Cattleya Species Offspring Inherited Strengths and Weakness, and Bloom Time

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| Cattleya | Breeding Strengths/Weakness | Flowering Season – Northern Hemisphere |
| *aclandiae* | Hybrids typically produce small growths and flowers are somewhat cupped. Species spots and flower color are usually recessive in the first generation. Spots will often appear in second and third generation hybrids. Species usually dominates flower shape, isthmus lip and flower count.  | Spring  |
| *cinnabarina* | Contributes dominant orange color, medium-sized flowers, and good flower count. Shape tends to be dominant with exceedingly small lip. Flowers typically have no fragrance. It often transmits its very thin pseudobulbs to its progeny. Yellow form frequently produces clear, bright yellow flowers in its progeny.  | Spring |
| *coccinea* | Dominates plant size, color, shape, short flower stem and low flower count. Flowers are flat with small lips, no fragrance, and excellent lasting qualities. Hybrids tend to flower at random throughout the year. When crossed with lavender parents, bright purples are produced.  | Spring |
| *dowiana* | Will intensify lavender. Lip pattern and fragrance are dominant. Imparts attractive shape and size. Crippling was common in early hybrids. Flowers do not have good lasting qualities.  | Fall |
| *flava* | Used to create yellow to bronze-colored flowers. Dominates its hybrids in flower shape, size, small lip, lack of fragrance, and growth habit.  | Spring |
| *forbessi* | Used in the development of bronze and yellow hybrids. Instills good flower substance and flat conformation. Its open shape and small lip are passed to offspring. Other dominant traits are thin pseudobulbs and low flower count. Hybrids tend to flower on every new growth produced throughout the year.  | Spring and Summer |

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| Cattleya | Breeding Strengths/Weakness | Flowering Season |
| *granulosa* | Dominates its hybrids in shape, size, growth habit, lip shape, flower count, and heavy substance. Its hybrids tend to have flat flowers. Used to produce red to bronze-colored hybrids.  | Summer |
| *guttata* | Trait of tall, bifoliate plant is passed to offspring. Dominant for color, high flower count, lip shape, and color, heavy substance, nearly flat flowers, and summer flowering season.  | Summer into early Fall |
| *harpophylla*  | Traits like C. cinnabarina hybrids. Instill in the offspring orange color, high flower count, flat conformation, flower size, and small lips. Hybrids tend not to have fragrance. Has extremely thin pseudobulbs, almost red-like, which its hybrids display.  | Late Winter to early Spring |
| *harrisoniana* | Instills heavy substance and relatively flat flowers to offspring. Imparts floriferousness.  | Late Summer to early Fall |
| *intermedia* | Imparts medium-sized flowers. Dominates its hybrids in flower count, growth habit, flower size, and lip shape. Hybrids tend to have pastel-colored flowers.  | Spring |
| *intermedia (Aquinii)* | Source of modern splash-petal Cattleyas. Early hybrids suffered from poor shape with petals pulled over the column. Line breeding and back crosses have produced good flat forms.  | Spring  |
| *labiata* | Species is quite variable. The lavender-flowered group dominates for flower color, lip color pattern, flower shape, size, and substance.  | Fall. Flowering is triggered by day length variation. It and its hybrids can be controlled by careful management of the day length. |
| *labiate (coerulea)* | The coerulea form color is recessive unless hybridized with other coerulea or blue forms.  | Fall. Flowering is triggered by day length variation. It and its hybrids can be controlled by careful management of the day length.  |

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| Cattleya | Breeding Strengths/Weakness | Flowering Season |
| loddigesii | Small- to medium-sized hybrids. Cultivars, especially polyploid cultivars, are extremely dominant with respect to flower color, size, growth, number of flowers, shape of flowers and small lips. Sparse, fine spotting of the sepals and petals is a common characteristic. Plants are often vigorous and bloom twice a year.  | Summer into Fall  |
| *lueddemanniana* | Used little in hybridizing. Has poor substance and tends to pass trait along to its hybrids. Installs tendency to limit number of flowers to two.  | March with variation.  |
| *maxima* | Imparts vigorous growth, good texture, lip pattern, good substance, and dark colors to its progeny. Species occurs in two lines: one with few but large flowers and the other has more flowers that are smaller. When a grex with higher flower count are used in hybridizing, offspring with good flower count can be expect. Negative traits passed to offspring are sometimes poor shape and a tendency for the petals to reflect along the midribs, giving the flowers an undesirable open conformation.  | Fall |
| *mossiae* | Used to produce offspring that bloom in the Spring. Lip pattern is dominate in hybrids. Imparts good flower count.  | Late Spring, early Summer  |
| *percivaliana* | Plants are smallest of the labiate Cattleyas. Introduces musky fragrance to offspring.  | Winter |
| *pulma* | Used in miniature Cattleya hybrids. Introduces excellent flower texture, good substance, and small vigorous growth habit. Purple flower color is dominant. Produces few-flowered, non-seasonal flowering hybrids.  | October |
| *purpurata*  | Tends to install large-flowered Cattleyas. Flowers are variable in color from white, coerulea to purple. Some forms have pink lip markings. Numerous cultivars have streaked and suffused petals. Lip pattern and lip shape are dominant. First generation hybrids the C. purpurata  |  |
| *Cattleya*  | Breeding Strengths/Weakness |  |
| *purpurata, continued*  | parent color and shape are dominant. Further line breeding the open flower shape is recessive, but the strong flower stem is dominant.  | May |
| *quadricolor (C. candida or C. chacoensis)* | Species produces pastel-colored flowers to offspring. Offspring tend to have soft substance flowers. The species flowers Intensifies lavender color in its hybrids. Other dominant traits are vigorous growth, fair shape, decent size, and lip pattern.  | Winter |
| rex | tend to display as cupped in presentation, which is a recessive trait in offspring.  | July |
| *schroederae* | Dominates winter flowering season in progeny. Produces delicate, clear, pastel-colored flowers. Offspring have ruffled flower segments and relatively small flowers. Trends of passing trait of weak substance.  | Spring |
| *tenebrosa* | Rules offspring for size, shape, and color. Used to develop bronze-colored flowers.  | June |
| *trianae* | Produces large-flowered hybrids. Instill winter flowering season to its offspring. Small lip and vigorous growth are dominant in offspring.  | Winter and flowering is controlled by the length of day.  |
| *violacea* | Imparts warmth requirements to offspring. Dominant for flower color and shape. Imparts flat conformation to its offspring.  | Spring, Summer, and occasionally Fall |
| *walkeriana* | Growth habit is dominant. Addition traits that are assertive are flower shape, size, dark color, excellent texture, and fragrance. Flat flowers and the isthmus lip are dominant. Species produces few flowers per inflorescence, which is passed to its progeny. | Spring to Summer |
| *warscewicii* | The size of flowers is an important characteristic of this species; eight inches or more across. Summer flowering season is passed to offspring. Other positive characteristics are good flower count, bright colors, and ruffling of flowers. Offspring tend to inherit soft flower substance.  | Summer |

References

American Orchid Society. (n.d.). Hereditary influences of the cattleya alliance. Online: <https://www.aos.org/orchids/orchid-breeding-and-hybridizing/hereditary-influences-of-the-cattleya-alliance>.

OrchidPro. (n.d.).

OrchidWiz X9.0. (n.d.).

Withner, C. (1990) The Cattleyas and their relatives: Volume I. The Cattleyas. Timber Press. Portland, Oregon.