Cattleya guttata Lindley 1832

SUBGENUS Falcata SECTION Guttatae [Cogn.] Withner 1989

Spotted Cattleya

Synonyms

Cattleya elatior Lindley 1831*; Cattleya elatior* Lindl. 1833; *Cattleya granulosa* Lindley var. russeliana Lindley; *Cattleya guttata* f. albina Xim.Bols. 2011; *Cattleya guttata* f. munda (Rchb.f.) M.Wolff & O.Gruss 2007; *Cattleya guttata* var. caerulea L.C.Menezes 1993; *Cattleya guttata* var. elatior (Lindl.) Fowlie 1977; *Cattleya guttata* var. immaculata Rchb.f. 1886*; Cattleya guttata* var. munda Rchb.f. 1888*; Cattleya guttata* var. pernambucensis Rodigas 1893; *Cattleya guttulata* Lindley; *Cattleya leopoldii* subsp. pernambucensis Brieger in ? ; *Cattleya sphenophora* Morr. 1848; *Cattleya tigrina* A. Rich. 1848; *Cattleya tigrina* var. caerulea L.C.Menezes 1993; *Cattleya tigrina* var. williamsiana (Rchb.f.) Braem 1984*; Epidendrum elatius* Rchb.f 1862;

Description

This is a medium sized, cool to warm growing epiphyte or lithophyte from near the seashore in southern Brazil with cylindrical, elongate pseudobulbs carrying 2 apical, spreading, elliptic-oblong, very coriaceous leaves and the inflorescence arises on a fully matured pseudobulb in the fall and winter on a terminal, to 1 1/2' [45 cm]

long, few to several flowered inflorescence subtended by a broad dried sheath and giving rise to heavy textured, waxy, fragrant flowers that can be long or short lived. [3]

This species produces medium- sized plants with slender stems, from 24-40 in. (60-100 cm.) high when well grown. There are 2 fleshy leaves. The racemes are 5-10 flowered, and the flowers are 2-3 in. (5-8 cm.) across. The sepals and petals are yellow-green, finely spotted deep purple or crimson. The basal part of the lip is white externally, purple veined internally, while the midlobe is amethyst-purple, traversed by several lines of small verrucosities. The isthmus of the lip is short, only about one fourth the length of the lip, thus distinguishing this species from C. granulosa. Further, the flowers are generally greener, smaller and less brightly colored. According to some books, the plants flower in the late fall from dried sheaths formed earlier the same summer as the growths matured. Hamilton's data indicate, however, a]uly flowering peak, but the spread of this data is no doubt confounded by the continued confusion of this species with others, especially C. leopoldii. C. guttata is a warm-growing species, requiring at least 55°F (16°C) in the winter during dormancy, and preferring warmer, wetter conditions in its development phase. The typical species, not very attractive to the beginner' s eye, with green flowers small in relation to the larger size of the plants, was sent to the Horticultural Society of London, England, from Rio de Ianeiro, Brazil, by the Right Hon. Robert Gordon about 1 827. It was actually collected and named earlier by Vellozo in 1790, together with Epidendrum pauper (see Cattleya forbesii) , making it one of the first two cattleyas to be described. His description, however, was not published until much later, and there is debate whether it was the same species. In comparison to other bifoliate species, real guttata is not often seen today, and yet selected clones are well worth growing. It was long confused with C. leopoldii, which was con- sidered to be a variety of this species, but leopoldii is now better classed as a separate species. The Richard name and plate of C. tigrina with its rosy sepal tips would seem to match closely the type of C. guttata in the Botanical Register, thus making tigrina another synonym. Some researchers consider it, however, a distinct species, and I am so inclined, but feel we need to know a little more about it first before making the separation. The spotting, for which it is named extends even to the ovaries and pedicels of the flowers. The plants are smaller than those of the usual C. guttata with no more than 2-3 flowers per growth; and the flowers are also small, about 1 1/2-2 in. (4-5 cm.) across. Braem seems confused on this issue, mixing C. tigrina with C. leopoldii rather than C. guttata. Tigrina is, incidentally, an appropriate name since the South American tigre, or jaguar, is a completely black-spotted, not striped, fierce feline. See the cover of the Sept. 1984 Die Orchidee for reproduction of the type picture of the species. Early descriptions in the Orchid Review say the plants of guttata "prefer the higher trees which would take hours to cut down. Their roots will descend the trunk 40 feet or more, and their pseudobulbs attain 5 feet and of corresponding thickness." One wonders if these were not really plants of C. leopoldii because of their great size? Variety 'Russelliana' had flowers larger than the type but less

spotted, and the lip was short and tipped with deep violet-red. Unspotted green alba forms with a white lip also exist. In the fine article dealing with bifoliate cattleya habitat (AOSB,]uly, 1 986) the Pessoas describe C. guttata growing with C. intermedia in beach sand in full sun together with cactus in other sparse vegetation. At least three natural hybrids have been described. C. guttata x C. intermedia produces C. pictumta; with C. loddigesii, C. hybrida is formed; and the hybrid with C. forbesii is C. dayana. The confusion that has existed over the years as to whether C. leopoldii is a variety of C. guttata stems from the general similarity of the flowers and the wide color and size variability within both these species, plus the fact that they interbreed in some localities. It is difficult to distinguish clear-cut not just relative characteristics to separate the species. Generally speaking C. guttata plants are smaller, with smaller and fewer flowers, than plants of C. leopoldii, and horticulturally they are less exciting or interesting. The guttata flowers are fleshier, greener and more compact. The flowers of leopoldii, on the other hand, are softer, larger, more wingy, typically darker in color, and the petals often have wavy edges and turned back tips. The guttata plants are fall or winter flowering while those of C. leopoldii bloom in the summer. The guttata flowers develop on a short stalk from a dried sheath, while those of leopoldii plants have a lengthier stalk and a green sheath. Guttata plants I have seen are up to 20—30 in. (50-75 cm.) high while well grown leopoldii plants can reach to 5 ft. (over 1 1/2 m.). Braem points out that the tip of the column is exposed in leopoldii flowers but is completely concealed by the lateral lobes of the lip in guttata. None of these qualities is by itself a clear-cut key character to separate the two. This is compounded by the fact that the two separate species have overlapping distributions in some Brazilian locations leading to the intergrading of forms. It does not, however, invalidate the integrity of the two separate species, confused as they may be in collections and in nature, nor does it resolve the delimitation of C. tigrina as possibly a separate taxon of still smaller plants adding to the complex. But what do you write on the labels of such plants? That remains the ultimate question here and in the greenhouse and is what the practical reader will want to know after all this verbiage is digested. As the reader can appreciate, the answer is not simple unless the plant at hand is typical of its species. Otherwise, one must conclude that it is a natural hybrid in some degree or another (1%—99%), and then put the hybrid name on the label—but there is no such name as yet for C. guttata x C. leopoldii, as is discussed at the latter's description. Nor is there a name for C. loddigesii- harrisoniana intergrades, etc., etc. Plants of these kinds actually form syngameons (see Withner and Stevenson, 1968) that are natural populations of hybrid origin, each derived from two or more species. Where natural populations of species overlap such taxa can develop, and it is, of course, inaccurate to put species names on the labels of such examples. What will the judges and the RHS do now? How can the nurseryman or the hobby grower have a proper label?[2]

Habitat

Coastal Brazil. The habitat extends from near Guarapari in Espírito Santo to near Paranágua in Paraná. In Espírito Santo, plants are found from sea level along the coast to 2000 ft. (0-610 m) along rivers as far as 75 mi. (120 km) inland. In the states of Rio de Janeiro and São Paulo, plants are usually found below 600 ft. (180 m) along rivers or in swampy forests. They usually grow 30-60 ft. (9-18 m) above the ground on the horizontal branches of large old trees which overhang streams or swampy areas. The trees on which the orchids grow are usually covered with vines, bromeliads, and other epiphytes. Growing near water and among other plants helps keep humidity high during the dry season. In some areas of Espírito Santo, plants grow on northeast-facing cliffs on lichen covered rocks and on the exposed roots of dwarf trees. -- Source: Charles Baker[4]

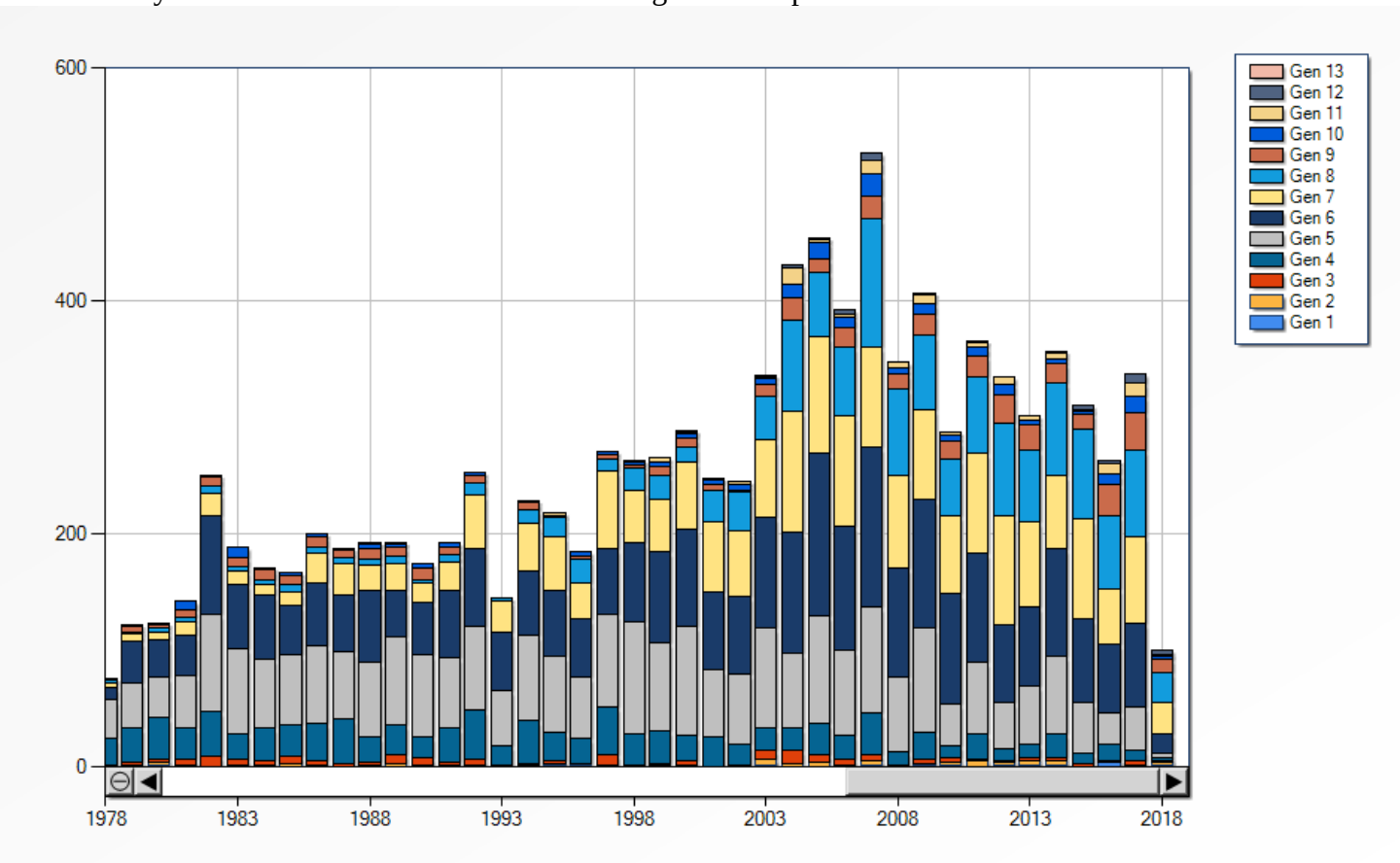
Awards

Origin	HCC	AM	FCC	JC	CBM	CHM	Total
	11	**9**	**1**	**4**	**1**	**0**	**25**
Years	**1973-2017**	**1986-2015**	**2011**	**1983**	**1962**		

F-1 Hybrids and Progeny

Hybrids: Total of 14,960 to the 13th generation

Generation	**Before 1940**	**1940-49**	**1950-59**	**1960-69**	**1970-79**	**1980-89**	**1990-99**	**2000-10**	**After 2010**
F-1	**115**	**17**	**3**	**13**	**8**	**3**	**5**	**5**	**13**



Although *Cattleya gaskelliana* has been used in hybridization since 1893, the bulk of the work has been done since 1980 with almost 400 hybrids per year since 2000. *C gaskellians* is a genetic component of 15,000 hybrids in 13 generations. It is part of many famous hybrids of the 40's, 50's and 60's including Bob Betts, Bow Bells, Mount Anderson, Princess Bells and Mount Hood.

Cattleya Bow Bells 'Christmas Chimes'

1945

207 F-1

4,304 Progeny

Cattleya Bob Betts ‘White Lightning’

1950

275 F-1

1,994 Progeny

Rlc. Mount Anderson ‘Big Surprise’

1962

66 F-1

539 Progeny

Breeding Strengths and Weaknesses

Cattleya gaskelliana has many alba forms and produces white hybrids for the late spring early summer season. It has a tendency to produce flowers of poor form by reducing the roundness of the flowers. Another flaw is a loss of good texture and a relatively open flower form. These flaws can be overcome by crossing with *C trianaei*.[6] It is easy to grow, is very free flowering and has large 7 inch flowers with a good fragrance. It has contributed significantly to the development of coerulea forms.[7]

Culture

Cattleya gaskelliana is a vigorous, easy to grow, free-flowering plant. It will normally begin growing in the United States -in early February and complete its growth by mid-May. It should be watered sparingly until the new growth is about 3 inches long. Then water should be increased until it is receiving heavy waterings as the growth matures. Always remember to allow the medium to dry out, however, between waterings, otherwise, if the roots are kept too wet, they may rot and die. Cattleya gaskelliana is one of the Catrleya species that produces flowers as the growth is maturing. In other words, it does not produce a growth and then rest for a few months before flowering as do Cattleya mossiae and Cattleya trianaei. Like most other Cattleya species, C. gaskelliana needs lots of sun and air to grow and flower well. The night tempera- ture should be 58 F-60 F and the day temperature 80 F-85 F. Cattleya gaskelliana normally produces three to five flowers on a flower stem in mid-May in the United States. The flowers do not stay in bloom as long as C. trianaei or Cartleya schroederae and three weeks is normal. Once in flower, the plants should be kept in the coolest part of the greenhouse so the flowers will last longer. After blooming, the plants will sometimes make a second growth, which, unlike C. warscewiczii, does not seem to diminish its flower production the following year. Repot the plants only when you see new roots starting from the lead pseudobulb.[7]

References

Aldridge, Peggy. 2008. *An Illustrated Dictionary of Orchid Genera.* Selby Botanical Garden Press.

[1]**la Croix, Isobyl. 2008.** *The New Encyclopedia of Orchids.* Timber Press

Meisel, Kaufmann, Pupulin 2014. *Orchids of Tropical America* .Cornel University Press

[2]**Withner, Carl L. 1988.** *The Cattleyas and Their Relatives: Volume I* Timber Press

[3]www.orchidspecies.com

[4]OrchidWiz.Database X4.3

[6]**Hackney, Courtney 2004.** *American Cattleyas.* Self Published

[7]**Chadwick, A. A. 2001** Cattleya gaskelliana Queen Bee par excellence, *Orchids.* 540 – 545