Peloric Orchid Flowers

The socalled 'peloric' flowers occur from time to time. This is most commonly noticed in Phalaenopsis, but it actually occurs in a variety of genera. In the very old days, plants with peloric flowers were often discarded, as they were clearly different from the targeted perfect flowers. Today peloric flowers have attracted some following, so there is some limited production targeting these.

There are several types of peloric flowers. The most common is **'Petal Peloric'**, where the petals mimic the colors in the lip. In the Cattleya family, this mutation originated in ***C. intermedia***, variety ***acquinii***. To the best of my knowledge, this was a single plant, found by a Mr. Acquini around 1890, and formally described in 1891.

This plant has been bred, including selfings, so the trait is now well established. One example is:

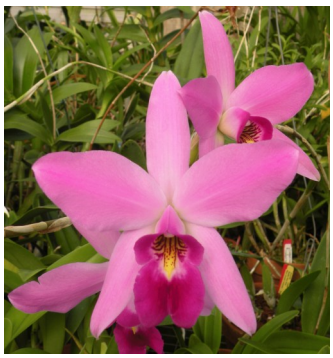
In complex hybrids, the effect can be even more spectacular; please see photo of ***C.*** **Persian Glory 'Road to China'** in the next column.

There is a long story behind this plant. In 2012 or 2013 I saw the name on a detail photo (Cattleya lip) posted by Elena Gaillard of Manhattan Orchid Society on a web site somewhere. Since Carolyn is part Persian, and I am part Chinese, with that name I just had to find the plant and purchase a division.

I found it at Elmore Orchids, and soon had a large plant (it is VERY vigorous). However, eventually I lost it in the 2017 freeze that wiped out my entire Cattleya collection. When I reached out to Elmore, the nursery had closed, but Mr. Elmore was still checking the email. He remembered having sold a division to someone else, and put me a touch with that grower, so I was able to re-acquire the plant.

Waldor Orchids also have a division. They used it in their 2012 exhibit in the Deep Cut OS Show, where it received an 80 pt AM/AOS (and where Elena took the photo that eventually caught my attention).

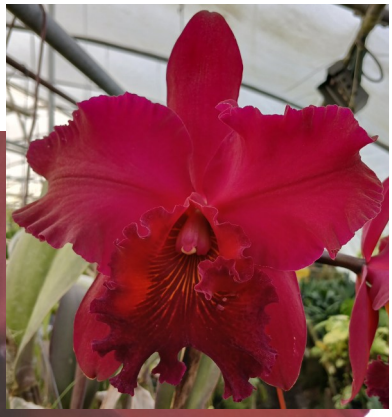
This peloric trait is especially pronounced in some crosses, such as ***Lc.*** **Miss Wonderful** (*C.* Mari's Song x *Laelia anceps*):



Two more shown on the next page.

For comparison, several other Cattleya species have color forms with a touch of color on the petals (but not the acquinii mutation). These plants are the source of splash petals, such as C. trianae 'Splash':

There are actually other types of peloric flowers. We recently noticed that my ***Rlc.*** **Heaven's Gate 'Crystelle' FCC/AOS** is **'lateral sepal peloric'.** It is not easy to see from the front, but it is clearly visible when viewed from the rear.



As far as we can tell, this is a mutation that appeared during the meristem process, but it is not common. Kyle has the same plant, also purchased from Krull-Smith, but his does not show this.

Another genus where peloric flowers has been actively pursued is Cymbidium. In this genus we have seen all 3 types of peloric flowers:

Petal Peloric

Cym. **Cotton Candy 'Wizard'**

Lateral Sepal Peloric

Cym. **Wacky 'Loco'**

Meristem Mutation

Cym. **Pepper's Fire 'Carnival'**

The peloric trait are not always stable (same flower spike can produce both peloric & non-peloric flowers). And, even if it is stable, the peloric mutations are not always compatible. I purchased several seedlings of *Cym.* (Cotton Candy 'Wizard' x Pepper's Fire 'Carnival'), and they bloomed non-peloric:

Despite all the difficulties in breeding plants with peloric flowers, the very best examples make it

worth the effort. Here ***Cym.* Wichita 'Princess':**

There have been plenty of meristem mutations in the production of Dendrobium phalaenopsis hybrids (Enobi Purple was the original of first 'Splash' and that plant later became the an album mutation).


All white
(no photo)

However, we have recently seen an actual peloric Dendrobium, ***Den.* Tuesday Delight '808 Orchids'** come to the market.

Finally, one of the wholesale nurseries in Hawaii (HOF) recently released photos of a peloric Miltoniopsis. It is spectacular, but not stable, as it can produce different peloric flowers on the same inflorescence.

I tried to order some, but they were already sold out. Then, I came across a few in bloom in another vendors booth at the Maryland show.