

Cattleya labiata Lindley 1824

SUBGENUS *Cattleya* SECTION *Cattleya* Lindley

Ruby Lipped Cattleya



Synonyms

Cattleya bullieri D.J. Carr 1886; *Cattleya labiata autumnalis* Pynaert 1893; *Cattleya labiata* f. *alba* (Linden & Rodigas) F.Barros & J.A.N.Bat. 2004; *Cattleya labiata* f. *albo-oculata* Cogn. 1897; *Cattleya labiata* f. *candida* (Lindl.) M.Wolff & O.Gruss 2007; *Cattleya labiata* f. *coerulea* (Rolfe) M.Wolff & O.Gruss 2007; *Cattleya labiata* f. *purpureostriata* Cogn. 1897; *Cattleya labiata* var. *alba* Linden & Rodigas 1892; *Cattleya labiata* var. *albo-oculata* (Cogn.) L.C.Menezes 1987; *Cattleya labiata* var. *amesiana* L.C.Menezes 2002; *Cattleya labiata* var. *amoena* L.C.Menezes 2002; *Cattleya labiata* var. *atropurpurea* L.C.Menezes 2002; *Cattleya labiata* var. *autumnalis* Linden 1887; *Cattleya labiata* var. *beyrodtiana* Schltr. 1914; *Cattleya labiata* var. *brennandiana* L.C.Menezes 2005; *Cattleya labiata* var. *caerulea* L.C.Menezes 2002; *Cattleya labiata* var. *coerulea* Rolfe 1895; *Cattleya labiata* var. *concolor* L.C.Menezes 2002; *Cattleya labiata* var. *crocata* Rchb.f. 1882; *Cattleya labiata* var. *genuina* Stein 1892; *Cattleya labiata* var. *petersii* Rolfe 1894; *Cattleya labiata* var. *petersii-marmorata* Cogn. & A.Gooss. 1898; *Cattleya labiata* var. *purpureolineata* L.C.Menezes 2002; *Cattleya labiata* var. *purpureostriata* (Cogn.) L.C.Menezes 1987; *Cattleya labiata* var. *rochellensis* Rchb.f. 1888; *Cattleya labiata* var. *semialba* L.C.Menezes 2002; *Cattleya labiata* var. *warocqueana* Rolfe 1890; *Cattleya labiata* *vera* Veitch 1887; *Cattleya labiatum* Rchb.f 1861; *Cattleya leeana* Sander 1883; *Cattleya lemoniana* Lindley 1846; *Cattleya massangeana* Rchb. f. 1883; *Cattleya morganae* Warner 1882; *Cattleya nalderiana* Rchb. f. 1885;

Cattleya oweniana auct. 1892; *Cattleya pallida* Lindl. & Paxton 1851-2; *Cattleya peetersii* André 1885; *Cattleya perrinii* Endl. in A.Hartinger 1845; *Cattleya regalis* hort. 1883; *Cattleya rochellensis* Rchb. f. 1888; *Cattleya rollissonii* T. Moore 1861; *Cattleya wallisii* L. Linden & Rchb. f. 1882; *Cattleya warocqueana* L. Linden 1890; *Epidendrum labiatum* (Lindl.) Rchb.f. 1861; *Epidendrum labiatum* var *lemonianum* (Lindl.) Rchb.f. 1862; *Epidendrum labiatum* var *pallidum* (Lindl. & Paxton) Rchb.f. 1862; *Epidendrum labiatum* var. *pictum* (Lindl.) Rchb.f. 1862

Description

After several labiate cattleya species were discovered an extended debate raged over whether they should be named separately or all considered varieties of this species, the first labiate to be described, and the type for the genus, *C. labiata* was then further distinguished with the epithet *vera*, the *true* labiate cattleya. Others called it variety *autumnalis*, the fall. flowering labiate cattleya, to separate it from others.

The species was introduced by William Swainson into England in 1818 from the Organ Mountains about 60 mi. (100 km.) north of Rio de Janeiro, Brazil. It was such a free-growing and popular species that collectors eventually nearly exterminated the plant in that locality. Now it is found in less accessible locations. By 1898 Cogniaux listed more than 70 named varieties. In this species the bud sheath is typically double, a characteristic which also frequently appears in *C. warneri*, sometimes in *C. mendelii*, and two or three others, such as *C. bowringiana*, as well as in hybrids of these species. Two to five flowers which are 5-6 in. (13-15 cm.) across are produced on the spike. The wavy petals and the sepals are rose-color faintly toned with mauve, while the crisped lip is rich crimson-purple bordered with rose-lilac, which varies in intensity. The throat is yellow with a white "eye" on either side of the central area. An immediate favorite in cultivation because of its flower size, vigor and richly colored lip, *C. labiata* was also one of the first major orchids to be line-bred depending upon self-pollination of highly selected clones. The improved third and fourth generation clones were more homozygous for these qualities than wild forms and thus contributed greatly to a number of modern polyploid hybrids. Occasionally, line bred plants produced by Joseph Urmston, who carried out this work in California, USA, are still to be found. His work clearly demonstrated the value of improving the 'breed before turning to hybridizing. This sound procedure is practiced by some orchid breeders today with everything from *Phalaenopsis* to *Oncidium*, *Broughtonia* and *Vanda*. Sometimes several generations of selfing are required to improve markedly the flower forms and coloration. Many varieties were recognized in the past due to the popularity of the species, and many are still grown in Brazil. Variety *alba* is white except for the yellow throat; 'Amesiana' was a semialba form; 'Superba' had deep rose sepals and petals with a darker, more crimson lip; the clone 'cooksonii' was semialba with a white edge around the lip; coeruleas were blue, etc. A rare natural hybrid of this species and *C. leopoldii* is named *C. victoria reginae*.²

Habitat

Northeast Brazil. *Cattleya labiata* was originally described from a plant said to have originated in the Organ Mountains, which are just north of Rio de Janeiro. This species has never again been found in that area, however, and it is quite probable that the habitat location given to Dr. Lindley was erroneous or deliberately misleading. Plants are found in mountain forests in the states of Cearaá Paráiba, Pernambuco, Alagoas, and Piauí at 1650-3300 ft. (500-1000 m). They are found in inland areas starting 31-93 mi. (50-150 km) from the coast and extend as far inland as 186-249 mi. (300-400 km). Within this region, plants are found in 3 different types of habitat, including a seasonal tropical rainforest zone near the coast, a tropical deciduous forest zone which is further inland, and a thorn bush scrub zone which is very far inland. Plants normally grow in bright conditions near the tops of old trees where they are found on the vertical trunks or the semivertical branches. However, they are occasionally found growing lithophytically either in shade or in sun. Plants are usually protected from the full sun, but not always. When they are in full sun, the leaves and pseudobulbs develop a protective reddish-brown color, and the reddish-rose flowers are more intensively colored. For many years, *Cattleya labiata* has been reported from the states of Bahia and Minas Gerais. Although concerted efforts have been made to find this species in these states, especially in northern Bahia, no plants have been found. However, populations of the very closely related *Cattleya warneri* are found in southern Bahia. Because the differences between the 2 species are so slight, *Cattleya warneri* T. Moore has probably been erroneously reported as *Cattleya labiata* over the years by dealers, collectors, and visitors to the habitat. -- Source: Charles Baker⁴

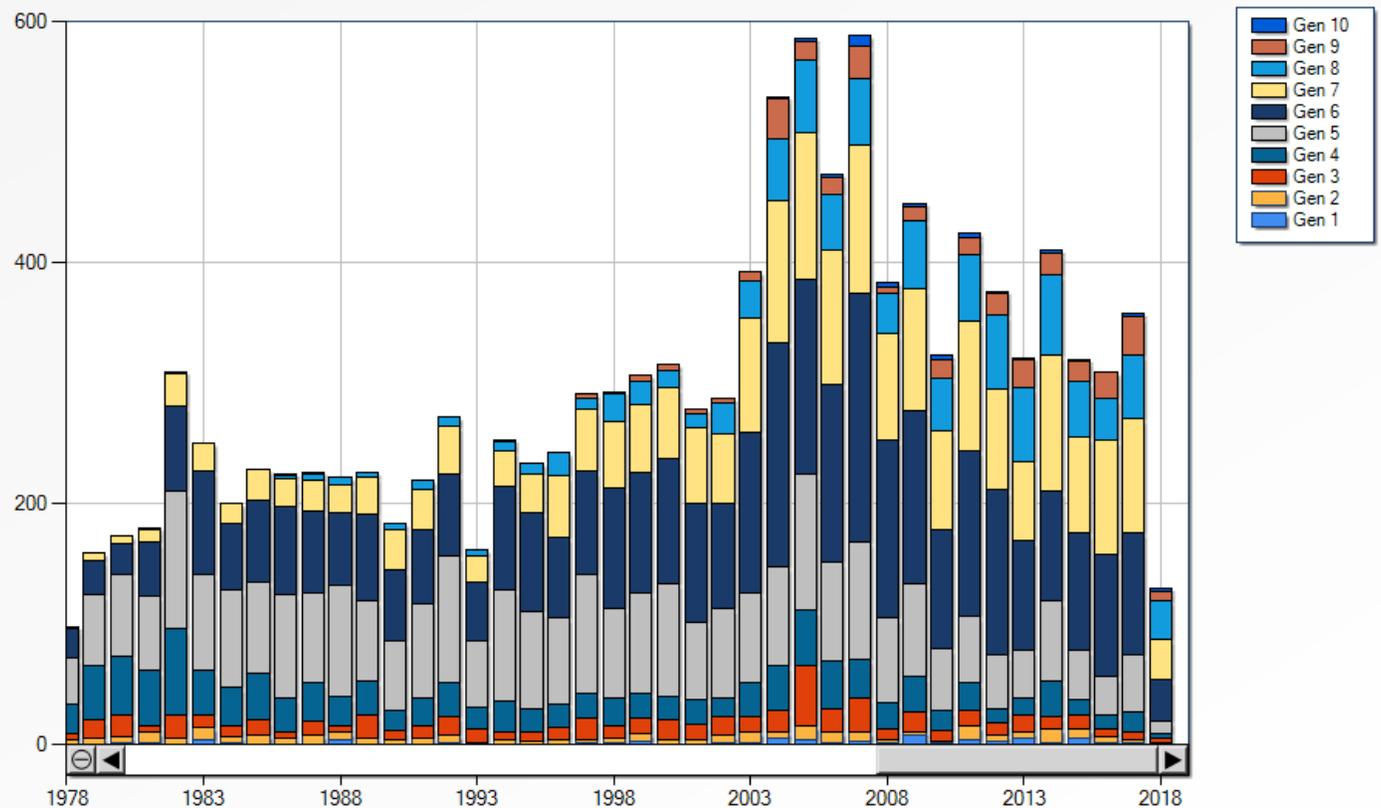
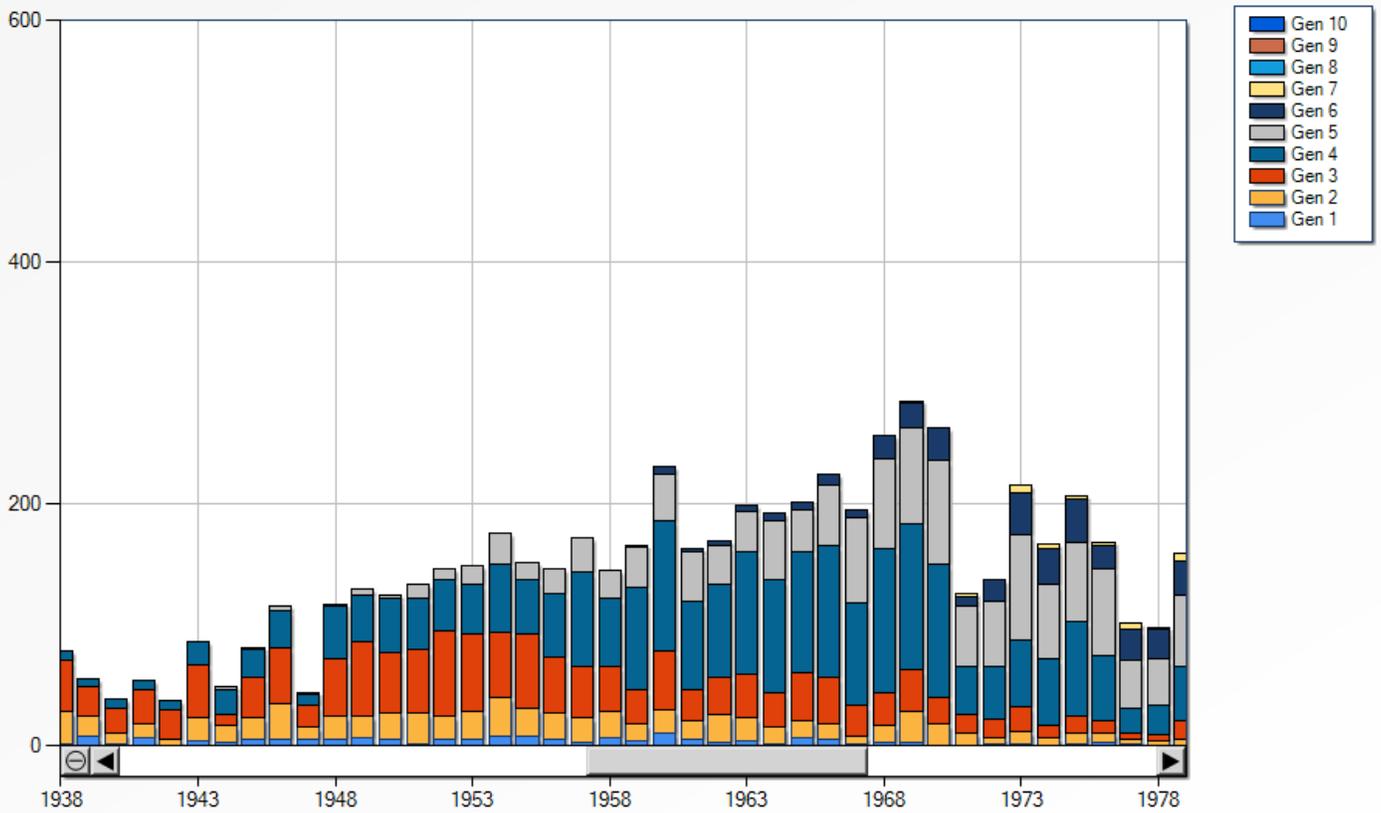
Awards

Origin	HCC	AM	CCM	CHM	CCE	CHM	Total
	21	28	3	4	1	4	61
Years	1995-2015	1951-2017	2007-2014	1980-2002	2011	1980-2002	

F-1 Hybrids and Progeny

Hybrids: Total of 19,105 to the 10th generation

Generation	Before 1940	1940-49	1950-59	1960-69	1970-79	1980-89	1990-99	2000-10	After 2010
F-1	187	46	55	43	10	12	6	26	21



The table and charts tell an interesting history of the use of *C. labiata* in hybridization. The vast majority of primary crosses were made early on, 120 of which before 1920. For the next 6 decades things rocked along with 200 to 300 hybrids being registered per year on average. In the 1990's things took off and 400-600 hybrids were created per year. The most awarded of *C. labiata*'s offspring is the 4th generation Rlc. Memoria Crispin Rosales 1959 with 56 AOS awards. The grex with the most progeny is Cattleya Bonanza (Bracey) 1949 with 349 followed closely by Rlc. Norman's Bay 1946 with 330. By the way, in 1949 there were two Cattleya Bonanza registered, one by Ben Bracey and a second by Armacostfe Royston Inc., listed as C. Bonanza (A & R) to distinguish between the two.



Rlc. Memoria Crispin Rosales

1959

243 F-1

920 Progeny



Cattleya Bonanza (Bracey)

1949

349 F-1

2,587 Progeny



Cattleya Bonanza color forms



Cattleya Portia

1897

122 F-1

394 Progeny

Breeding Strengths and Weaknesses

Cattleya labiata is a fall bloomer, primarily October and November.⁴ This was an important bloom time for the cut flower trade. The flowers are well arranged on strong upright stems. The species and its hybrids are “light controllable” allowing the production of flowers anytime during the late fall-winter season.⁶ The species has many natural color forms opening the way to a multitude of colors and patterns in its hybrids.⁷

Culture

The plants prefer ample light and water during the summer, with drier conditions in winter after growth and flower production is completed. Plants of *Cattleya labiata* and its hybrids are autumn "short day bloomers" responding to the length of day and night in their flowering. Other cattleyas do not share this characteristic. This species and its hybrids are thus controllable in their flowering as was discussed in the earlier chapter on "Culture", for the timing of cut flower crops. The *Orchid Digest* for July, 1987, has a complete account by Lou C. Menezes of *C labiata* and all of its described varieties with many illustrated in color⁷

References

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

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

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

³www.orchidspecies.com

⁴OrchidWiz.Database X4.3

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

⁷**McHatton, Ron. 2016.** What's in the Background of that Cattleya?. Supplement to Orchids 10: 13.