Line Breeding for Pink Cymbidium

Without doubt *Cymbidium* Alexanderi is the greatest *Cymbidium* because it was the foundation for *Cymbidium* breeding; total progeny of 15,955 can support the statement. We can expect flowers of *Cym*. Alexanderi should be "Naturally" pink color because the presence of *Cym*. *insigne* background. However, achieving white flower colors in orchids was always a goal for breeder and it was done with the clone *Cym*. Alexanderi 'Westonbirt'.

Cym. insigne and *Cym*. Ceres are the main contributor of red pigments. This hybrid was registered by Hamilton Smith in 1919 and in 1931 Hanbury exhibited the reddish bronze *Cym*. Ceres 'F. J. Hanbury', which received an FCC/RHS.



Cym. Ceres (*Cym*. *iansonii* x *Cym*. *insigne*) Photo by L. Batchman

Cym. Ceres represent a milestone developing red color hybrids, it had been used multiple times to create a wide range of red colors hybrids and most of them were diploid, which may lack of size and substance. There is a need for tetraploid parents. Because of extensive breeding efforts, tetraploids with pink to red coloration started to appear. The pink tetraploid Cymbidium Coral Sea 'Leona Mayner is of pink coloring and gives seed. (Hetherington 1963).



Cym. Coral Sea 'Sarita Mayner' BM/CSA 78.1 Points Photo by CSA

Apparently breeding with *Cym*. Coral Sea does not go further, there are registered just 14 offspring, first generation and 15 total progenies. Perhaps there were conflict with the number of chromosomes.

Cym. Babylon (*Cym.* Olympus x *Cym.* Pauwelsii) a lovely pink hybrid, it had 157 offspring, first generation and 3,283 total progenies. It might start the Cymbidium pink line breeding because most of its first-generation hybrids are pink color. Observing the table below, *Cym.* Vieux Rose (*Cym.* Babylon x *Cym.* Rio Rita) highlight from the list, its beautiful hybrid was created by Hothfield in 1949. They earned 1 culture awards granted by the CSA in 1980, 5 HCC and 1 CCM giving by the AOS.



Photo by Atstupenas

Bramesa Golden Dragon 'Leapin' Lou' HCC/AOS (76 points)



Photo by Atstupenas

Cym. Rio Rita *Cym*. Pearl x *Cym*. Ruby

Seed		Pollen	Hybrid	Year	Offspring	Awards
Cym . Alexanderi	x	Cym. Babylon	Cym. Cleo Sherman	1956	76	59
Cym. Rosanna	x	Cym. Babylon	Cym. Ann Green	1958	42	30
Cym. floribundum	x	Cym. Babylon	Cym. Oriental Legend	1961	6	24
Cym. Babylon	x	Cym. Pearl	Cym. Tinsel	1949	1	13
Cym. Babylon	x	Cym. Iowianum	Cym. Leedja Clean	1955	3	13
Cym. Remus	x	Cym. Babylon	Cym. Burgundian	1955	6	8
Cym. Spartan Queen	x	Cym. Babylon	Cym . Featherhill	1956	3	8
Cym. Babylon	х	Cym. Rio Rita	Cym. Vieux Rose	1949	135	7

Cym. Babylon some first-generation presumable pink or with pink tint

Another interesting *Cymbidium* that contributed with pink hybrids is *Cymbidium* Delrosa 'The King' FCC (93), which got one of the highest and oldest *Cymbidium* AOS award records is the capsule parent is the great *Cym*. Alexanderi (*Cym*. Eburneo-lowianum x *Cym*. *insigne*) and the pollen parent is *Cym*. Peregrine (*Cym*. Ceres x *Cym*. Parsifal), but it just produced 3 offspring.



Cym. Delrosa 'The King' FCC/AOS 93 Points, 1953 April 22

Species of Cymbidium that contribute to the Cymbidium pink line breeding

Cymbidium dayanum, this lovely species native range is from Himalaya to Japan (Southern Kyushu) and Malesia. It was naturalized in Hawaii. *Cym. dayanum* is a fairly compact Cymbidium species that passes this trait on to its progeny. Flowers, especially the lip show an attractive red coloration and petals and sepals are softly pink tone.

The vigor of *Cym. dayanum* is outstanding, and the hybrids exhibit this welcome characteristic as well. Its hybrids mature quickly, they are able to perform well over a wide range of environmental conditions and passes this tolerance on to its progeny (Hatfield 2018).



Cym. dayanum var. dayanum Photo taken from powo.science.kew.org

Cymbidium insigne is a key species for infusing the pink color in the line breeding. The color of the petals and sepals varies from near white to a rather deep rose flush. There is inclined to be a complex of rose dots on the bases of both petals and sepals. The lip is profusely marked with red-lilac bars and dots on the frontal lobe and lines of the same color on the side lobes. (Crosby H. 1952).

Cymbidium ensifolium is a compact plant, bloom early in September. It contributes with scent, erect blooming spike and heat-tolerance to its offspring. Apparently the first generation also had bad features, including a limited color range, poor shape and substance and short flower life. However, these are problems which can overcome in future generations of hybrids. (Rogerson 1991).

New direction breeding Cymbidium pink

I think regarding form perhaps new direction must go toward narrow shape segments, different than the classic *Cym. eburneum*. About pink color it expresses on the flower as veins and patterns not as a solid color. Far relation genetic procure them to mate. In a very different subject, polyploid can get better flower size in this *Cymbidium* complex.

In order to complement and get an idea of possible new direction I pulled out some recent awards using new species that can be potentially breed *Cymbidium* pink flowers

> *Cymbidium* White Iceberg 'Frostbite' HCC/AOS (79 points) *Cymbidium insigne* x *Cymbidium wenshanense* Award No: 20234668 Date: Feb 04, 2023 Event: National Capital Center Monthly Judging (Washington, DC) Judging Center: National Capital Judging Center Exhibitor: R. J. Griesbach Photographer: Michael Summers



Cymbidium Desert Rain 'Spring Shower' HCC/AOS (77 points) *Cymbidium* Banana Split x *Cymbidium erythraeum* Award No: 20224865 Date: Apr 23, 2022 Event: Southern Tier Orchid Society Show (Binghamton, New York) Judging Center: Northeast Judging Center Exhibitor: Jeanne Kaeding Photographer: Geoffery Gould





Cymbidium Maufant 'Jersey' HCC/AOS (78 points) *Cymbidium* Red Beauty x *Cymbidium* Thurso Award No: 20225309 Date: Mar 19, 2022 Event: Pacific Central Judging Center - Filoli (Woodside, California) Judging Center: Pacific Central Judging Center Exhibitor: Japheth Ko Photographer: Chaunie Langland

Cymbidium Flirtation 'M.B.F.' HCC/AOS (77 points)

Cymbidium Zebra x *Cymbidium floribundum* Award No: 20222058 Date: Jan 29, 2022 Event: Gulf Coast Orchid Society Show (Gautier, MS) Judging Center: Atlanta Judging Center Exhibitor: Marble Branch Farms Photographer: Chip Lechner





Cymbidium Minuet 'David Sanders 4N' AM/AOS (80 points) *Cymbidium insigne* x *Cymbidium floribundum* Award No: 20224667 Date: Feb 05, 2022 Event: National Capital Center Monthly Judging (Washington, DC) Judging Center: National Capital Judging Center Exhibitor: John Sonnier: British Embassy Washington Photographer: Bryan Ramsay

Cymbidium Memoria Ellen Margron 'Beauty Spots' HCC/AOS (78 points) *Cymbidium* Brenda x *Cymbidium* Devon Odyssey Award No: 20212261 Date: Feb 07, 2021 Event: California-Sierra Nevada Center Monthly Judging (Sacramento, California) Judging Center: California-Sierra Nevada Judging Center Exhibitor: Cynthia Battershall Photographer: Ramon de los Santos





Cymbidium Renee Taylor 'Patricia Olson' AM/AOS (81 points)

Cymbidium Kabuki Moon x *Cymbidium* Hazel Tyers Award No: 20222266 Date: Mar 02, 2022 Event: California-Sierra Nevada Center Monthly Judging (Sacramento, California) Judging Center: California-Sierra Nevada Judging Center Exhibitor: Paul and Phyllis Chim Photographer: Ramon de los Santos

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