

PRESIDENT'S MESSAGE

nother flowering season over!

We collectively wait with bated breath for so long for flowering season, and excitedly announce to all when we first glimpse buds, and then all too soon, it is over. Another year to wait.

It is so unfortunate that we could not enjoy each other's flowers at the Expo this year, and I have heard members of the public state their disappointment at not attending the Expo, but we can look forward to next year. The next Expo may be different and simpler in many ways, to cater for our changing world, but our primary objective in holding the Expo has always been to display and promote the *Clivia* to the public. That will not change.

Don't forget to view the 2020 Member's Virtual Flowering season on the MCG website. The links are in this newsletter. Thank you to those who supplied photos for us to use. I would also recommend viewing the Clivia Society Virtual Show. This is a competitive series of classes with photos of flowers from all over the world. Can you pick the Australian plants?

We are hopeful of holding our Annual General Meeting on Friday 19th February 2021, all going well. A newsletter will be distributed mid-January 2021 to confirm, and to detail requirements such as masks, social distancing, or whatever else is required. I am sure we can make it work and be safe.

This newsletter issue contains an article on F1 and F2 terminology, a summary and photos of a special *Clivia* mini-expo, Ikebana arrangement photos and a sample of photos from the 2020 Member's flowering season.

In the absence of a Christmas get-together this year, we are running an End of Year Lucky Draw. Details further in this newsletter.

This is our last newsletter for the year. It has been a strange and sombre year and we hope that 2021 will be a year where we will find some normalcy and continue with our much-loved hobby. By the middle of January, we will be able to set a tentative calendar for the year.

As always, please let me know of any questions, issues or ideas you may have.

I wish you a happy and festive season.

I hope to see you in 2021.

With regards,

Lisa Fox



Fig. 1 Ikebana arrangement & photography - Helen Marriott

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F1 AND F2 TERMINOLOGY - Lisa Fox

ost people new to *Clivia* breeding will have heard the term F1 or F2 with regard to crosses between plants or seen one of these terms on the label of a plant, and scratched their head as to the meaning of this strange term.

Often, an assumption is made as to the meaning of the terms and the terminology is then used in further breeding efforts. In many cases, these terms were incorrectly used originally and then the incorrect use is further propagated. Eventually the result is confusion regarding the breeding of a plant, particularly when the plant is sold to a novice.

'P' generation

In 1856, Johan Gregor Mendel (1822 – 1884) began a decade-long research experiment to investigate inheritance using garden peas. True breeding parents, he referred to as the 'P' generation for parental generation. He crossed two plants from the 'P' generation and documented the different characteristics and colours in the parental generation as well as subsequent generations.

F1 generation

F is short for the Latin word *filia* which translates as daughter or son. F_1 or F_1 refers to the first filial generation which is the offspring from the initial cross between two parent plants ('P' generation).

Mendel discovered that the F1 generation displays the dominant features from the two parent plants rather than a merging of traits, which was the common thought at the time. In further generations, hidden features appeared in a percentage of plants. Mendel coined these the 'dominant' traits and the 'recessive' traits.

In 2009 the Melbourne Clivia Group first published an article by Helen Marriott titled, *An introduction to interspecific hybrids*, revised in 2018, where Marriott discusses the thoughts of well-known growers. In the remainder of this article, there will be relevant texts quoted from that material.

To maximize the potential of interspecifics, the breeding of more than one generation is necessary. Rudo Lotter, for example, argues that in a first generation cross (F1), such as crossing C. miniata x C. gardenii, the siblings will not exhibit a lot of variation. To bring out further characteristics that are recessive, the best F1 siblings are crossed between themselves (or selfed) to create the F2 generation. (Marriott, 2009)

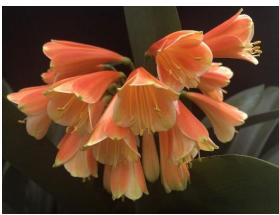


Fig. 2 Nakamura Miniata x Caulescens is an example of F1 generation

F1 does **not** apply to a plant that has been selfed. A plant that has been selfed is not a cross between two genetically distinct plants and therefore, this terminology does not apply. This is important as my own observation is that in the *Clivia* world, growers use the term F1 after the plant's name to identify that the plant **has** been selfed. I have seen this countless times all over the world and it has become the norm to call a selfed plant, an F1. I have been guilty of doing the same for years as I accepted that this was what F1 meant. A quick review of the Facebook Clivia Groups reveals many photos of plants simply referred to by a name followed by F1. The assumption is that the photo is a selfed plant.

F2 generation

 F_2 or F_2 refers to the second generation. If F_1 was the daughter, then F_2 is the granddaughter. This may be the crossing of two siblings of the F_1 generation, or it may be the selfing of one of the F_1 seedlings.

Mendel allowed his F1 generation to naturally selffertilise to produce the F2 generation. The F2 generation may be the crossing of F1 siblings, or the



selfing of an F1 seedling. In the F2 generation, desirable recessive traits may be apparent.

Note that if an F1 interspecific (or any other F1 for that matter) is subsequently used in a cross with a different parent, it becomes a new F1. (Marriott, 2009)



Fig. 3 'Moondrops' is an F2 hybrid of C. gardenii x yellow C. miniata.

Yoshikazu Nakamura's experience is that excellent interspecific hybrids can be achieved already by the second generation (F2). He has often selfed his F1 interspecific hybrids, thereby bringing out many attractive features in the flowers of the F2 generation. (Marriott, 2009)

It is not correct to assume that F2 refers to a plant has been selfed, and then selfed again. For example, (Vico Yellow x self) x self. This has been used commonly in the *Clivia* world, and I have also heard of people referring to a parent plant that has been selfed as an F2 generation. This is also incorrect and confuses the novice purchasing a plant with the label, Vico Yellow F2.

What is the breeding of this plant?

Is it Vico Yellow x self?
Is it (Vico Yellow x self) x self?
Is it (Vico Yellow x Something) x (Vico Yellow x Something)?
Is it (Vico Yellow x Something) x self?

Although it has been suggested that we only need to proceed to the second generation (F2) in interspecific hybridisation, Keith Hammett indicates that quite often, recessive traits are not expressed until generations much later than the F2 (personal communication), so there may in fact be reason to proceed to F3 or F4 though sibling crosses or selfing. (Marriott, 2009)

Conclusion

If unsure what the F1 or F2 term denotes when purchasing a plant or seed, it is best to ask for specifics on the cross. If you plan to breed further with the plant, then knowing the exact parentage can save time and effort and make a difference with a breeding program. With my own crosses, I now only write the correct cross and no longer use the F1, F2 and F3 terminology on labels. I reserve these terms for my own records. It saves confusion for all involved.

References

Hyatt, D. (2004). What's the difference between F1 and F2? Virginia, Journal American Rhododendron Society

Wikipedia, (2004). F1 hybrid.[online] Available at: https://en.wikipedia.org/wiki/F1_fusion_[Accessed 2 Oct. 2020]

GKVK, (2018). F1 F2 F3 Hybrid Seeds and Pollination | Seed Saving Basics. [online] Available at: https://www.gkvks.com/f1-f2-f3-hybrid-seeds-and-pollination-seed-saving-basics/ [Accessed 2 Oct 2020] OpenStax, Biology. OpenStax CNX. May 14, 2015 http://cnx.org/contents/185cbf87-c72e-48f5-b51e-f14f21b5eabd@9.85



Fig. 4 Ikebana arrangement & photography - Helen Marriott



DISPLAY 2020 - John Mackenzie

Day 1 Saturday

The moment we have been eagerly waiting for all year, the weekend of the MCG Expo 2020! Except, it had been cancelled.... another victim of Covid-19.

With the early flowering season, we were experiencing, Brenda and I decided to hold our own show over the same weekend. The weather was going to play its part, sunshine was the forecast, the flowers were up to the task and ready to be displayed.

Set-up was on Saturday morning, and we were ready to open the doors by 1pm to visitors who remained constant all day (2). The display was well set-up, plants were spaced out so there was no over-crowding and everyone commented what a lovely display was presented. The full color spectrum was achieved with many flower shapes and sizes from first flowering to mature plants. Those who attended were keen to come back on Sunday to see a changing of the display.



Fig. 5 Display plants - John and Brenda

Day 2 Sunday

The weather remained the same as yesterday fine and sunny. Visitor numbers were similar to yesterday (2), with a further 16 plants rotated into the display our tally was up to 38 glorious *Clivia* plants presented by two exhibitors.

Once again comments were overheard of the quality of the display with so many variations in color. Although sales were well down from previous years the two-day show was a first and a complete success by the time 3pm came around. It was time to start packing up putting plants back where they belong then get some refreshments out for the volunteers who helped with the show. Next year we are hoping to have an even bigger show with a lot more visitors in attendance.



Fig. 6 Clivia display - John and Brenda

As is the norm with the MCG Expo we decided to have a People's Choice Award, awarding first, second and third place to the most popular plants, votes were counted after the doors were closed and the winners were announced.



Fig. 7 Clivia display - John and Brenda

First place to Mariska x pastel green throat, which received 2 votes.



There was a tie for 2^{nd} place between (Conway's Tessa x Venus) x Shirley Hardman 1 vote

Equal 2nd was World cup x splash also 1 vote.

Is there a better way to relax than to sit back and admire our lovely *Clivia* plants in flower?



Fig. 8 Clivia display - John and Brenda

SNOW IN MELBOURNE

Rae Begg sent this photo on the 25th September 2020. Who can believe we have snow at this time of year? No wonder the rest of Australia are at the end of their flowering season and we are just beginning. At this rate, Rae may be waiting for her flowers to open at Christmas.



Fig. 9 Snow in Melbourne

CLIVIA SOCIETY VIRTUAL MINIATA SHOW

Don't forget to check out the entries and the winners in the Clivia Society Virtual Show. This was a worldwide show and Australia was represented. Can you pick the Australian plants?

https://cliviasociety.com/clivia/gallery/cs-virtual-miniata-show-classes/

2020 MEMBER'S VIRTUAL FLOWERING GALLERY

Interspecifics/Species

http://www.melbournecliviagroup.org.au/gallery/gallery-2020-members-flowering/

Miniata

https://www.melbournecliviagroup.org.au/gallery/gallery-2020-members-miniata-flowering-season/

END OF YEAR LUCKY DRAW

As we are unable to hold a Christmas function this year, we have decided to hold a lucky draw as a small consolation. All financial members will be entered into a draw and three winners will be selected.

 $1^{\rm st}\, prize$ - \$100 voucher from Bunnings (for when you are allowed to shop again)

2nd prize – 2 x \$50 vouchers from Bunnings.

Prizes will be drawn on the 20th November and the winners notified. The winners will be announced in the next newsletter.

ITEMS FOR SALE

If any member wishes to advertise seed, seedlings or plants for sale in the newsletter, please send an email to the secretary with details. All sales items are the responsibility of the seller and are not endorsed by the Melbourne Clivia Group. Please contact the seller directly.

MEMBER FLOWERING 2020 SAMPLE



Fig. 10 John Cochrane



Fig. 11 Interspecific - John and Brenda



Fig. 12 Pleasing Rhythm x Angel City - Di Mathews



Fig. 13 Origin of Life - Michael Barrett



Fig. 14 Allan Gibson



Fig. 15 Ray and Chee Perks



Fig. 16 Terry Edwards



Fig. 17 Saoirse - Lisa Fox



Fig. 18 Moondance - Di Mathews



Fig. 19 Ray and Chee Perks



Fig. 20 John Cochrane



Fig. 21 Hirao - Allan Gibson



Fig. 22 John Cochrane



Fig 23 Rian - Lisa Fox



Fig. 24 Variegated Peach - Allan Gibson



Fig. 25 Peter Studders - Di Mathews



Fig. 26 John Cochrane



Fig. 27 Mariska x Pastel green throat – John and Brenda

Late Picked Clivia Seeds for Sale

Contact Rae bbrigade1@hotmail.com for pictures and orders

Degg	Tot pictures und orders	1	1	
		Qty	No. pac ks	
		per pack		
LOT 1	(Lurline x Monty's Peach) X peach or cream pollen	2	2	\$5.00
LOT 2	Yellow flowering, with Painted Face trait X Hirao	2	3	\$5.00
LOT 3	(Dark cream x Pen Henry Yellow) X self	3	1	\$5.00
LOT 4	(Dark cream x Pen Henry Yellow) X BKS	2	4	\$5.00
LOT 5	Bill Morris Cream X (Dark cream x Pen Henry Yellow)	3	2	\$5.00
LOT 6	Dark Cream X (Dark cream x Pen Henry Yellow)	4	10	\$5.00
LOT 7	Bronze X open (with bronzes & oranges)	2	3	\$5.00
LOT 8	Coral Candy X Gunston (Bronze) X open (with bronzes & oranges)	2	9	\$5.00
Lot 9	Bronze X Bronze	2	2	\$5.00
Lot 10	Deep Red X Self	2	2	\$5.00