The Genus Brassavola, (L.) R.Br. in W.T.Aiton, Hortus Kew. 5: 216 (1813) Type: Brassavola [B.] cucullata [bra-SAH-vo-la kyoo-kyoo-LAH-ta]

There are 28 species (OrchidWiz [update Dec 2017]) that are epiphytes and sometimes lithophytes at elevations of from sea level to 3300 ft (1000 m) from Mexico, southern Caribbean islands to northern Argentina in moist or wet montane forests, mangroves, rocky crevices and cliff faces. They are most fragrant at night and many with a citrus smell. The genus is characterized by very small pencil-like pseudobulbs, often forming large clumps; a single, fleshy, apical, sub-terete leaf and the inflorescence produced form the apex of the pseudobulb. The inflorescence carries from a single to a few large flowers. The floral characteristics are elongate narrow similar sepals and petals, the base of the lip usually tightly rolled around at least a portion of the column which carries 12, sometimes eight unequal pollina with prominent opaque caudicles. The flowers usually occur, as a rule, in spring, summer and fall. The flowers are generally yellow to greenish white with a mostly white lip. It is not unusual for dark spots, usually purple, to be in the region where the sepals, petals, and lip join the stem (claw). This spotting is a dominant generic trait in Brassavola nodose. They are easily cultivated under intermediate conditions.

Although this is a relatively small genus (28 species), the species show an unusually close relationship with one another in their floral patterns, coloration, and column structure making identification difficult, key to know where the plants were collected.

As mentioned above the flowers are fragrant at night. The fragrance will be 'turned off' shortly after plants are brought into a bright room but can be 'turned on' by returning the plant to a dark environment. This experiment can only be repeated a couple of times. As the flowers age or if cut, the fragrance production is turned off.

They are allied with the Cattleyas and are used extensively in hybridizing. They are the "B" in BLC in many orchids that are commonly grown. Most likely pollinated by moths attracted to the nocturnal scent.



Brassavola cucullata 'Saint Mary of Egypt' AM/AOS Jul 2001, NS 7.0 x 15.2 cm

Common Name or Meaning: Named in honor of Antonio Musa Brassavola, nobleman and botanist of Venice during the nineteenth century. This species was among the earliest to orchids cultivated with botanical garden records back to 1794 and the first picture of a Brassavola, B. nodose, published in 1691.

A feature of Brassavola acaulis is the alternate production of a vegetative growth with a flower-producing growth, an interesting habit found elsewhere in this sub tribe in *Alamania punicea, Cattleya walkeriana*, and *Epidendrum stanfordianum*.

A key / unique characteristic of this genus is the existence of region referred to as a neck or beck between the ovary and the base of the column. The beck is especially apparent I the fruiting stages of certain *Brassavola* species after flowering and pollination.

The short columns of the flowers have a more elaborate structure than other columns of this subtribe, with the rim of the anther bed, the clinandrium, being extended to form a hoodlike structure around the pollen and anther cap. This rim may produce two long sicklelike or toothlike process on either side of the anther cap and another, smaller process in the center above them. Column details are used to aid in the identification of species.

Generally, you would point scale using the Cattleya point scale, but there are some cases where the General point scale would be appropriate.

Table of species used in hybridization or receiving awards (OrchidWiz – Dec 2017 update)

Species marked with a	* are used th	ne most in hybr	idization			Progeny				Α	os	Awa	ards				
Kew Name	Subgenus	<u>Section</u>	Habitat, Country	Temp.	<u>Season</u>	F1/Total	FCC	<u>AM</u>	нсс	JC	AD	AQ	CCE	ССМ	СНМ	CBR	Tot.
Brassavola acaulis	Brassavola	Cuneilabia	Belize, Guatemala to Panama	Warm to hot	Winter - summer	7/7		3						2	1		6
Brassavola ceboletta	Sessililabia	Conchoglossa	Brazil, Peru to Argentina	Cool	Summer - Winter	0/0										1	1
Brassavola cucullata	Brassavola	Brassavola	Carribean Islands and Countries	Warm to hot	Summer - Fall	65/89		5		2				4			11
Brassavola flagellaris	Sessililabia	Conchoglossa	Brazil	Cool to Warm	Spring - Summer	16/24		2	1					3		1	7
Brassavola fragrans	Sessililabia	Conchoglossa	Bolivia, Brazil, Paraguay	Warm to hot	Spring - Summer	8/13											0
Brassavola grandiflora	Brassavola	Cuneilabia	Belize to Costa Rica	Warm to hot	Fall - Winter	10/14		2									2
Brassavola martiana	Brassavola	Prionoglossa	South America to Peru - Brazil	Warm to hot	Winter - Spring	14/17		1	1					1	2		5
Brassavola nodosa*	Brassavola	Cuneilabia	Mexico, Southern Caribbean to Venezuela	Warm to hot	Summer - Fall	430/1068	3	16	7				1	25		1	53
Brassavola perrinii	Sessililabia	Conchoglossa	Bolivia, Brazil to Argentina	Cool to Warm	Spring	86/102								8			8
Brassavola reginae			Brazil		Spring	3/3										1	1
Brassavola subulifolia	Brassavola	Cuneilabia	Jamaica	Cool to Warm	Fall - Winter	45/93		3					1	8			12
Brassavola tuberculata	Sessililabia	Conchoglossa	Brazil	Warm to hot	Spring	15/23		1						2			3
Brassavola venosa	Brassavola	Cuneilabia	Mexico to Nicaragua	Warm to hot	Fall	1/3										1	1

Key: Cold - 50 to 58F at night; Cold to Cool - 50 to 66F at night; Cool - 58 to 66F at night; Cool to Cold - 58 to Cold -

Of the 28 presently known species only 13 (~46%) have been used in hybridization or have received awards. **Brassavola nodosa** has been used the most (fragrance, spots, easy to grow), 430 primary crosses (~61% of all *Brassavola* primary crosses) and 1068 total progeny (~78% of all *Brassavola* progeny), in hybridization and has also received the most awards, including 3 FCCs.

Brassavola Crosses	<1900	1900s	1910s	1920s	1930s	1940s	1950s	1960s	1970s	1980s	1990s	2000s	2010s
Registered in decade						1	0	1	0	2	2	4	4
Associated awards						1	0	0	0	17	0	3	2
Associated F1 Progeny						12	0	0	0	37	6	3	0
All F1 Hybrids													
Registered in decade	2	6	8	4	2	5	13	50	74	108	99	165	147
Associated awards	5	19	0	1	12	32	41	28	44	113	77	38	18
Associated F1 Progeny	8	9	2	1	7	94	112	152	39	107	48	15	8

As of the Dec 2017 edition of OrchidWiz there are 22 Brassavola hybrids with 14 being primary hybrids (63%) and a total of ~1360 intergeneric hybrids with ~590 primary hybrids. The above table shows the interest in breeding Brassavolas based on registration, associated awards, and F1 progeny of Brassavola primary (F1) hybrids as of December 2017 edition of OrchidWiz. Clearly there has been an ebb and flow in F1 registration with a recent increase.

Characteristics inherited by Brassavola hybrids are generally smaller flowers with elegant, unconventional shapes, exotically shaped and marked lips, floriferousness, and great heat tolerance. The general blooming time for Brassavolas and their hybrids are in the hot summer months.

Primary Brassavola Crosses

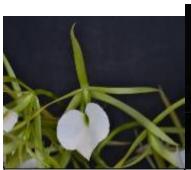
The most successful (number of progeny and/or awards, OrchidWiz, Sep 2017 edition) F1 crosses are:

<u>B. Little Stars</u> (B. nodosa x B. subulifolia), 1983, Stewart Inc., 37 F1 and 41 total progeny, 27 AOS awards (2 AMs, 2 HCCs, 1 CCE, 13 CCMs). Major progeny: **Procatavola Walnut Valley Lime Stars** (Ctyh. Lime Sherbet x B. Little Stars), 2008, H & R Nurseries, 2 F1 progeny, 6 AOS awards (4 AMs, 2 HCCs).

B. George Tyler (B. flagellaris x B. cucullata), 2004, A. Black, no progeny, 3 AOS awards (1 AM, 2 HCCs)

B. Yaki (B. cucullata x B. nodosa), 1946, Mr. / Mrs. Osment, 12 F1 progeny, 1 HCC/AOS award

B. Maria del Carmen (B. nodosa x B. flagellaris), 1994, J. Izquierdo, 5 F1 progeny, no awards.



Brassavola Little Stars 'H&R', AM/AOS Oct 2011, NS 11.4 x 10.2 cm



Brassavola Yaki 'Black's Nova', HCC/AOS Jul 2009, NS 7.0 x 14.0 cm



Brassavola Maria del Carmen



Brassavola George Tyler 'Diamond Orchids', AM/AOS Jul 2013, NS 12.0 x 12.1 cm

Intergeneric Crosses

There have been 73 genera created by intergeneric breeding with Brassavola, with the main breeding trait of Brassavola being; easy of culture, floral shape, flower color intensity. Some of the most successful (number of progeny and/or awards, OrchidWiz, Dec 2017 edition) intergeneric crosses are:

<u>Brassocattleya Keowee</u> (C. Lorraine Shirai x B. nodosa), 1975, Carter & Holmes, 4 F1 and 5 total progeny, 18 AOS awards (9 AMs, 6 HCCs, 1 AQ, 2 CCMs)

<u>Brassocattleya Morning Glory</u> (B. nodosa x C. purpurata), 1958, Del-Ora, 32 F1 and 37 total progeny, 12 AOS awards (2 AMs, 7 HCCs, 1 JC, 2 CCMs). Major progeny; **Bc. Morning Song** (Bc. Morning Glory x C. Melody Fair), 2002, H & R Nurseries, no progeny, 7 AOS awards (4 AMs, 3 HCCs).

<u>Brassocattleya Binosa</u> (B. nodosa x C. bicolor), 1950, R. Tanaka, 73 F1 and 106 total progeny, 15 AOS awards (8 AMs, 4 HCCs, 3 CCMs). Major progeny; **Bc. Nakornpathome Silver** (Bc. Binosa x C. Brazilian Treasure), 1986, Huan Bui Orchids, 11 F1 progeny, 5 AOS awards (1 AM, 3 HCCs, 1 CCM); **Bc. Memoria Vida Lee** (Bc. Binosa x C. Brazilian Treasure), 1986, Huan Bui Orchids, 11 F1 progeny, 5 AOS awards (1 AM, 3 HCCs, 1 CCM)



Brassocattleya Keowee 'Newberry', AM/AOS Jul 2013, NS 6.0 x 7.0 cm



Brassocattleya Morning Glory 'Royal Purple', AM/AOS Nov 2015, NS 14.0 x 14.0 cm



Brassocattleya Binosa 'Wabash Valley', AM/AOS Aug 1988, NS 12.0 cm

Brassocattleya Richard Mueller (B. nodosa x C. milleri), 1965, Mrs. W. Boyd, 75 F1 and 173 total progeny, 6 AOS awards (1 AM, 3 HCCs, 2 CCMs). Major progeny: Rby. Golden Tang, see below; Bc. Yellow Bird (B. nodosa x Bc. Richard Mueller), 1990, H&R Nurseries, 7 F1 progeny, 14 AOS awards (4 AMs, 2 HCCs, 1 CCE, 7 CCMs); Bc. Rustic Spots (Bc. Richard Mueller x C. Landate), 2000, H & R Nurseries, 4 F1 progeny, 13 AOS awards (5 AMs, 8 HCCs)

Rhynchobrassoleya [Rby.] Golden Tang (Rlc. Waikiki Gold x Bc. Richard Mueller), 1989, H & R Nurseries, 38 F1 and 41 total progeny, 20 AOS awards (10 AMs, 10 HCCs)

<u>Brassocatanthe [Bct.] Roman Holiday</u> (Ctt. Chocolate Drop x B. nodosa), 1983, J. A. Roman, 3 F1 progeny, 11 AOS awards (4 AMs, 5 HCCs, 2 CCMs);

Brassocatanthe [Bct.] Little Mermaid (C. walkeriana x Bsn. Maikai), 1997, Dogashima, 14 F1 and 15 total progeny,

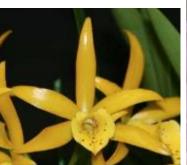
3 AM/AOS awards



Bc. Richard Mueller 'Summerfield Orchids', AM/AOS Apr 2000, NS 9.2 x 9.5 cm



Rby. Golden Tang 'Linwood', AM/AOS Apr 2016, NS 11.2 x 10.5 cm



Brassocatanthe Roman Holiday 'Beverly's Bliss', AM/AOS Jun 2009, NS 8.5 x 7.6 cm



Brassocatanthe Little Mermaid 'Janet', AM/AOS Oct 2014, NS 10.0 x 10.5 cm

<u>Brassanthe [Bsn.] Maikai</u> (B. nodosa x Gur. bowringiana), 1944, Hirose, 69 F1 and 96 total progeny, 20 AOS awards (2 AMs, 3 HCCs, 15 CCMs). Major progeny: **Brassocatanthe Ivy Williams** (C. Gene May x Bsn. Maikai), 1997, C. L. A. N. Tropicals, no progeny, 8 AOS awards (3AMs, 4 HCCs, 1 CCM); **Bct. Little Mermaid**, see above.

<u>Brassanthe Bill Worsley</u> (B. nodosa x Gur. aurantiaca), 1966, S. Fouraker, 16 F1 and 34 total progeny, 2 AOS awards (1 AM, 1 CCM). Major progeny: **Brassocatanthe Robert Randall** (Bsn. Bill Worsley x C. cinnabarina), 2006,

- C. Hamilton, no progeny, 7 AOS awards (3 AMs, 3 HCCs, 1 CCM); **Brassocatanthe Empress Worsley** (Bsn. Bill Worsley x
- C. Red Empress), 1974, Voo Doo Orchids, 10 F1 and 17 total progeny, 1 HCC/AOS award

Rhynchovola [Rcv.] David Sander (B. cucullate x Rl. digbyana), 1938, Sanders [St. Albans], 6 F1 progeny, 10 AOS awards (6 AMs, 3 HCCs, 1 CCM)

Rhynchovola [Rcv.] Jimminey Cricket (B. nodosa x Rl. digbyana), 1974, Stewart Inc., 13 F1 progeny, 5 AOS awards (1 AM, 4 HCCs).



Brassanthe Maikai 'Eva', AM/AOS Oct 2010, NS 10.0 x 11.5 cm



Brassanthe Bill Worsley 'Spring Water', AM/AOS Jan 2013, NS 9.4 x 7.1 cm



Rhynchovola David Sander 'Springwater', AM/AOS Aug 2016, NS 19.0 x 20.0 cm



Rhynchovola Jimminey Cricket 'Marita', AM/AOS Nov 2013, NS 16.6 x 8.6 cm

Karl Varian 4 of 6 8-Mar-18

Brassavola AM/AOS or Higher Quality Award winners in 2017



Bc. Hawaiian Kaleidoscope 'Crownfox' AM/AOS Apr 2017, NS 11.0 x 10.9 cm (Bc. Hippodamia x Bc. Richard Mueller)



Bc. Morning Edition
'Salinas' AM/AOS
Feb 2017, NS 12.5 x 12.0 cm
(Bc. Morning Glory x
C. quadicolor



Blc. Petite Stars

'Julio David' AM/AOS

Aug 2017, NS 7.0 x 7.5 cm

(Bc. Richard Mueller x

L. rubescens)



Rcv. David Sander 'Isabel's Legend' AM/AOS Oct 2017, NS 15.5 x 18.4 cm (B. cucullata x Rl. digbyana)

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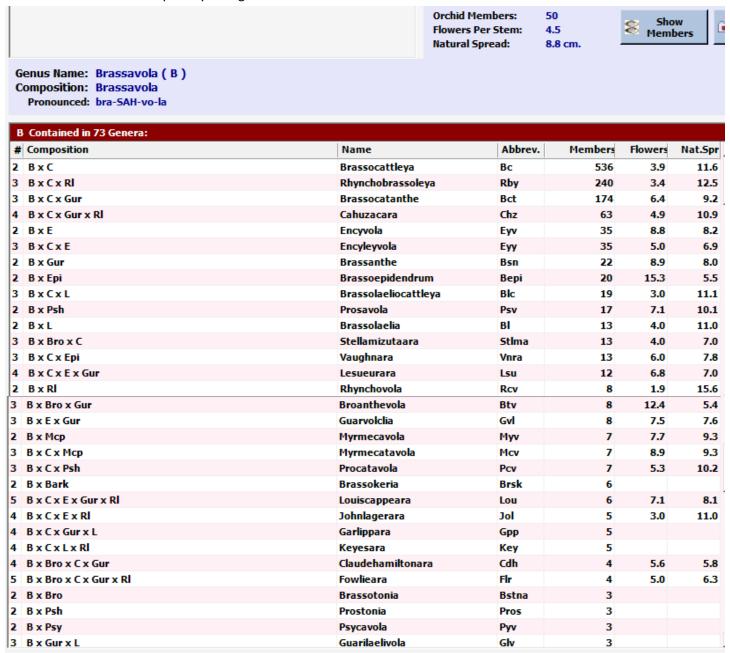
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Orchids, May 2003, Meet Brassavolas: A New Look at the Lady-of-the-Night and its Hybrids, Matthews, M.; V. 72, pp. 348-359

Interesting Tidbits

The Table below list the top thirty intergeneric crosses made with Brassavola and the number of cross that exist:



As the table above points out, there have been 73 intergeneric genera involving Brassavola with ~ 1400 grexes, almost 30 times more than the entire Brassavola family. The intergeneric genera with the largest number of members is Brassocattleya (Brassavola x Cattleya) with 536 members, clearly the largest intergeneric genera with Brassavola and ten times as many members as Brassavola (50 species and hybrids). What is impressive about the crosses involved with Encyclia are the large lip (sometimes triangular shaped).

Species Data Sheet

Brassavola perrinii Lindl., Edwards's Bot. Reg. 18: t. 1561 (1833).

[bra-SAH-vo-la pe-REEN-ee-eye]

The first plants of Brassavola perrinii arrived in England in the 1840s in a shipment of orchids sent to Mrs. Harrison of Liverpool by her family in Rio de Janeiro, Brazil. The plants proved tough enough to survive the long sea voyage, Mrs. Harrison named the species B. perrinii after Mr. Perrin, her gardener-grower, who helped them to thrive.

The species has thin, hanging leaves and the flowers are smaller than those of B. nodosa or B. grandiflora, with a narrower lip. To compensate, there are usually more flowers per stem than the other two species usually bear.

In 1898, the first hybrid with B. perrinii was registered [Bc. Belairensis (B. perrinii x C. guttata)], followed in 1909 by Bc. Joan (B. perrinii x C. warscewiczii) and in 1925 by Bc. Paulae (B. perrinii x C. dowiana).



Brassavola perrinii

Apparently, these crosses disappointed the growers and hybridizers of Cailleya Alliance hybrids in England, for further hybridization of the species did not resume until the 1960s and with growing interest today. The total number of hybrids is 102, but with awards concentrated in a few impressive grexes. The AOS has given more than 34 awards to hybrids of the species, but only 10 grexes have been awarded. And of these 10 awarded grexes, four have received a single award and three have received two awards. That leaves three crosses winning 24 of the 34 awards to B. perrinii progeny.

Synonyms:

None in recent times, but.

In The Cattleyas and their Relatives, Volume V. Brassavola, Encyclia, and other Genera of Mexico and Central America, C. L. Withner writes "Brassavola perrinii, B. fragrans, and B. flagellaris are a complex of closely related forms that differ in their habitat locations - southern Brazil and farther south, Minas Gerais, and north of Rio de Janeiro, respectively. The plants of B. perrinii are most like those of B. fragrans and , in my experience, are slightly smaller-flowered and more floriferous.

It is easy to see that using flower size differences alone will not distinguish between Brassavola perrinii and B. fragrans. At this point I have no foolproof way of differentiating between the two. There is no good key character we can conveniently use to separate them other than their geography, and that is seldom known in a greenhouse collection. Then why am I listing them separely? I simply cannot quite believe they are the same."

Varieties / forms:

No official varieties or forms, the lip is always white sometimes with a spot of color, yellow or green, but the sepals and petals have a variation in color represented by the description of the awarded crosses: pale citron, cream-yellow, light yellow, greenish yellow, sea-green, and the other three awarded plants have no color description.

Awards:

	FCC	AM	нсс	AQ	JC	CCM	CCE	СНМ	CBM	TOTAL
AOS						8				
Year(s) Awarded						1963- 2012				

The uniformity in flower shape and color is reflected in the awards, or rather the lack of quality awards, but the cultural awards have truly been outstanding. An example of one of the cultural awards is shown on the right in cultivar 'Emily', when it received the CCM it had 319 flowers on 80 inflorescences in a 17.5 cm (7 inch) plastic pot. Brassavola perrinii 'Emily' CCM/AOS besides receiving a CCM/AOS in 1992 it also received the Butterworth Prize which is award to the plant exhibiting the finest orchid culture awarded by the AOS in 1992.

Breeding Characteristics:

The plants of Brassavola perrinii are April – July. The species is a good parent for hybrids. It contributes to heat tolerance, summer blooming, floriferous, contrasting lip color, substance, and intensification of color in the sepals and petals, and well-rounded lip. The negatives in hybridizing would be a stellate shape and flower size.



Brassavola perrinii 'Emily' CCM/AOS May 1992, NS 8.0 x 7.8 cm

	Regist	ration	deca	de									
Brassavola perrinii	<1900	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010
Crosses Registered	2	1	0	1	0	0	0	2	12	15	12	19	39
Awards to Crosses Regtr	0	0	0	0	0	0	0	0	2	29	1	0	2
F1 Progeny to Crosses Regtr	1	0	0	0	0	0	0	0	5	8	0	3	0

As shown in the above table interest in Brassavola perrinii hybridization has increase in recent years with over 30 crosses register in this decade.

Recent Award Winners:

Only one new grex has been awarded recently, Guarvolclia Valle Turabo.

'Major' Hybrids:

Brassavola Adrian Hamilton (B. nodosa x B. perrinii), 2010, Claude Hamilton, no progeny, 1 no AOS awards. Only Brassavola perrinii cross to receive any award.
Rhynchobrassoleya [Rby.] Everything Nice (Rlc. Memoria Helen Brown x B. perrinii), 1981, Stewart Inc., 4 F1 progeny, 12 AOS awards (3 AMs, 8 HCCs, 1 CCM).
Brassanthe [Bsn.] Sunny Delight (B. perrinii x Gur. aurantiaca), 1987, L. Cox, 2 F1 progeny, 4 AOS awards (1 AM, HCC, 1 CCE, 1 CCM).

Rhynchobrassoleya Lahaina Novelty (B. perrinii x Rls. Waikiki Gold), 1985, L. Aotaki, 1 F1 progeny, 5 AOS awards (1 AMs, 4 HCCs).



Guarvolclia Valle Turabo 'Janairie Hernandez' HCC/AOS Jan 2016, NS 5.0 x 5.0 cm (Bsn. Sunny Delight x Gcy. Kyoguchi)



Brassavola Adrian Hamilton '4N', TRO/TOGA Dec 2010



Rby. Everything Nice 'Wintergreen', AM/AOS Sep 1997, NS 11.1 x 11.8 cm



Brassanthe Sunny Delight 'MAJ', CCE/AOS May 2008, NS 7.0 x 6.2 cm



Rby. Lahaina Novelty 'Remar', HCC/AOS Sep 1994, NS 11.0 x 11.5 cm

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Orchids, May 2003, Meet Brassavolas: A New Look at the Lady-of-the-Night and its Hybrids, Matthews, M.; V. 72, pp. 348-359

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The Genus Broughtonia

(Swartz) R. Brown in W.T. Aiton, Hortus Kew. Ed 2, 5: 217 (1813)

Type: Broughtonia [Bro.] sanguinea [brow-TOH-nee-a san-GWIN-ee-ab]

There has been much debate over the generic limits of Broughtonia. Some have the genera Broughtonia, Cattleyopsis, and Laeliopsis as either three, two, or individual genera. Today, the Kew Monocat list has them as one genus. DNA data and morphological characters showed that the data are consistent with either the single-genus or three-genera viewpoint but the three genera also constitute a single, well-supported clade. Geographical relationships are also consistent with either viewpoint.

Six species and two natural hybrid medium sized sympodial epiphytes or lithophytes are confined in humid, low elevation, forest scrub of Jamaica, Cuba, the Bahamas and Puerto Rico. These plants have clustered, somewhat flattened dull green to grey pseudobulbs, each with one to four, leathery or fleshy leaves at the tip. The long, much longer than the leaves, simple to sometimes branching, few-flowered inflorescence has minute bracts and is borne from the tip of the pseudobulb that becomes grooved with age. The plant, when properly grown, is almost ever



Broughtonia sanquinea 'Cherry Bates' FCC/AOS Dec 1994, NS 6.0 x 6.0 cm

blooming. The brilliant candy striped, crimson, white, yellow to pale pink flowers have slightly incurved, oblong sepals and wider petals. The broad to tubular, roundish, entire or obscurely trilobed lip has purple veins radiating out from the yellow or ivory colored base, and either a crisp or slightly notched margin. The flowers have a long, stout, footless column.

Because of the combining of the three genera into one I have the following divisions (for my clarification):

Subsection Broughtonia

Broughtonia negrilensis

Broughtonia sanquinea

Subsection Cattleyopsis

Broughtonia cubensis

Broughtonia lindenii

Broughtonia ortgiesiana

Subsection Laeliopsis

Broughtonia domingensis

Common Name or Meaning – Named after Arthur Broughton, an English botanist who worked in Jamaica in the early 1800s.

Point Scale using the Cattleya scale.

Postive hybridization characteristics:

Round, flat flower form to the flowers; wide and overlapping petals and sepals; an intensity of rosy color; flowers in a cluster at the end of a comparatively long stalk; a showy display for the size of the plant; an early seedling maturity to produce the first flowers; a tolerance of heat and sun; an ability to grow well in baskets or on slabs of cork or tree fern.

Negative hybridization characteristics:

Unusually susceptible to certain pesticide sprays, particularly malathion; may quickly rot from over watering.

Table of species hybridization and awards (OrchidWiz – Dec 2017 update)

Species marked with a * a	are used the n	nost in hybridizatio	n		Progeny				4	AOS	Awa	r <u>ds</u>				
Kew Name	Sub Genus	Habitat, Country	Temperature	Season	F1/Total	<u>FCC</u>	<u>AM</u>	НСС	<u>JC</u>	<u>AD</u>	AQ	CCE	ССМ	СНМ	CBR	Total
Broughtonia cubensis	Cattleyopsis	Cuba	Cool to warm	Winter- spring	1/2	1	1						1	1	1	5
Broughtonia domingensis	Laeliopsis	Cuba, Dominican Republic, Haiti, Puerto Rico	i warm to not	Spring- Summer	19/43			1						1	1	3
Broughtonia lindenii	Cattleyopsis	Bahamas, Cuba	Warm	Summer	8/12									2		2
Broughtonia negrilensis	Broughtonia	Jamaica	Warm to hot	Winter- spring	19/33		1	4	1				3	1	1	11
Broughtonia ortgiesiana	Cattleyopsis	Cuba	Cool to warm	Winter- spring	10/19	1	2						1	1		5
Broughtonia sanguinea*	Broughtonia	Jamaica	Warm to hot	Spring- Summer	132/987	1	70	23	4		5		7		2	112

Key: Cold -50 to 58F at night; Cold to cool - 50 to 66F at night; Cool -58 to 66F at night; Cool to warm -58 to 75F at night; Cool to Hot -58 to 85F at night; Warm -66 to 85F at night; Warm to Hot -66 to 85F at night; Hot -75 to 85F at night

All six of the known species have been used in hybridization, with **Broughtonia sanguinea** used by far the most (over 90% of the crosses) and has received the most awards. Three

species have received an FCC/AOS. Hybridization with Broughtonia started in 1956 when W. W. G. Moir crossed Caularthron bicolor with Broughtonia sanguinea to create Caultonia Alice Hart. NOTE: In the above table, total progeny includes to ALL crosses (includes intergeneric).

Caultonia Alice Hart 'Fitzroy' HCC/AOS Oct 1999, NS 4.8 x 4.8 cm



Broughtonia Progeny	<1940s	1950s	1960s	1970s	1980s	1990s	2000s	2010s
Registered in decade		6	53	44	209	266	380	111
Associated awards		20	49	98	185	198	250	33

As of the Dec 2017 edition of OrchidWiz there are 14 Broughtonia hybrids with 8 being primary hybrids and ~1000 intergeneric hybrids. The emphasis in Broughtonia breeding has been with intergeneric hybrids. From the above table on can see a constant increase in Broughtonia breeding that may have peaked in the 2000s based on registration data and maybe in associated awards (but it is still early).

Major Broughtonia Species / Crosses, excluding Broughtonia sanquinea

(based on awards and/or F1 progeny, OrchidWiz, Dec 2017 edition)

Bro. negrilensis, 19 F1 and 33 total progeny, 12 AOS awards (1 AM, 4 HCCs, 1 JC, 3 CCMs, 2 CHMs, 1 CBM)

Bro. domingensis 19 F1 and 43 total progeny, 3 AOS awards (1 HCC, 1 CHM, 1 CBR). Major progeny: **Bro. Kingston**, see below; **Bro. Hamlyn's Masterpiece**, see below.

Bro. Kingston (Bro. sanguinea x Bro. domingensis), 1959, 18 F1 and 24 total progeny, 5 AOS awards (1 AM, 2 HCCs). Major progeny: **Bro. Hamlyn's Masterpiece**, see below.

Bro. Hamlyn's Masterpiece (Bro. sanguinea x Bro. Kingston), 2004, 1 F1 progeny, 17 AOS awards (12 AMs, 3 HCCs, 1 AQ, 1 CCM)



Broughtonia negrilensis 'Paraiso' AM/AOS May 2009, NS 5.7 x 4.9 cm



Broughtonia domingensis 'Hamlyn', HCC/AOS Jun 2004, NS 3.8 x 2.9 cm



Broughtonia Kingston 'Hamlyn' AM/AOS Apr 2002, NS 4.9 x 5.4 cm



Bro. Hamlyn's Masterpiece 'Alana Marie', AM/AOS Jun 2013, NS 4.5 x 4.8 cm

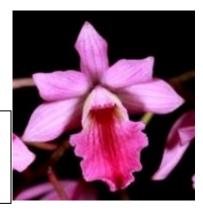
2017 Broughtonia & Progeny Genera (3+ members) Quality Awardees

(with at least a one non-Broughtonia sanguinea parent)



Ctna. Mem. Michael Davis 'Sandra Walters' AM/AOS Feb 2018, NS 5.8 x 6.3 cm (Bro. Cayman x Ctna. Marley Beckford)

> Psytonia yumanensis 'Hamlyn' AM/AOS Feb 2017, NS 3.2 x 3.5 cm (Bro. domingensis x Psy. olivacea



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Interesting Tidbits

Table below list the names of existing intergeneric crosses made with Broughtonia and the cross members that exist:

Orchid Members: 22
Flowers Per Stem: 13.5
Natural Spread: 4.3 cm.

Genus Name: Broughtonia (Bro)
Composition: Broughtonia

Pronounced: brow-TOH-nee-a

Bro Contained in 65 Genera:					
# Composition	Name	Abbrev.	Members	Flowers	Nat.Spr
2 Bro x C	Cattleytonia	Ctna	286	5.6	6.5
3 BroxCxGur	Guaricattonia	Gct	260	6.1	6.3
4 Bro x C x Gur x RI	Volkertara	Vkt	122	4.1	7.2
3 BroxCxRI	Rhyntonleya	Rly	93	3.3	7.8
2 Bro x Gur	Guaritonia	Grt	23	11.9	5.3
2 BroxL	Laelonia	Lna	17	7.0	6.5
3 BroxCxL	Laeliocatonia	Lctna	15	5.9	7.6
2 Bro x Psy	Psytonia	Pyt	13	8.5	2.9
3 B x Bro x C	Stellamizutaara	Stlma	13	4.0	7.0
3 BroxCxCau	Cautonleya	Cny	13	24.0	7.1
3 B x Bro x Gur	Broanthevola	Btv	8	12.4	5.4
2 Bro x Mcp	Myrmetonia	Myt	7	7.5	5.3
3 BroxCxE	Cycatonia	Cct	7		
4 BroxCxExGur	Ballantineara	Bln	7	12.9	5.9
4 BroxCxGurxL	Janssensara	Jan	7	8.0	6.6
Bro x Gur x L	Brolaelianthe	Blt	6	5.8	4.8
2 Bro x Cau	Caultonia	Cul	5	12.0	4.8
2 Bro x Epi	Epitonia	Eptn	5		
2 Bro x Ttma	Tetratonia	Tttna	5	10.2	3.0
3 BroxCxMcp	Cattoniphila	Ctph	5	4.8	6.5
3 Bro x Gur x Mcp	Bromecanthe	Brm	5	15.8	5.9
2 Bro x Dga	Domintonia	Dmtna	4		
3 Bro x C x Psy	Psycattleytonia	Psct	4	8.4	5.2
4 B x Bro x C x Gur	Claudehamiltonara	Cdh	4	5.6	5.8
4 Bro x C x Gur x Mcp	Wilmotteara	Wmt	4	6.4	5.5
5 B x Bro x C x Gur x RI	Fowlieara	Flr	4	5.0	6.3
6 BroxCxCauxGurxLxRl	Dodara	Doda	4		
2 B x Bro	Brassotonia	Bstna	3		
3 Bro x C x Epi	Epicatonia	Epctn	3		
3 Bro x E x Gur	Guaritoniclia	Grn	3	23.5	6.2
3 Bro x Epi x Gur	Epitonanthe	Enn	3		
4 BroxCxCauxL	Williamcookara	Wlc	3	9.5	6.5

There has been significant intergeneric crossing with this species as discussed in the main text and will not be repeated here except to point out the above list is not complete in regards to the intergeneric species that have been created to date.

Species Data Sheet

Broughtonia [Bro.] sanguinea (Sw.) R.Br. in W.T.Aiton, Hortus Kew. 5: 217 (1813)

[brow-TOH-nee-a san-GWIN-ee-ah]

A rather common epiphytic, Broughtonia sanguinea is found throughout Jamaica at altitudes from sea level to 2600 ft (800 m). The globular to almost cylindric, clustered (4 by 5 cm) pseudobulbs (may bear one to two encircling scars where the sheathing bracts where tightly attached) with 1-4 coriaceous, oblong, somewhat acute leaves (8-20 x 1.5-4.5 cm) at the pseudobulbs apex. The simple or branched inflorescence (20 to 50 cm long) is terminal, erect, with 5-18 successive flowers. Flowers showy, concolor, veiny, with good flowers having a natural spread of 4.1-4.4 cm or larger, usually pink to crimson to reddish purple (but there are other color forms: white, yellow, peach, and aquinii or strip as well as semialba), with the lip yellow at the base and purple veins. Sepals oblong-lanceolate, acute, lateral sepals broader than dorsal. Petals roundish-ellipitic. Lip (up to 2.2 long x 2.5 cm width) broad, roundish, margins erose. Column winged and anther cap white.



Broughtonia sanquinea 'Cherry Bates' FCC/AOS Dec 1994, NS 6.0 x 6.0 cm

Bro. sanguinea, the blood red Broughtonia, was one of the earliest epiphytic orchids to be cultivated in England and was introduced to Kew in 1793. The rich color of the flowers was unlike any other cultivated orchid at that time, and it was recommended that the plants be grown in the East India house with good light, warmth, and moisture. Plants were best grown in baskets or rafts that could be suspended near the glass. This advice still applies.

They usually flower in the late spring or early summer, the Peak being May through July, but reports show blooms in all months of the year.

Certain dwarf forms of the species tend to have smaller flowers that never open completely and readily self-pollinate and produce seed.

Broughtonia sanguinea has also been confused with Broughtonia ortgesiana from Cuba, so that in the older literature Cuba was also mistakenly listed as part of its distribution. We understand today that Bro. sanguinea is endemic only on Jamaica.

One hybridizer, Jim Bloom, made a specialty of line breeding several highly selected clones with superior shape and color.

The flowers of Broughtonia sanguinea are still popular for their rounded form and intense reddish coloration, characteristics that seem to remain dominant even after two or three generations of hybrid breeding. Splash-petaled types have also been popular. Such hybrid plants prefer to be mounted, still having some of the physiology of their Broughtonia ancestry, seeming to have a distinct dormancy, and requiring close attention to watering versus humidity.

Broughtonias and their hybrids are particularly susceptible to pesticides, particularly malathion, and they can stop growing and defoliate quickly. Getting the plants to grow again is difficult, and they may sit a year or two before doing anything, if they do not die first from gradual dehydration.

<u>Distribution:</u> Throughout Jamaica. The highest concentration occurring along the coast on the south side of the island near sea level. Habitats range from salt flats, bush, cacti, and on guango trees.

<u>Ecology:</u> Flowering throughout the year, peaking in May through July.

Recognition: Broughtonia sanguinea are still popular for their rounded form and intense reddish coloration.

Conservation Status: Not endangered. This species is widely distributed. Collection pressure is moderate.

Synonyms:

None

Varieties / forms:



Broughtonia sanguinea 'Karin', AM/AOS Jul 2014, NS 3.9 x 4.0 cm

Bro. sanguinea f. aurea 'Mei-Ling', HCC/AOS May 2009, NS 4.1 x 4.2 cm



Bro. sanguinea f. aurea 'Claudia', HCC/AOS May 1999, NS 4.1 x 4.0 cm



Broughtonia sanguinea 'Pink Star', AM/AOS Jun 2011, NS 4.5 x 5.2 cm

Shown in these figures are the various varietal color and patterns: white, yellow, peach, and pink are some of the colors. The splash / aquinii form is the main form with color variations resulting in semialba and 'strip' variations.



Broughtonia sanguinea



Broughtonia sanguinea 'Sentinel's Exceptional' AM/AOS Jun 2013, NS 4.1 x 4.6 cm



Jul 2014, NS 4.1 x 4.6 cm

Awards:

	FCC	AM	HCC	AQ	JC	CCM	CCE	СНМ	CBM	TOTAL
AOS	1	70	24	5	4	7			2	113
Year(s) Awarded	1994	1963-2017	1967-2013	1987-2012	1965-2000	1965-2017			1974-2012	

The JCs were for the aquinii color form, peach color, texture.

The FCC appears to be for color, form and "the flowers glow."

Breeding Characteristics:

Postive:

- Substantially reduces size of larger species and hybrids. This effect diminishes with more complex breeding, example Catleytonia Keith Roth
- In some cases, it can produce branching inflorescences
- The broad lip is usually a dominant characteristic.
- Yielding pronounced yellow "eyes" and interesting lip patterns often transmitted through more than one generation. The same pertains to the white column.
- The better the form of the Broughtonia, the better the form of the hybrid.

- * Capability of flowering sequentially from the same blooming tip over a long period in primary crosses. Capability of secondary branching, thus extending bloom period. Capability of flowering two to four times per year under good cultural conditions.
- * Broughtonias, even when no flares are visible, can produce flaring and darting on the petals of the progeny.
- * Broughtonias usually will produce vibrant, clear colors in their hybrids.
- * Hybrids are capable of flowering on very small plants. However, once flowered, give the plant at least four years to mature and produce its full complement of flowers in size, form, and number.
- * Production of multiple leads is common in hybrids, potentially producing specimen plants with impressive flower displays quickly.

Neutral effiets:

- * Elongation of the inflorescence, with some clustering at the end, is typical. Flowers can be crowded and inflorescences consistently must be supported which would become a negative.
- * The white "halo" around the column often is seen in hybrids. This can be either positive or negative, depending on subjective taste.

Negative effects:

- * Many times, the "rabbit-ear" form of Broughtonia petals is evident in its hybrids. If it creates imbalance in the flower, then it should be considered negative.
- * Colors can vary greatly from flowering to flowering.
- * Red forms of Broughtonia sanguinea open very dark and fade to medium reds during the flowering period.
- * The clasping effect of sheaths on Broughtonia pseudobulbs often is carried on into the hybrid. It is annoying because if excess water builds up, rot can occur. However, it can be attended to simply by pulling the sheath an inch below the point where the leaf is attached to the pseudo bulb.
- * Broughtonias produce more than their share of poor-growing seedlings and deformed flowers. Sometimes adding to the poor growth are necrotic leaf markings, which resemble virus but usually are not. Only about a third of these plants can be grown out of this condition through good culture. Note also that under very bright light conditions, broughtonias and their hybrids often show substantial foliage and flower pigmentation clusters. These also can be confused with some forms of virus.
- * Hybrids grown too wet or dark usually will develop black leaf markings, rot on new growth, and root loss.
- * New growths on broughtonias and their hybrids can die back suddenly. If you are growing well, don't be too alarmed. The "rot" usually stops, and new eyes soon expand and grow.

	Registr	ation Y	ear					
Broughtonia sanguinea	<1940	1950	1960	1970	1980	1990	2000	2010
Crosses Registered	0	3	35	34	193	238	359	98
Awards to Crosses Registered	0	17	39	98	177	165	218	28
F1 Progeny to Crosses Registered	0	36	212	188	296	102	128	6

There has been a constant increase in breeding with Broughtonia progeny with a peak in primary hybrids occurring in the 1980s and maybe a peak in overall breeding and awards received in the 2010s.

'Major' Hybrids, Progeny:

Top 8 awardees and top 10 number of progeny (OrchidWiz X4.1, Update: December 2017, RHS Regr Jul-Sep 2017).

NOTE: This table only list the AOS awards that have been received.

				F1	Total						Α	os	Awa	rds				Percent
Name	Parent	Parent	Year	Offspr	Offspr	Originator	FCC	AM	нсс	JC	ΑD	ΑQ	CCE	ССМ	снм	CBR	Total	Sanguinea
Bro. sanguinea				132	987		1	70	24	4		5		7		2	113	100.0%
Cattleytonia Keith Roth	C. bicolor	Bro. sanguinea	1960	190	562	Fields Orchids		3	2								5	50%
Cattleytonia Jamaica Red	Bro. sanguinea	Ctna. Keith Roth	1972	37	231	W.W.G. Moir		14	9			1					24	75%
Cattleytonia Capri	Ctna. Jamaica Red	C. intermedia	1988	74	167	Orchid Center		1	1								2	37.50%
Guaricattonia Barrel of Brandy	Gct. Nip of Brandi	Ctna. Capri	2000	21	21	D. Neuendorff											0	31.10%
Guaricattonia Drummer Boy	Gct. Little Drummer Boy	Ctna. Capri	2000	6	6	D. Neuendorff											0	31.30%
Guaricattonia Distant Drums	C. Mini Purple	Gct. Drummer Boy	2005	0	0	D. Neuendorff											0	15.60%
Guaricattonia Starrlyn	Ctna. Capri	Grt. Why Not	1996	3	10	R. Farwell		7	4								11	43.80%
Guaricattonia Brandi	Grt. Rosy Jewel	Ctna. Keith Roth	1982	42	98	Richella		1									1	50%
Guaricattonia Nip of Brandi	Gct. Brandi	Ctt. Portiata	1991	1	22	D. Neuendorff											0	25%
Guaricattonia Little Drummer Boy	Gct. Brandi	C. Drumbeat	1994	2	8	D. Neuendorff											0	25%
Guaritonia Rosy Jewel	Gur. bowringiana	Bro. sanguinea	1956	14	114	W.W.G. Moir		5	3		1			1			10	50%
Guaricattonia Brandi					See	above (in Keit	h Rot	:h Lin	e)									
Guaritonia Why Not	Gur. aurantiaca	Bro. sanguinea	1979	139	179	Stewart Inc.		22	18	1	1	1		6			49	50%
Guaricattonia Keepsake	C. Precious Stones	Grt. Why Not	1986	3	3	Stewart Orchids		9	7			1					17	25%
Guaricattonia Starrlyn					See	above (in Keit	h Rot	:h Lin	e)									
Cattleytonia Maui Maid	C. Hawaiian Variable	Bro. sanguinea	1984	62	68	R. Yagi		6	6					1			13	50%
Cattleytonia Peggy San	C. Peggy Huffman	Bro. sanguinea	1983	32	75	Stewart Inc.		1	3								4	50%
Cattleytonia Sacramento Splash	C. Little Dipper	Ctna. Peggy San	2001	1	1	Gold Country		10	9								19	25%
Tetratonia Dark Prince	Bro. sanguinea	Ttma. Canaliculata	1965	0	0	W.W.G. Moir		5	6	1				5			17	50%
Broughtonia Kingston	Bro. sanguinea	Bro. domingensis	1959	18	24	W.W.G. Moir		1	2								3	50%
Broughtonia Hamlyn's Masterpiece	Bro. sanguinea	Bro. Kingston	2004	1	1	Claude Hamilton		12	3			1		1			17	75%

The above table show five breeding lines with Cattleytonia Keith Roth being the major breeding line (one, Guaritonia Rosy Jewel, has most of their progeny when breed into the Ctna. Keith Roth line).

All crosses breed by D. Neuendorff have received their awards in Australia.

The non-Ctna. Keith Roth lines have NOT received any awards beyond the primary hybrid except when breed into the Ctna. Keith Roth line.

No hybrid has received an FCC/AOS.



Cattleytonia Keith Roth 'Excelsior' AM/AOS Jan 1968



Cattleytonia Jamaica Red 'Elsa' AM/AOS Mar 1985, NS 5.4 cm



Cattleytonia Capri 'Lea' AM/AOS Mar 1995, NS 6.5 x 7.1 cm



Guaricattonia Brandi 'O.C.' AM/AOS Oct 1993, NS 5.6 x 5.8 cm



Guaricattonia Barrel of Brandy 'My Dreams' AM/QOS Apr 2004, NS 8.2 x 8.0 cm



Guaricattonia Distant Drums 'Desire' AM/AOC Apr 2005, NS 7.4 x 7.1 cm



Guaricattonia Starrlyn 'Dajao' AM/AOC Sep 2015, NS 5.0 x 5.0 cm



Guaritonia Rosy Jewel 'Ewa' AM/AOC Dec 1968, NS 6.4 cm



Guaritonia Why Not 'Jenny Motta' AM/AOS Feb 2014, NS 5.0 x 5.3 cm



Guaricattonia Keepsake 'Jenny Motta' AM/AOS Feb 2014, NS 5.0 x 5.3 cm



Cattleytonia Maui Maid 'Ryan' AM/AOS May 2001, NS 5.6 x 6.2 cm



Cattleytonia Peggy San 'Cynosure' AM/AOS Jun 1988, NS 5.7 cm



Cattleytonia Sacramento Splash 'Sweet Emma' AM/AOS Mar 2015, NS 8.0 x 8.9 cm



Tetratonia Dark Prince 'Akiikii' AM/AOS Feb 2009, NS 3.2 x 3.0 cm



Broughtonia Kingston f. alba 'Hamlyn' AM/AOS Apr 2002, NS 4.9 x 5.4 cm



Bro. Hamlyn's Masterpiece 'Alana Marie' AM/AOS Jun 2013, NS 4.5 x 4.8 cm

2017 Broughtonia sanguinea & Progeny Genera (3+ members) AM and higher

Quality Awardees



Broughtonia sanguinea 'Rock Cottage' AM/AOS Mar 2017, NS 4.1 x 4.2 cm



Cattleytonia Happy Face 'H&R' AM/AOS Aug 2017, NS 8.2 x 9.0 cm (Ctna. Peggy San x C. Mari's Song)



Guaricattonia Sadie Rainn 'Pottsy's Tall and Proud' AM/AOS Nov 2017, NS 7.6 x 7.2 cm (Ctt. Acker's Madison x Ctna. Donovan Bennett)

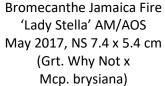


Guaricattonia Xavier Hamilton " AM/AOS Feb 2017, NS 6.4 x 6.6 cm (Ctt. Michael Sampson x Ctna. Donovan Bennett)



Myrmetonia Summertime 'Zeynep' AM/AOS May 2017, NS 4.2 x 3.3 cm (Bro. sanguinea x Mcp. tibicinis)

'Lady Stella' AM/AOS (Grt. Why Not x





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http://apps.kew.org/wcsp/qsearch.do

https://secure.aos.org/aqplus/SearchAwards.aspx

Bechtel, H.; Cribb, P.; Launert, E.; The Manual of Cultivated Orchid Species, 1992 OrchidWiz.Database x3.2, update: June 2017

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The Genus Rhyncholaelia Linnaeus, Species Plantarum ed. 2: 1347 (1763), nom. cons. Type: Rhyncholaelia [Rl.] glauca [rink-oh-LYE-lee-ah GLAW-ka]

Rhyncholaelia consists of two medium-sized sympodial epiphytes or sometimes terrestrials, often labeled as *Brassavola* where they were formerly placed. These plants are found in hot, seasonally dry, low to mid elevation, hill forests, thorn bushes and cacti (montane forest) of southern Mexico to Nicaragua. These large plants have long, compressed, club-shaped pseudobulbs, subtended by off-white sheaths, each with a solitary, erect, long, oblong, leathery to fleshy grey-green leaf. The plants have fat sheaths often containing a solitary, extremely showy flower with a strong, almost overpowering fragrance. It has a very short peduncle, the stem that rises from the axil of the leaf to the flower. Flowers are large, fleshy, showy, the sepals olive-green or yellow-green, the petals and lip cream or greenish-white. The lip is large, obscurely 3-lobed, surrounding 'funnel-shaped' the column, with a callus in the basal half. The flowers have a short, erect, footless column.

It is closely allied to both *Brassavola* and *Laelia* and the species have at various times been included in one or the other of these genera. It differs from the *Brassavola* in its broader flat leaves and much larger flowers; and from *Laelia* in its distinctive beaked fruit and greenish or whitish flowers.

Rhyncholaelia glauca 'River's End' FCC/AOS Nov 2006, NS 12.7 x 11.6 cm

CULTURE: Prefers minimum winter temperatures of 59°F (15°C), Cattleya like light conditions, and a pronounced dry period when growth is complete.

Common Name or Meaning – Greek for snout or horn and Laelia, a genus of orchids. Refers to the prominent beak separating the ovary from the rest of the flower.

Point Scale using the General point scale and sometimes the Cattleya scale.

Table of Rhyncholaelia species, hybridization or awards (OrchidWiz – Mar 2018 update)

Species marked with a * a	re used the most in hy	bridization		Progeny				A	os /	Αw	ards				
Kew Name	<u>Season</u>	F1/Total	FCC	<u>AM</u>	HCC	JC A	AD A	٩Q	CCE	ССМ	СНМ	CBR	Total		
Rhyncholaelia digbyana*	Mexico to Nicaragua	Warm	Spring-Summer	391/17106	1	14	10	1				8			34
Rhyncholaelia glauca	Mexico to Honduras	Winter	113/1038	1	13	13	1				14		1	43	

Key: Cold -50 to 58F at night; Cold to cool -50 to 66F at night; Cool -58 to 66F at night; Cool to Warm -58 to 85F at night; Warm -66 to 75F at night; Warm to Hot -66 to 85F at night; Hot -75 to 85F at night

The awards are roughly equal between the two species with both receiving an FCC and approximately the same number of AMs and HCCs. Rhyncholaelia glauca has received the most CCMs. Both *Rhyncholaelia* species have been used in hybridization with **Rhyncholaelia digbyana** used the most. Since a Species data sheet will follow on **Rhyncholaelia digbyana**, the rest of this report will focus on **Rhyncholaelia glauca**.

Below is a table providing the number of Rhycholaelia glauca crosses registered by decade.

Decade	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010
Register Crosses	0	16	8	5	1	7	11	34	36	81	139	402	298
Assoc. Awards	0	2	0	0	0	2	4	4	22	39	185	169	43

As of the Mar 2018 edition of OrchidWiz there are 1038 Rhycholaelia glauca hybrids with 113 being primary hybrids. The above table shows the interest in Rhycholaelia glauca breeding, based on registration appears to be increasing, while the number of awards appears to have peaked in the 1990s. Clearly hybridizing with Rhyncholaelia is very active today.

Crosses (top 6 awardees, 9 registered progeny crosses)

Below is a table indicating the heritage of the Rhyncholaelia glauca crosses with the six highest number of awards (all, table only show AOS awards) and the nine crosses with the most F1 progeny are indicated in bold text.

					_							Year	F1	Total	ıl	AOS Awards FCC AM HCC JC AD AQ CCE CCM CHM CBR Total												
Na	me									Parent	Parent	rear	Offspr	Offspr	Originator	FCC	AM	HCC	JC A	D/	AQ C	CCE	ССМ	СНМ	CBR	Total		
Rh	yncl	hola	elia	Aris	tocr	at				RI. glauca	RI. digbyana	1973	9	9	F. Kern		3	10								13		
																										0		
Rh	Rhyncholaelia glauca						113	1038		1	13	13	1				14		1	43								
Rh	ynca	anth	e Da	affo	dil					RI. glauca	Gur. aurantiaca	1949	70	877	Fennell		1									1		
	Rhy	ynca	ttle	anth	ne Or	an	ge N	Nugg	ett	Rlc. Manu Akaka	Ryn. Daffodil	1980	128	478	Miyamoto			2								2		
		Jack	rfow	liea	ra A	pp	leblo	osso	m	CII. Snowflake	Rth. Orange Nuggett	1992	42	44	Rod McLellan Co.		12	13	1				8			34		
		-	ncat aint		nthe	e N	1om	ilani		C. Mari's Song	Rth. Orange Nuggett	1995	34	38	C. Kumano		6	10					2			18		
			ncat lugg		nthe	F	uchs	Ora	nge	Rth. Orange Nuggett	Ctt. Viola Sanjume	1987	26	75	R. F. Orchids		2	1								3		
		,	ncat tarb		nthe t	N	etra	siri		Ctt. Kauai Starbright	Rth. Orange Nuggett	1987	18	66	V. Netrasiri			2								2		
		F	-	cati eaut	tlean y	th	e Bu	rana	l	Rth. Netrasiri Starbright	C. Netrasiri Beauty	1996	18	28	P. Buranaraktham		1	2					2			5		
			R	•	cattl gel	ea	nthe	e Bui	rana	Rth. Burana Beauty	C. Bright Angel	2003	3	3	H&R Nurseries			6								6		
	Rhy	nca	ttle	anth	ne Ye	llo	w Ir	np		Ryn. Daffodil	C. Neon	1958	30	344	Clarelen		2									2		
			ncat arat		nthe	: T	wen	tyfo	ur	Rlc. Lemon Tree	Rth. Yellow Imp	1983	30	298	Armacost		2	5								7		
		F	Rhyı	ıcat	tlear	nth	e Fr	ee S	pirit	Rth. Twentyfour Carat	C. Beaufort	1990	133	263	H&R Nurseries		9	7	1							17		
			R	•	cattl info				ve	Rth. Free Spirit	Rth. Love Sound	2002	28	30	W-C. Hung		1	1								2		
			R	•	cattl per		nthe	Da	l's	Rth. Free Spirit	C. Lana Coryell	1998	21	24	D.&B. Littman											0		



Rhyncanthe Daffodil 'Tony Jo', AM/AOS May 20019 NS 13.0 x 14.5 cm (Rl. glauca x Gur. aurantiaca)

Clearly based on the above criteria, there are two major Rhyncholaelia glauca breeding lines: Daffodil-Orange Nuggett [D-O] line (478 total progeny) and Daffodil-Yellow Imp [D-YI] line (344 total progeny). The D-O line although started after the D-YI line presently have the greatest number of progeny, but the D-YI line appears to have recently become very active. I have also included on this chart the only significant Rhyncholaelia hybrid, Rhyncholaelia Aristocrat (RI. glauca x RI. digbyana).



Rhycholaelia Aristocrat 'Ponce', AM/AOS Feb 2011, NS 12.2 x 11.4 cm

Examples of Daffodil-Orange Nuggett Line Crosses

Rhyncattleanthe [Rth.] Orange Nuggett (Rlc. Manu Akaka x Ryn. Daffodil), 1980, 128 F1 and 478 total progeny, 2 HCC/AOS awards.

Jackfowlieara Appleblossom (Caulaelia Snowflake x Rth. Orange Nuggett), 1992, Rod McLellan Co., 42 F1 and 44 total progeny, 34 AOS awards (12 AMs, 13 HCCs, 1 JC, 8 CCMs).

Rhyncattleanthe Momilani Rainbow (C. Mari's Song x Rth. Orange Nuggett), 1995, 34 F1 and 38 total progeny, 18 AOS awards (6 AMs, 10 HCCs, 2 CCMs).

Rhyncattleanthe Fuchs Orange Nuggett (Rth. Orange Nuggett x Ctt. Viola Sanjume), 1987, R.F. Orchids, 26 F1 and 75 total progeny,

Rhyncattleanthe Burana Angel (Rth. Burana Beauty x C. Bright Angel), 2003, H & R Nurseries, 3 F1 progeny, 6 HCC/AOS awards.



Rth. Orange Nuggett 'Kadaoka', HCC/AOS Feb 1981, NS 7.8 cm



Jackfolwlieara Appleblossom 'Luna', AM/AOS Apr 2017, NS 9.2 x 10.0 cm



Rth. Momilani Rainbow 'Kristin Nicole Vaz', AM/AOS Feb 2016, NS 10.3 x 10.5 cm



Rth. Fuchs Orange Nuggett 'Lea', AM/AOS Mar 2016, NS 8.2 x 8.5 cm



Rhyncattleanthe Burana Angel '#1 Best', HCC/AOS Mar 2016, NS 7.8 x 8.4 cm

Examples of Daffodil-Yellow Imp Line Crosses

Rhyncattleanthe [Rth.] Yellow Imp (Ryn. Daffodil x C. Neon), 1958, Clarelen, 30 F1 and 344 total progeny, 2 AM/AOS awards.

Rhyncattleanthe Twentyfour Carat (Rlc. Lemon Tree x Rth. Yellow Imp), 1983, Armacost, 30 F1 and 298 total progeny, 6 AOS awards (2 AMs, 4 HCCs).

Rhyncattleanthe Free Spirit (Rth. Twentyfour Carat x C. Beaufort), 1990, H&R Nursuries, 133 F1 and 263 total progeny, 17 AOS awards (9 AMs, 7 HCCs, 1 JC).

Rhyncattleanthe Shinfong Little Love (Rth. Free Spirit x Rth. Love Sound), 2002, 28 F1 and 30 total progeny, 2 AOS awards (1 AM, 1 HCC).

Rhyncattleanthe Dal's Emperor (Rth. Free Spirit x C. Lana Coryell), 1998, D. & B. Littman, 21 F1 and 24 total progeny, no AOS awards.



Rhyncattleanthe Yellow Imp 'Golden Grail', AM/AOS May 1982, NS 11.3 cm



Rth. Twentyfour Carat 'Jill' AM/AOS Jan 1993, NS 12.5 cm



Rhyncattleanthe Free Spirit 'Carmela' AM/AOS Jan 2011, NS 7.7 x 7.8 cm



Rth. Shinfong Little Love 'Ruey Yu' AM/AOS Feb 2009, NS 7.5 x 7.4 cm



Rth. Dal's Emperor 'Michelle' AM/AOC Oct 2001, NS 6.4 x 5.3 cm

Rhyncholaelia & Rhyncholaelia glauca Progeny (3+ mbrs) 2017 Quality Awardees



Rhyncattleanthe Free Love 'Glencreek' AM/AOS Mar 2017, NS 8.1 x 7.7 cm (Rlc. Love Call x Rth. Free Spirit)



Rechingerara Alexandra Kontos 'Mem. Ramon Melendez' AM/AOS Mar 2017, NS 8.3 x 7.5 cm (L. colombiana x Rth. Fuchs Orange Nuggett)



Rechingerara Marvideen Rose Jackfolwlieara Appleblossom 'Pol Poco' JC/AOS Jan 2017, NS 11.2 x 7.8 cm (Rth. Momilani Rainbow x L. colombiana)



'Luna', AM/AOS Apr 2017, NS 9.2 x 10.0 cm (CII. Snowflake x Rth. Orange Nuggett)



Stormara Jamaica Gold 'Hamlyn' HCC/AOS Mar 2017, NS 9.8 x 9.2 cm (Rth. Twentyfour Carat x Mcp. brysiana)



Stormara Mem. Ruben Sauleda 'Florida SunCoast' AM/AOS Mar 2017, NS 9.4 x 10.0 cm (Rth. Elizabeth Palmer x Mcp. Tibicinis)

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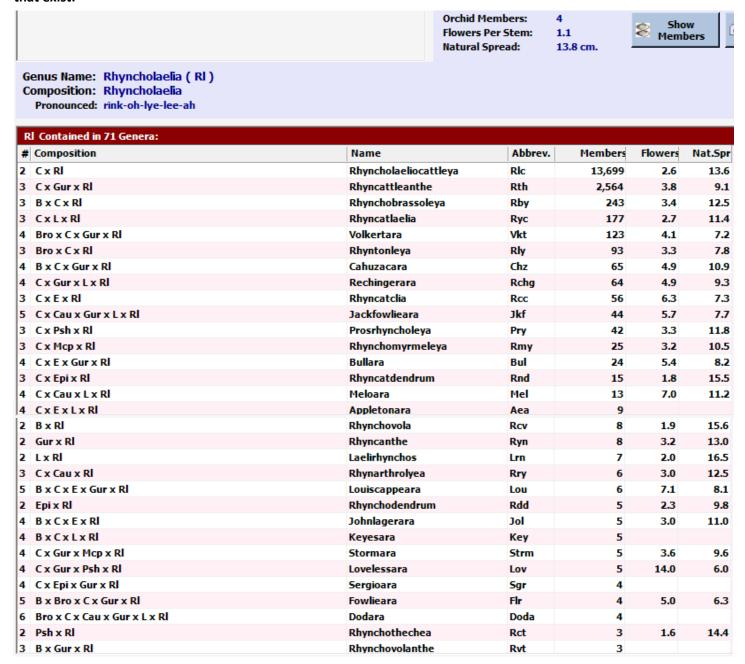
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Interesting Tidbits

Table below list the names of the existing intergeneric crosses made with Rhyncholaelia and the number of crosses that exist:



There has been significant intergeneric crossing with this species as discussed in the main text and will not be repeated here except to point out the above list is not complete in regards to the intergeneric species that have been created to date.

Species Data Sheet

Rhyncholaelia digbyana (Lindl.) Schltr., Beih. Bot. Centralbl. 36(2): 477 (1918)

[rink-oh-lye-LEE-ah dig-bee-AH-na]

A rather common epiphytic, Rhyncholaelia [RI.] digbyana is often found in large colonies on exposed tree trunks and branches in direct sunlight from southern Mexico to Honduras in acacia and cacti forests ranging from 30 to 3300 ft (10 to 1000 m). The elongated (up to 15 cm long) pseudobulbs have a single leaf at the apex. The leaf is suberect, elliptic, fleshy up to 20 cm long by 5.5 cm wide. Both the pseudobulbs and leaves are a silver gray, dark green appearance. There may be a maroon stain on the pseudobulbs, sheath and sometimes on the leaves, particularly the backs. There is usually a single flower on a short inflorescence (to 13 cm long). Flowers large, showy, very fragrant; sepals and petals (elliptic-lanceolate, obtuse) pale yellowish-green; lip (obscurely 3-lobed, very large, emarginate) white or creamy-white with a greenish hue. Callus of two or three basal keels. Column short, wider shortly above the míddle, tridentate at the apex. Pollinia 4. Capsule ellipsoid, strongly 3-winged, pedicellate.



Rhyncholaelia digbyana 'Two Moons', FCC/AOS May 2015, NS 17.0 x 16.2 cm

<u>History:</u> Introduced into cultivation from Honduras by Mrs. McDonald who gave a plant to Edward St. Vincent Digby in Dorsetshire, England. Digby flowered it in 1845 and John Lindley described it in his honor.

Ecology: Peak flowering from May through July.

Synonyms:

Brassavola digbyana Laelia digbyana

Varieties / forms:

Rhyncholaelia digbyana f. fimbripetala – petal edges fimbriate, but not to the degree found on the lip.

Awards:

	FCC	AM	HCC	AQ	JC	CCM	CCE	СНМ	CBM	TOTAL
AOS	1	14	9	1	1	4		1	3	34
Year(s) Awarded	2015	1965-2017	1989-2016	2004	1970	1976-2007		1981	1964-1977	

The JC "recognized for its unusual two-flowered form on three of the four inflorescences"

The FCC "Six incredible, massive flowers and two buds well-presented on six inflorescences"

Breeding Characteristics:

There are over 17,000 hybrids with many VERY successful crosses. Some of the breeding characteristics are:

- Imparts larger-than-normal flower size to its hybrids. The size is not necessarily found in the primary hybrids but mainly in those crosses several generations removed.
- The fringed lip is dominant through many generations.
- Very good vigor to its hybrids
- Resistance to disease
- With yellow cattleyas, it generally imparts freedom from flower deformity
- Reduces the flower count per pseudobulb
- A short peduncle (the flower stem)

- A delightful fragrance
- Common white orchid scale seems to prefer brasso hybrids
- Picotee-edged cattleyas

RI. digbyana						Regist	ration [Decade					
	<1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010
Registered Crosses	6	78	206	389	439	572	878	1206	1341	2156	2421	4405	3009
Associated Awards	1	14	24	28	41	83	246	655	490	870	1027	1252	313

'Major' Hybrids Heritage Chart with AOS Awards (Top 9 Awardees and top 12 F1 Progeny highlighted green, per OrchidWiz 4.2, March 2018 update):

inginighted green, per				F1	Total		AOS Awards											
Name	Parent	Parent	Year	Offspr	Offspr	Originator	FCC	AM	нсс	JC	AD	AQ	CCE	ССМ	СНМ	CBR	Total	
Rhyncholaelia digbyana				391	17106												0	
Rhyncholaeliocattleya Digbyano-Warneri		C. warneri	1902	21	4997	Chamberlain											0	
Rhyncholaeliocattleya Hannibal	Rlc. Digbyano- Werneri	C. Fabia (1894)	1920	7	4953	Sir George Holford											0	
Rhyncholaeliocattleya Hartland	Rlc. Hannibal	C. Leda (1900)	1933	97	4936	S. Low	1	2	1								4	
Rhyncholaeliocattleya Norman's Bay	Rlc. Harland	C. Ishtar	1946	330	4490	S. Low	2	9	7	1				1			20	
Rhycholaeliocattleya Memoria Crispin Rosal	C. Bonanza (Bracey)	Rlc. Norman's Bay	1959	243	908	Bracey		26	30								56	
Rhycholaeliocattleya Oconee	C. Belle of Celle	Rlc. Norman's Bay	1976	274	1158	Wm. Kirch Orchids		4									4	
Rhyncholaeliocattleya Cheah Bean- Kee	C. Los Angeles	Rlc. Norman's Bay	1964	2	965	Wm. Kirch Orchids		1									1	
Rhyncholaeliocattleya Waianae Flare	C. John Harry Jenkins	Rlc. Cheah Bean-Kee	1980	5	955	Miyamoto											0	
Rhyncholaeliocattleya Toshie Aoki	See below																0	
Rhyncholaeliocattleya Mrs. J. Leemann	RI. digbyana	C. dowiana	1902	169	8595	Maron		1									1	
Rhyncholaeliocattleya Minerva (1910)	Rlc. Mrs. J. Leemann	C. dowiana	1910	8	2263	Lambeau											0	
Rhyncholaeliocattleya Llewellyn	Rlc. Minerva (1910)	C. Mrs. Medo	1937	26	2250	Manda											0	
Rhyncholaeliocattleya Everest (1914)	Rlc. Mrs. J. Leemann	C. Canhamiana	1914	3	1699	Sanders [St. Albans]											0	
Rhyncholaeliocattleya Nanette	Rlc. Everest (1914)	C. Annette (1919)	1932	83	1696	S. Low		4						1			5	
Rhyncholaeliocattleya Blanche Okamoto	C. Canberra	Rlc. Nanette	1952	14	1355	Kodama			1								1	
Rhyncholaeliocattleya Llebanche	Rlc. Llewellyn	Rlc. Blanche Okamoto	1975	3	1205	Miyamoto											0	
Rhyncholaeliocattleya Faye Miyamoto	C. Amber Glow	Rlc. Llebanche	1975	43	1202	Miyamoto											0	
Rhyncholaeliocattleya Toshie Aoki	Rlc. Faye Miyamoto	Rlc. Waianae Flare	1980	224	950	Miyamoto		7	6	1							14	
Rhyncholaeliocattleya Sofrano	Rlc. Mrs. J. Leemann	C. Iridescens	1917	5	5882	Sanders [St. Albans]	1										1	
Rhyncholaeliocattleya Zante	Rlc. Sofrano	C. Luminosa	1929	3	4019	CharlesWorth Ltd.											0	
Rhyncholaeliocattleya Midenette	Rlc. Zante	C. Mrs. Medo	1941	10	2743	L. Serman Adams											0	
Rhyncholaeliocattleya Xanthette	See below																0	
Rhyncholaeliocattleya Mithra	See below																	
Rhyncholaeliocattleya The Baroness	Rlc. Mrs. J. Leemann	C. Ophir	1913	46	6434	Bruno Schroder											0	

Rhyncholaeliocattleya Xanthea	Rlc. The Baroness	Rlc. Sofrano	1928	21	4641	CharlesWorth Ltd.								0
Rhyncholaeliocattleya Xanthedo	Rlc. Xanthea	C. Mrs. Medo	1939	26	2764	CharlesWorth Ltd.	1							1
Rhyncholaeliocattleya Xanthette	Rlc. Midenette	Rls. Xanthedo	1948	57	2698	L. Serman Adams		4	1	1				6
Rhyncholaeliocattleya Fortune	C. Memoria Albert Heinecke	Rlc. Xanthette	1963	183	1580	Stewart Inc.		6	6					12
Rhyncholaeliocattleya Goldenzelle	Rlc. Fortune	C. Horace	1982	217	339	J. Hanes		14	15	1		1		31
Rhyncholaeliocattleya Dorothy Drury- Lowe	Rlc. Xanthea	C. Lembera	1938	2	2303	CharlesWorth Ltd.								0
Rhyncholaeliocattleya Jane Helton	Rlc. Dorothy Drury-Lowe	Rlc. Xanthea	1950	106	2288	McDade		5	3					8
Rhyncholaeliocattleya Glorious Gold	See below													0
Rhyncholaeliocattleya Lemon Tree	Rlc. Jane Helton	C. Beaufort	1970	55	471	Stewart Inc.			4					4
Rhyncholaeliocattleya Twentyfour Carat	See below													0
Rhyncholaeliocattleya Malvern	Rlc. The Baroness	C. Canberra	1943	72	697	Black & Flory		1	2					3
Rhyncholaeliocattleya Malworth	C. Charlesworthii	Rlc. Malvern	1963	177	358	Jones & Scully	1	3	1					5
Rhyncholaeliocattleya Amber	Rlc. The Baroness	C. dowiana	1920	9	1637	Bruno Schroder								0
Rhyncholaeliocattleya Mithra	Rlc. Amber	RIc. Sofrano	1926	4	1618	Bruno Schroder								0
Rhyncholaeliocattleya Golden Myth	Rlc. Mithra	C. Golden Gleam	1949	48	1566	McDade			2					2
Rhyncholaeliocattleya Buttercup	See below													
Rhyncholaeliocattleya Yellow Hammer	Rlc. Mrs. J. Leemann	C. Orange Blossom	1928	9	511	Alexander								0
Rhyncholaeliocattleya Manu Akaka	C. Triumphans	Rlc. Yellow Hammer	1951	5	497	H. Yamamoto								0
Rhyncattleanthe Orange Nuggett	See below													0
Rhyncholaeliocattleya Mrs. M. Gratrix (1899)	RI. digbyana	C. cinnabarina	1989	16	3139	Veitch								0
Rhyncholaeliocattleya Cooksonii	Rlc. Mrs. M. Gratrix (1899)	C. dowiana	1909	9	2573	CharlesWorth Ltd.								0
Rhyncholaeliocattleya Tucuman	Rlc. Cooksonii	C. Rhoda (1908)	1917	9	2564	Lacroze								0
Rhyncholaeliocattleya Tucurano	Rlc. Tucuman	Rlc. Sofrano	1929	5	1629	CharlesWorth Ltd.								0
Rhyncholaeliocattleya Zanturano	Rlc. Tucurano	Rlc. Zante	1943	20	1623	CharlesWorth Ltd.								0
Rhyncholaeliocattleya Glorious	C. Solario	Rlc. Zanturano	1951	27	1334	McDade								0
Rhyncholaeliocattleya Glorious Gold	Rlc. Jane Helton	Rlc. Glorious	1961	6	1284	Rivermont								0
Rhyncholaeliocattleya Pink Surprise	Rlc. Glorious Gold	C. loddigesii	1978	5	1271	A. Tharp								0
Rhyncholaeliocattleya Waikiki Gold	Rlc. Pink Surprise	C. forbesii	1978	208	1238	Miyamoto		3	4					7
Rhyncholaeliocattleya Peach Cobbler	Rlc. Waikiki Gold	C. guttata	1983	11	113	R.T. Fukumura			2					2
Rhyncholaeliocattleya Waianae Leopard	Rlc. Peach Cobbler	C. Penny Kuroda	1991	57	92	Miyamoto			5					5
Rhyncholaeliocattleya Durigan	Rlc. Waianae Leopard	C. Corcovado	2005	5	5	J. Durigan		7	9		1			17
Rhyncholaeliocattleya Ferrieres	RI. digbyana	C. Dionysius	1942	14	2650	Chassaing							Ш	0

Rhyncholaeliocattleya Deesse	Rlc. Ferrieres	C. Lamartine	1947	172	2629	Vacherot-		2	3						5
Rhyncholaeliocattleya Mount Hood	Rlc. Deesse	C. Claris	1962	186	535	Lecoufle Beall		10	16			1			27
Rhyncholaeliocattleya Mount Anderson	C. Bow Bells	Rlc. Deesse	1962	66	535	Beall		18				_	1		30
Rhyncholaeliocattleya Pastoral	C. Mademoiselle Louise Pauwels	Rlc. Deesse	1961	174	469	R. Altenburg	1	4	2				5		12
Rhyncholaeliocattleya Lester McDonald	C. Ann Follis	RI. digbyana	1963	41	266	Rod McLellan Co.	1	2	3	1 3	L				8
Rhyncholaeliocattleya Greenwich	C. Ann Follis	Rlc. Lester McDonald	1968	42	131	Rod McLellan Co.		7	5						12
Rhyncholaeliocattleya Digbyano-mossiae	RI. digbyana	C. mossiae	1889	76	3594	Veitch									0
Rhyncholaeliocattleya Snowdon	Rlc. Digbyano- mossiae	C. Isabel Sander (1912)	1920	2	1168	Sanders [St. Albans]									0
Rhyncholaeliocattleya Headon	See below														0
Rhyncholaeliocattleya Heatonensis	RI. digbyana	C. Hardyana (1896)	1902	38	3304	CharlesWorth Ltd.									0
Rhyncholaeliocattleya Headon	Rlc. Snowdon	Rlc. Heatonensis	1952	2	1166	Unknown									0
Rhyncholaeliocattleya Nacouchee	Rlc. Headon	C. Estelle (1931)	1952	46	1163	Armacost		4	2				2		8
Rhyncholaeliocattleya California Girl	C. Horace	Rlc. Nacouchee	1983	54	74	Stewart Inc.									0
Rhyncholaeliocattleya Lisa Taylor Gallis	Rlc. California Girl	C. Beaufort	2000	9	9	R. Takafuji		4	6						10
Rhyncholaeliocattleya Primate	See below														0
Rhyncholaeliocattleya Imperatrice de Russie	RI. digbyana	C. mendelii	1899	38	2110	Maron									0
Rhyncholaeliocattleya Primrose	Rlc. Imperatrice de Russie	C. Primrose	1930	2	1489	Sanders [St. Albans]									0
Rhyncholaeliocattleya Primate	Rlc. Primrose	RIc. Heatonensis	1941	18	1487	Sanders [St. Albans]		1							1
Rhyncholaeliocattleya Buttercup	Rlc. Primate	Rlc. Golden Myth	1961	94	1185	Rivermont		1	7						8
Rhyncattleanthe Bouton D'Or	Ctt. Wolteriana	Rlc. Buttercup	1968	136	636	E. J. Small		2	5				3		10
Rhyncattleanthe Love Sound	C. briegeri	Rth. Bouton D'Or	1987	147	334	Dogashima		5	4						9
Rhyncattleanthe Shinfong Little	See below														0

Rhyncholaelia digbyana has 391 F1 progeny and of these 98 have progeny. The above table only list 9 F1s, ranging from the most F1 progeny only (Rlc. Mrs. J. Leeman) to 20th (Rlc. Ferrieres). In regards to awards received only AOS awards are in the above table.

I'm sure/know that I have missed some major crosses, but with over 17,000 total crosses I have to limit my selection some how/where.

'Major' Hybrids, Rlc. Digbyano-Warneri – Rlc. Norman's Bay line:

Ric. Norman's Bay (Ric. Hartland x C. Ishtar), 1946, S. Low, 330 F1 and 4490 total progeny, 20 AOS awards (2 FCCs, 9 AMs, 7 HCCs, 1 JC, 1 CCM). Major progeny (not listed below): Ric. Bryce Canyon (Ric. Nacost x Ric. Patricia Purves), 1973, Armacost, 156 F1 and 467 total progeny, 2 AOS awards (1 AM, 1 HCC); Ric. Chunyeah (Ric. Tassie Barbero x Ric. Kuan-Miao Chen), 1991, Lai Teng-Hsiung, 147 F1 and 246 total progeny, 4 AOS awards (3 AMs, 1 CCM); Ric. Amy Wakasugi (C. Bonanza (Bracey) x Ric. Herons Ghyll), 1966, Wakasugi, 73 F1 and 130 total progeny, 21 AOS awards (10 AMs, 11 HCCs); Ric. Chia Lin (Ric. Oconee x Ric. Maitland), 1989, Su Ping-Ho, 191 F1 and 239 total progeny, 8 AOS awards (6 AMs, 1 JC, 1 CCM).

RIc. Oconee (C. Belle of Celle x Rlc. Norman's Bay), 1976, Carter & Holmes, 274 F1 progeny, 1158 total progeny, 4 AM/AOS awards. Major progeny (not listed elsewhere in this report): RIc. Chia Lin, see above; RIc. Owen Holmes (Rlc. Harlequin (1960) x Rlc. Oconee), 1982, Carter & Holmes, 57 F1 and 89 total progeny, 10 AOS awards (6 AMs, 4 HCCs); RIc. Edisto (C. Maria Ozzella x Rlc. Oconee), 1982, Carter & Holmes, 54 F1 and 70 total progeny, 8 AOS awards (6 AMs, 2 HCCs); Rth. Cherry Suisse (Ctt. Chocolate Drop x Rlc. Oconee), 1991, M. Pendleton, 22 F1 and 24 total progeny, 14 AOS awards (1 FCC, 10 AMs, 3 HCCs); RIc. Sanyung Ruby (Rlc. Waianae Coast x Rlc. Chia Lin), 1995, W-C. Hung, 42 F1 and 50 total progeny, 1 AM/AOS award.

RIc. Memoria Crispin Rosales (C. Bonanza (Bracey) x Rlc. Norman's Bay), 1976, Bracey, 243 F1 and 908 total progeny, 56 AOS awards (26 AMs, 30 HCCs). Major progeny (not listed elsewhere in this report): RIc. Lucky Strike (Rlc. Memoria Crispin Rosales x C. Bonanza), 1966, T. M. Sanders, 73 F1 and 193 total progeny, 3 HCC/AOS awards; RIc. Sweet Anniversary (Rlc. Pamela Farrell x Rlc. Memoria Crispin Rosales), 1990, Dogashima, 40 F1 and 60 total progeny, no AOS awards; RIc. Jane Fumiye (Ctna. Keith Roth x Rlc. Lucky Strike), 1987, F. Aisaka, 3 F1 and 5 total progeny, 7 AOS awards (3 AMs, 4 HCCs).



Rlc. Norman's Bay 'Lucile' FCC/AOS Nov 1964



Rhyncattleanthe Oconee 'Wine Red Fall' AM/AOS Sep 2001, NS 14.5 x 15.0 cm



Rlc. Memoria Crispin Rosales 'Victory' AM/AOS Sep 2001, NS 17.2 x 18.2 cm

'Major' Hybrids, Rlc. Mrs. J. Leeman line:

RIc. Toshie Aoki (Rlc. Faye Miyamoto x Rlc. Waianae Flare), 1980, Miyamoto, 224 F1 and 950 total progeny, 14 AOS awards (7 AMs, 6 HCCs, 1 JC). Major progeny: Rlc. Ann Cleo (C. Wayndora x Rlc. Toshie Aoki), 1990, Orchid Center, 2 F1 progeny, 6 AOS awards (4 AMs, 1 HCC, 1 JC); Rlc. Little Toshie (C. Beaufort x Rlc. Toshie Aoki), 1994, Orchid Center, 85 F1 and 93 total progeny, 13 AOS awards (5 AMs, 8 HCCs); Rlc. Chunyeah (Rlc. Tassie Barbero x Rlc. Kuan-Miao Chen), 1991, Lai Teng-Hsiung, 147 F1 and 246 total progeny, 4 AOS awards (3 AMs, 1 CCM); Rlc. Williette Wong (Rlc. Tassie Barbero x Rlc. Toshie Aoki), 1990, Edward Wong, 32 F1 and 38 total progeny, 3 AOS awards (1 AM, 2 HCCs).

Ric. Fortune (C. Memoria Albert Heinecke x Rlc. Xanthette), 1963, Stewart Inc., 183 F1 and 1580 total progeny, 12 AOS awards (6 AMs, 6 HCCs). Major progeny: Rlc. Goldenzelle, see below; Rlc. Ports of Paradise (Rlc. Fortune x Rl. digbyana), 1970, Stewart Inc., 85 F1 and 151 total progeny, 14 AOS awards (2 FCCs, 3 AMs, 8 HCCs, 1 CCM); Rlc. Young Kong (Rlc. Green Fantasy x Rlc. Tassie Barbero), 1991, Lai Teng-Hsiung, 19 F1 and 10 total progeny, 3 AOS awards (1 FCC, 1 AM, 1 HCC); Rlc. Chunyeah, see above; Rlc. Haw Yuan Gold (Rlc. Lemon Tree x Rlc. Tassie Barbero), 1997, Haw Yuan, 74 F1 and 88 total progeny, 1 AM/AOS award; Rlc. Apricot Flare (Rlc. Fortune x Rlc. Waianae Queen), 1983, 43 F1 and 112 total progeny, 3 AOS awards (2 AMs, 1 HCC).

Ric. Goldenzelle (Ric. Fortune x C. Horace), 1982, J. Hanes, 217 F1 and 339 total progeny, 31 AOS awards (14 AMs, 15 HCCs, 1 JC, 1 CCM). Major progeny: Ric. Dal's Horizon (Ric. Waikiki Sunset x Ric. Goldenzelle), 1998, D. B. Littman, 33 F1 and 39 total progeny, no AOS awards.

Ric. Malworth (C. Charlesworthii x Rlc. Malvern), 1963, Jones & Scully, 177 F1 and 358 total progeny, 5 AOS awards (1 FCC, 3 AM, 1 HCC). Major progeny: Ric. Luna Jaune (Rlc. Malworth x C. Beaufort), 1992, K. Shimatani, 29 F1 progeny, 5 AOS awards (3 AMs, 2 HCCs); Ric. Lorraine Malworth (C. Lorraine Shirai x Rlc. Malworth), 1971, Jones & Scully, 22 F1 and 50 total progeny, 4 AOS awards (1 FCC, 3 AMs)



Rlc. Toshie Aoki 'Pizazz' AM/AOS Aug 2017, NS 14.2 x 13.5 cm



Rlc. Fortune 'Grandview' AM/AOS Dec 1976, NS 16.0 cm



Rlc. Goldenzelle 'Sau-Ping Cheung' AM/AOS Mar 2017, NS 17.0 x 16.2 cm



Rlc. Malworth 'Orchidglade' FCC/AOS Feb 1969, NS 14.0 cm

'Major' Hybrids, Rlc. Mrs. M. Gratrix, Rlc. Lester McDonald and Rlc. Heatonensis Lines:

RIc. Waikiki Gold (Rlc. Pink Surprise x C. forbesii), 1978, Miyamoto, 208 F1 and 1238 total progeny, 7 AOS awards (3 AM2, 4 HCCs). Major progeny: Rlc. Durigan, see below; Rlc. Golden Tang (Rlc. Waikiki Gold x Bc. Richard Mueller), 1989, H & R Nurseries, 38 F1 and 41 total progeny, 20 AOS awards (10 AMs, 10 HCCs); Rlc. Haw Yuan Beauty (Rlc. Haw Yuan Moon x C. Mari's Song), 1997, Haw Yuan, 50 F1 and 55 total progeny, 4 AOS awards (1 AM, 3 HCCs); Rlc. Erin Kobayashi (Rlc. Meditation x Rlc. Waikiki Gold), 1980, W. A. Chang, 138 F1 and 228 total progeny, 6 AOS awards (4 AMs, 2 HCCs); Rlc. Waianae Leopard (Rlc. Peach Cobbler x C. Penny Kuroda), 1991, Miyamoto, 57 F1 and 92 total progeny, 5 HCC/AOS awards.

RIc. Durigan (RIc. Waianae Leopard x C. Corcovado), 2005, J. Durigan, 5 F1 progeny, 17 AOS awards (7 AMs, 9 HCCs, 1 AQ). No major progeny.

RIc. Greenwich (C. Ann Follis x RIc. Lester McDonald), 1968, Rod McLellan Co., 42 F1 and 131 total progeny, 12 AOS awards (7 AMs, 5 HCCs). Major progeny: RIc. Chinese Bronze (C. bicolor x RIc. Chinese Jade), 1981, Stewart Inc., 18 F1 and 30 total progeny, 5 AOS awards (1 AM, 4 HCCs); RIc. Orglade's Seaspray (RIc. Memoria Helen Brown x RIc. Greenwich), 1983, Jones & Scully, 13 F1 and 18 total progeny, 1 HCC/AOS award; RIc. Chinese Jade (C. guttata x RIc. Greenwich), 1973, Stewart Inc., 10 F1 and 42 total progeny, 3 HCC/AOS awards.

RIc. Lisa Taylor Gallis (RIc. California Girl x C. Beaufort), 2000, R. Takafuji, 9 F1 progeny, 10 AOS awards (4 AMs, 6 HCCs). No major progeny.



Rlc. Waikiki Gold 'Sentinel's Tricolor' AM/AOS Jul 2017, NS 10.0 x 10.5 cm



Rlc. Durigan 'Orion' AM/AOS Nov 2014, NS 11.6 x 13.1 cm



Rlc. Greenwich 'Killarney' AM/AOS Jul 2009, NS 17.4 x 19.0 cm



Rlc. Lisa Taylor Gallis 'Nora' AM/AOS Dec 2012, NS 9.3 x 9.7 cm

'Major' Hybrids, Rlc. Ferrieres Line:

RIc. Deesse (Rlc. Ferrieres x C. Lamartine), 1947, Vacherot-Lecoufle, 172 F1 and 2629 total progeny, 5 AOS awards (2 AMs, 3 HCCs). Major progeny (not listed below): **Rlc. Erin Kobayashi**, listed above; **Rlc. Meditation** (Rlc. Deesse x C. Fedora), 1974, W. Nishimoto, 105 F1 and 537 total progeny, 3 AOS awards (2 AMs, 1 HCC).

Ric. Mount Hood (Ric. Deesse x C. Claris), 1962, Beall, 186 F1 and 535 total progeny, 27 AOS awards (10 AMs, 16 HCC, 1 AQ). Major progeny: Ric. Mount Sylvan (Ric. Sylvia Fry x Ric. Mount Hood), 1984, B. Schwartz, 31 F1 and 54 total progeny, no AOS awards; Ric. November Bride (C. Ursula Adam x Ric. Mount Hood), 1967, Rod McLellan Co., 18 F1 and 38 total progeny, 5 AOS awards (1 AM, 4 HCCs); Ric. Pink Empress (Ric. Mount Hood x Ric. Bryce Canyon), 1997, W. H. Huang, 15 F1 and 16 total progeny, 2 AM/AOS awards.

RIc. Mount Anderson (C. Bow Bells x Rlc. Deesse), 1962, Beall, 66 F1 and 535 total progeny, 30 AOS awards (18 AMs, 11 HCC, 1 CCM). Major progeny: Rlc. Island Charm (Rlc. Donna Kimura x C. intermedia), 1987, Orchid Center, 36 F1 and 69 total progeny, 7 AOS awards (3 AMs, 2 HCCs, 2 JCs); Rlc. Donna Kimura (C. Princess Bells x Rlc. Mount Anderson), 1970, Kodama, 78 F1 and 276 total progeny, 9 AOS awards (7 AMs, 2 HCCs); Rlc. Mahina Yahiro (Rcl. Meditation x Rlc. Donna Kimura), 1986, J.K.H.Yee, 53 F1 and 68 total progeny, 6 AOS awards (4 AMs, 1 JC, 1 CCM); Rlc. Pamela Hetherington (C. Paradisio x Rlc. Mount Anderson), 1970, Stewart Inc., 102 F1 and 187 total progeny, 6 AOS awards (1 FCC, 2 AMs, 1 HCC, 2 CCMs).

Ric. Pastoral (C. Mademoiselle Louise Pauwels x Rlc. Deesse), 1961, R. Altenburg, 174 F1 and 469 total progeny, 12 AOS awards (1 FCC, 4 AMs, 2 HCCs, 5 CCMs). Major progeny: Rlc. Turandot (C. Bob Betts x Rlc. Pastoral), 1968, R. Altenburg, 25 F1 and 42 total progeny, 1 HCC/AOS award; Rlc. Ernesto Alavarce (Rlc. Pastoral x C. Nerto), 2002, R. Altenburg, no progeny, no AOS awards; Rlc. William Farrell (C. Helen Veliz x Rlc. Llano), 1980, Armacost, 48 F1 and 93 total progeny, 6 AOS awards (5 HCCs, 1 CCM); Rth. Love Passion (Rlc. William Farrell x Ctt. Trick or Treat), 1990, Dogashima, 26 F1 and 28 total progeny, 5 AOS awards (1 AM, 1 CCE, 3 CCMs).



Rlc. Deesse 'French Lace' AM/AOS Jan 1964



Rlc. Mount Hood 'Peppermint Stick' AM/AOS Oct 1963



RIc. Mount Anderson 'Pink Cloud' AM/AOS Jan 1983, NS 17.5 cm



Rlc. Pastoral 'Innocence' FCC/AOS Nov 2008, NS 17.8 cm

Rhyncholaelia digbyana Only Progeny (3+ mbrs, AM+) 2017 Quality Awardees Rhyncholaeliocattleya [Rlc.], 1 FCC and 11 AMs awarded (Select group below, highest score)



Rlc. Valley Isle Charm
'Exotic Orchids' FCC/AOS
Jun 2017, NS 18.0 x 19.0 cm
(Rlc. Memoria Crispin Rosales
x Rlc. James Clarkson)



Rlc. Toshie Aoki 'Pizazz' AM/AOS Aug 2017, NS 14.2 x 13.5 cm (Rlc. Faye Miyamoto x Rlc. Waianae Flare)



Rlc. Heaven's Gate
'Crystelle' AM/AOS
Jan 2018, NS 13.8 x 14.5 cm
(Rlc. Leonard Smith x
Rlc. Carolina Splendor)



Rlc. Matthew Koch 'Gold Country' AM/AOS Jul 2017, NS 6.6 x 6.6 cm (Rlc. Sunday x C. Bright Angel)



Rlc. Sierra Garnet 'Nevada City' AM/AOS Sep 2017, NS 11.9 x 12.0 cm (C. Sierra Doll x Rlc. Oconee)



Rlc. Cloud's Candy Corn 'Odom's Orchids' AM/AOS Jun 2017, NS 11.6 x 11.6 cm (Rlc. Waianae Leopard x C. Landate)



Rlc. Jacqueline DeMoss 'Alejandro' AM/AOS Feb 2017, NS 18.8 x 18.0 cm (Rlc. Burdekin Wonder x C. Ruth Gee)



Rlc. Sueno de Amor 'Lea' AM/AOS Oct 2017, NS 16.6 x 18.7 cm (Rlc. California Girl x Rlc. Princess Teresa)



Rlc. Waikiki Gold 'Sentinel's Tricolor' AM/AOS Jul 2017, NS 10.0 x 10.5 cm (Rlc. Pink Surprise x C. forbesii)



Rlc. Goldenzelle 'Sau-Ping Cheung' AM/AOS Mar 2017, NS 17.0 x 16.2 cm (Rlc. Fortune x C. Horace)



Rlc. Gene Crocker 'Grass Valley' AM/AOS Apr 2017, NS 9.7 x 8.3 cm (Rlc. Newberry Delight x Rlc. Newberry Promise)



Rlc. Dendi's Gem 'Yes, Dear' AM/AOS Jul 2017, NS 9.0 x 9.0 cm (Rlc. SunCoast Sunspots x C. Jungle Gem)

Rhyncholaeliocattleya [Rlc.] cont'd, Rhyncattleanthe [Rth.], Rhyntonleya [Rly.], Rechingerara [Rchg.], Rhyncatclia [Rcc.], Bullara [Bul.], Rhynchovola [Rcv.], 1 FCC and 9 AOS awardees (Select group below, highest score)



Rlc. Oro Tico 'Carlos Solis' AM/AOS Mar 2017, NS 14.3 x 15.0 cm (Rlc. Memoria Ray Hasbach x Rlc. Goldenzelle)



Rhyncattleanthe Mahuea 'Melencia' AM/AOS Dec 2017, NS 8.1 x 7.2 cm (Rlc. Firey Leopard x Rth. Martha Clarke)



Rth. Memoria Luciano Pavarotti 'Valley Isle' AM/AOS Jun 2017, NS 11.5 x 11.8 cm (Rth. Memoria Mario Lanza x Rlc. Murray Spencer)



Rth. Krull's Golden Horses 'Krull-Smith' AM/AOS Feb 2017, NS 10.0 x 11.0 cm (Rth. Tangerine Horses x Rth. Carolina Golden D'Or)



Rth. Circle of Love 'Diamond Orchids' FCC/AOS Apr 2017, NS 8.8 x 8.0 cm (Sc. Circle of Life x Rth. Pure Love)



Rhyntonleya Rasberry Lemonade Rechingerara Honky Tonk Woman 'Syzygy' HCC/AOS Jan 2017, NS 8.3 x 8.5 cm (Ctna. Maui Maid x Rlc. Doctor Joe Walker)



'Crownfox' AM/AOS Mar 2017, NS 9.9 x 9.9 cm (L. undulata x Rth. Bouton D'Or)



Rhyncatclia Rossy Ochoa 'PAOS Festival 2017' HCC/AOS Apr 2017, NS 10.0 x 11.0 cm (Rlc. Waianae Leopard x E. Ginger Snap)



Bullara Kyoguchi Gold 'SVO Delight' HCC/AOS Mar 2017, NS 5.3 x 5.0 cm (Gcy. Kyoguchi x Rth. Gold Medallions)



Rhynchovola David Sander 'Isabel's Legend' AM/AOS Jul 2017, NS 15.5 x 18.4 cm (B. cucullata x Rl. digbyana

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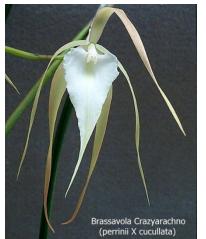
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Award Descriptions

Brassavola [B.] Crazyarachno – Quality Award Description

(B. perrinii x B. cucullata)

Nineteen stellate flowers and twelve buds on nine arching inflorescences; sepals and petals light bronze green, sepals and petals lanceolate, petals narrower than sepals; lip light white, acutely triangular, light greenish spot under column; column and anther cap white; substance firm; texture satiny.

Broughtonia [Bro.] Jamaica Jester – Quality Award Description

(Bro. negrilensis x Bro. ortgiesiana)

Sixty-four stellate flowers on two multi-branched

inflorescences; flowers white overlaid magenta, veins darker magenta; lip tubular, ruffled, overlaid magenta, dark magenta veins, concentrated centrally, callus light yellow-rose, callus area void of overlay; substance good; texture crystalline.



Rhyncholaeliocattleya [Rlc.] Digbyano-mossiae – Cultural Award Description

(Rl. digbyana x C. mossiae)

Nineteen stellate light pink flowers and three buds on twelve inflorescences, blemish free grey-green foliage in a 6 inch [15 cm] clay pot; sepals lanceolate; petals obovate; lip tubular, distally broad magenta mid vein, basally yellow; column and anther cap light pink; substance good; texture diamond dust.

Guaricattonia [Gct.] Aussie Brandy – Quality Award

Description

(Ctna. Peggy San x Gct. Splash of Brandy)

Seven full peloric flowers on one arching inflorescence; sepals carmine; petals white light carmine overlaid basal edges, yellow streak basally central, dark carmine heavy overlaid distally; lip light carmine, distally heavy dark carmine overlaid, basally yellow overlaid with two dark carmine veins centrally; column creamy carmine, overlaid dark carmine distally; anther white; substance firm; texture crystalline.





Rhyncholaeliocattleya [Rlc.] Heatonensis – Quality Award Description (Rl. digbyana x C. Hardyana)

Five stellate light lavender flowers and one bud on an erect inflorescence; sepals lancelolate; petals obovate; lip tubular, deeply ruffled distally, lavender transitioning to yellow in throat, tubular, deeply ruffled distally; column creamy white; anther cap creamy yellow; substance firm; texture matte.