), with a slight central depression.

Propagation is not difficult. It is recommended that stem cuttings with hardened growth be used for propagation in the summer. Cuttings collected recently by Dr. Weaver in Costa Rica were successfully

propagated in the arboretum's greenhouses using Hormo-root B hormone powder. Stuck in a medium of sand and perlite and placed under a polyethylene tent, they rooted in just a few months with an excellent root system. However, even cuttings made from new growth and stuck in perlite without a hormone application under lights produced a good set of roots. The medium is best kept on the dry side to prevent the possibility of stem rot. Seeds collected in Costa Rica before the fruits were quite ripe germinated well in about 3 weeks without any pre-treatment. The resultant seedlings are healthy but slow-growing and they will probably take at least two years to bloom.

Culturally, I have found *Blakea* to require little care. Bailey's *Standard Cyclopedia of Horticulture* recommends an "intermediate" growing temperature (a night-time temperature of about 55°F). A standard, well-drained soil with a bit of additional peat is adequate. Although it likes a fair amount of water in spring and summer when it is actively growing, it is generally tolerant of drought.

Because of its habit of branching freely, it can become quite dense if not pinched regularly. I usually make pruning an occasion to distribute cuttings to friends who wish to begin plants of their own.

Grown as a conservatory plant, my own *Blakea* receives good light, including at least three hours of direct sun daily. In summer, *Blakea* can be kept outdoors in a lath house or in dappled sun. Although it will continue to thrive in less light, heavy bloom cannot be expected. For this reason, I am more inclined to suggest *Blakea* as a plant for a conservatory-like environment rather than the living room, a circumstance not as uncommon as it once was.

If there is a mystery that remains concerning *B. gracilis* it is why such an appealing and amenable plant is so little known and at least until now, so rarely cultivated.

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References

- Anon. 1905. Kew notes. In, *The Gardener's Chronicle*, No. 9F8. p.229.
- Bailey, L. H. 1942. *Standard cyclopedia of horticulture*. 2nd Ed. Vol. 1. New York: MacMillan Co.
- Blake, Stephen. 1664. *Compleat gardener's practices*. London: Thos. Pierrpont.
- Browne, Sir Patrick. 1756. *The civil and natural history of Jamaica*. London: Osborne & Shipton
- Standley, P. C. 1938. *The flora of Costa Rica*. Field Museum of Natural History, vol. 18, part 3. Chicago: Field Museum Press.
- Skan, S. A. 1906. *Blakea gracilis*. In, *Bot. Mag.* 4th Ser. Tab. 8099.