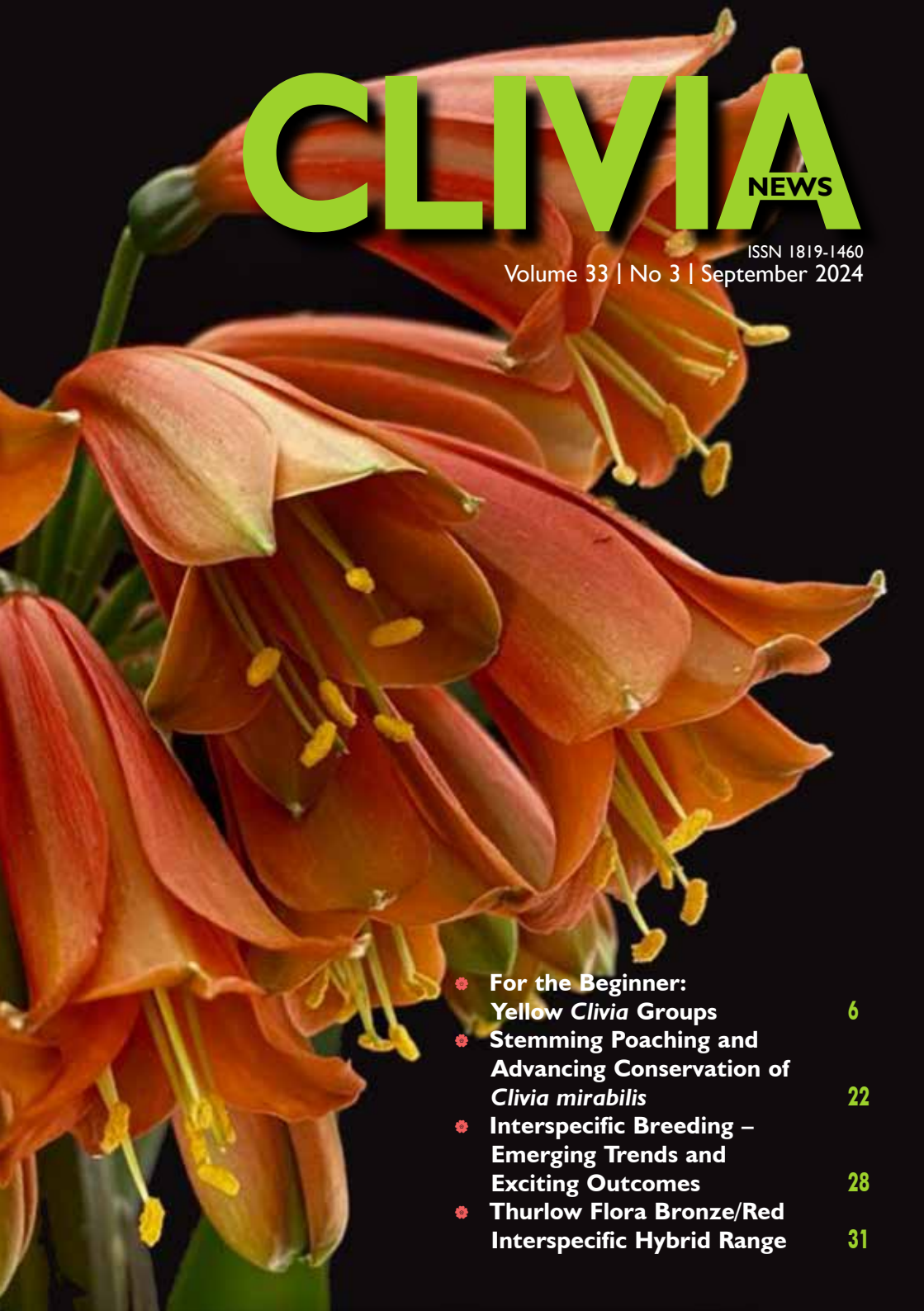




CLIVIA

NEWS

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- ✿ **For the Beginner:**
Yellow *Clivia* Groups 6
- ✿ **Stemming Poaching and
Advancing Conservation of
*Clivia mirabilis*** 22
- ✿ **Interspecific Breeding –
Emerging Trends and
Exciting Outcomes** 28
- ✿ **Thurlow Flora Bronze/Red
Interspecific Hybrid Range** 31

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Contents

- 4** Meet the Publications Committee
- 5** The Clivia Calendar – *Carrie Kruger*
- 6** For the Beginner: Yellow *Clivia* groups – *Carrie Kruger*
- 8** Photographic Competition of the Clivia Society 2024
- 10** The Garden Route Interspecies Show – *Lizl van Rooyen*
- 12** The Lowveld Clivia Club Interspecific and Other Pendulous Show – *Morne Dorfling*
- 14** The Northern Clivia Club Winter Show – *George Mann*
- 17** Reminiscing over the Overberg Clivia Interest Group – *Felicity Weeden*
- 21** The Rooihuiskraal Winter Show – *Karel Stanz*
- 19** Northern Free State Clivia Club
- 22** Stemming Poaching and Advancing Conservation of *Clivia mirabilis* – *Dave Garriock*
- 22** Free State Clivia Club Interspecific Show 2023 – *Renzi Mattana*
- 24** CLIVIA PERSONALITIES: Hendrik Wentzel and his Son Eduard Wentzel – *Cindy Dorfling*
- 25** CLIVIA PERSONALITIES: Remembering Stef de Swardt: A Passionate Plantsman and Beloved Friend
- 26** For Love not Money – André du Toit Shares his Special Relationship with his *Clivia*
- 28** Interspecific Breeding – Emerging Trends and Exciting Outcomes – *Bernard Slippers and Karel Stanz*
- 31** Thurlow Flora Bronze/Red Interspecific Hybrid Range – *Sean Chubb*
- 33** Clivi-Arta – *Helen Sanders*
- 34** The Complexity of Flower Colour Formation in Plants: Regulation of Anthocyanin Production and its Relevance to Flower Colour in *Clivia* (Part A) – *Bernard Slippers*
- 38** Motley and Exquisite Flower: Proposals for New Show Classes to Respond to New Developments – *Hennie van der Mescht*
- 39** 2024 Membership Fees of the Clivia Society
- 39** Advertisement Costs in Clivia News – 2024
- 39** Contact Details of South African Clubs and Interest Groups

FRONT AND BACK COVER: 'Witcher' – *Sean Chubb*

Meet the Publications Committee

A group of dedicated Society members from various clubs have volunteered to form the Clivia Publication Committee as a temporary transitional measure to ensure that the Society's publications continue in 2024.

The committee is spearheaded by Carrie Kruger (GRCC) and includes Joubert van Wyk (NCC), Karel Stanz (NCC), Hennie van der Mescht (FS), Bernard Slippers (NCC), and Chris Smit (CCC). We extend our gratitude to these members for their time and effort in keeping the publications alive. We aim to fulfill this role to the best of our abilities.

Special thanks to Fréda for the design and layout and to Nicolene for her input.

We have worked hard to publish this final issue of the Clivia News for 2024 in a very short period. The Yearbook will be published a bit later than usual, but we have already started some preparatory work for this project.

Our goal is to provide our Society members with a revamped publication filled with club news, photos, and interesting articles.

To achieve our objectives, we rely on club members for news and information. We have established a more formal contact structure with our local clubs and overseas contacts.

We urge the clubs to communicate and support this committee with suggestions, articles, and photos.

In this first revamped edition, you will find interesting articles on interspecific breeding and the complexity of flower color formation in plants, as well as new features with information for the beginner, a *Clivia* calendar and much more. We have also included the winter club show results and photos.

We sincerely hope that members find this publication interesting, relevant, and intellectually stimulating. 🌺



clivaria
— A journey of clivia —

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Photos of own bred plants

The *Clivia* Calendar

(based on Southern Hemisphere growing conditions)

Carrie Kruger - Utopia Clivias

A short summary of what needs to be done during the 3-month period of August, September and October:

1. Planting seed:

You can plant your seeds directly after harvesting or you can wait until temperatures rise in spring. Seeds need ambient temperatures between 21°C and 25°C to germinate. If temperatures are still too low use a heated germinator specially designed for this purpose.

2. Planting out seedlings:

As soon as temperatures range between 14°C and 25°C it is safe to plant out 1- and 2-year-old seedlings from trays to single or community pots.

3. Potting on:

Seedlings and plants can also be potted to larger pots before temperatures become too extreme.

4. Dividing and transplanting:

In the warmer parts of the country clivias can be divided or transplanted at any time during the year without detrimental results. We have found autumn, spring or early summer are preferable, as the plants will establish more quickly.

5. Flowering time:

Pollinations and photos are most crucial during this time. Pollinate early morning or evening when stigma is wet and sticky. Late afternoon photography is best to capture the true colours of flowers. 🌺



For the Beginner: Yellow *Clivia* Groups

Carrie Kruger - Utopia

Yellow *Clivia* are divided into groups 1, 2 or 3. Plants from Group 1 yellow breed true to type yellow plants. Group 2 yellows can split for orange/pastel if crossed with a Group 1 yellow. A small percentage are classified as Group 3 or unknown group. Probably 90% of all yellow *miniata* available worldwide fall under Group 1, the rest is made up by Group 2 yellow and numerous other groups. These groups produce yellow flowering offspring if bred within their group.

If you wish to breed yellow *Clivia*, breed Group 1 yellows with Group 1 yellows and Group 2 with Group 2. If you should breed a Group 1 Yellow with a Group 2 Yellow, the resulting flowers will range from pastel to orange. Natal Yellow is considered to belong to Group 2 Yellows and often has a great deal of green in the flower. 'Vico Yellow' on the other hand is a reliable Group 1



'Charl's Green' x 'TKO'

Yellow. It is therefore necessary to know which group your plants belong to, should you want to breed a pure yellow flowering plant. 🌺

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'Vico Yellow x Great White'



'Hottie Hirao' F1



'Compact Yellow' Group 1



'Vico Gold'

YELLOW CLIVIA GROUPING: (MOST AVAILABLE)

GROUP 1 YELLOWS:

1. Kirstenbosh Yellow
2. Eshowe or Saunders Yellow
3. Watkins Yellow
4. Karkloof Yellow
5. Jim Holmes Yellow
6. Noyce's Yellow
7. Vico Gold
8. Solomone Yellow
9. Yellow Daruma G1
10. Sir John Thouron
11. Vic Daniels Yellow G1
12. Pen Henry Yellow
13. Kevin Walters Yellow
14. Morris Yellow
15. Lisa Mannion Yellow
16. Solomone Yellow
17. Nakamura Yellow

GROUP 2 YELLOWS:

1. Centani Yellow
2. Dwesa Yellow1
3. Transkei Yellow
4. Smith's Yellow
5. Floradale Yellow
6. Natal Yellow2
7. Giddy Yellow
8. Gibello Yellow
9. Swellendam Yellow
10. Stella Parish Yellow
11. Cynthia's Best
12. Port St John's Yellow
13. Hirao Green
14. Yellow Daruma G2
15. TK Yellow GT
16. 'Cynthia's Dream'3
17. 'Pat's Gold'
18. 'Golden Fleece'
19. TK Yellow
20. Charl's Green
21. Green Bomb

GROUP 3 YELLOWS:

1. Celtis Kloof Yellow
2. Potterill Blush Yellow
3. Greendale yellow
4. Peacevale yellow

Photographic Competition of the Clivia Society 2024

All members of the Clivia Society are invited to submit entries into the six categories of the Photographic competition. The photographs you enter may be published in the Yearbook 25 of 2024 - November. The closing date for entries is the 13th October 2024.

CONDITIONS FOR ENTRY OF IMAGES INTO THE COMPETITION:

1. Complete the entry form. One form is sufficient if several photographs are submitted at the same time.
2. Submit entries by the 13th October 2024.
3. There are six categories. The number of entries per category is limited to three.
 - Photographs should be submitted to Clivia Society Photographic Competition, infocliviasociety@gmail.com
 - If the size of the images are large, use 'WeTransfer' – which is available free of charge!
 - Format of photographs: jpeg file not larger than 1Mb per photograph. The resolution should be 300 dpi. The images should be submitted without being embedded in another program. Please be aware that if the photographs have a small file size, the judges have difficulty to adequately assess them.
 - If you submit photos for entry into the Society competition you also accept that your photograph may be used in Society publications with full recognition of you as photographer.
4. The decision of the judges is final and must be accepted by all entrants.

Hints: The photographs are judged on their photographic quality. The prettiest photograph

may not be the best in quality terms for photographic assessment.

Aspects such as sharpness of the image, true colour, absence of distractions in the photograph, composition, lighting, cropping, background choice and white balance are all important considerations for the photographer.

CATEGORIES FOR THE COMPETITION – MAXIMUM OF THREE ENTRIES PER CATEGORY

1. Any photograph of a *Clivia miniata* umbel.
2. Any photograph of an umbel of any pendulous species.
3. Any photograph of any interspecific *Clivia* plant. Owing to the ongoing problem of separating some of the interspecific flowers from the *miniata* flowers, consider carefully into which class you wish to enter the flower image.
4. Any photograph of habitat plants. These must be photographed in their natural state in habitat.
5. Any photograph of a single flower of any *Clivia* species. This class refers to a single flower, so you should have a single flower as the main feature.
6. Any photograph of *Clivia* related subjects such as buds, berries, foliage and floral art. 🌸

CLIVIA SOCIETY PHOTOGRAPHIC COMPETITION ENTRY FORM 2024

Name of Entrant	
Contact e-mail	
Telephone	
Year photographs taken	
Number of Entries	

Indicate number of entries in each class below:

<i>C. miniata</i>		Pendulous species		Interspecific plants	
Habitat		Single flower		<i>Clivia</i> related: buds, berries, foliage, floral art	
Submission		e-mail		WeTransfer	

The Garden Route Interspecies Show

Lizl van Rooyen

One way to brighten up the cold winter days is by hosting an Interspecies Clivia Show. On Saturday, 3rd August 2024, the annual Garden Route Clivia Club Interspecies and Foliage Show was held at Outeniqua Palms Nursery in George. It was a stunning array of bright colours like only the Interspecies can give.

Congratulations to the winners:

- Best on Show: Leon van Rooyen (Jnr)
- 1st Runner-Up: Carrie Kruger
- 2nd Runner-Up: Carrie Kruger
- Best Green Leaf: Willie Freund
- Best Variegated Leaf: Carrie Kruger

- People's Choice Flower: Carrie Kruger
- People's Choice Foliage: Willie Freund

Medal Winners:

- David Norval: 3 Gold, 6 Silver, 1 Bronze
- Randy Young: 1 Silver
- Willie Freund: 1 Gold, 1 Bronze
- Carrie Kruger: 6 Gold, 4 Silver, 1 Bronze
- Leon van Rooyen (Jnr): 10 Gold, 3 Silver, 2 Bronze

Overall, it was a marvelous show, and we are eagerly anticipating the upcoming Big Clivia Show on the 28th of September 2024 in George. 🌺



Willie Freund, Leon van Rooyen (Jnr) and Carrie Kruger



Left: Best on Show –
Leon van Rooyen (Jnr)



Below: 1st Runner-Up to Best on
Show – Carrie Kruger



Above: 2nd
Runner-Up to
Best on Show –
Carrie Kruger



Left: Best on Show
– Leon van Rooyen
(Jnr)



Carrie Kruger won 6 Gold, 4 Silver as well as 1 Bronze medal



Willie Freund won 1 Gold as well as 1 Bronze medal





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The Lowveld Clivia Club Interspecific and Other Pendulous Show

Morne Dorfling

The Interspecific and other Pendulous Show of the Lowveld Clivia Club happened on Saturday, 20 July 2024 at The Orchid Farm Stall, on the R40, Nelspruit.

I would like to begin by extending my heartfelt thanks to Oosie Strydom and Greg Jones for their dedicated time and exceptional job in judging the magnificent plants showcased at the show. Their expertise and effort have truly made this event special.

A big congratulations is also in order for all the exhibitors who shared their incredible plants with us. Your passion and hard work are truly inspiring.

While we didn't keep an exact count, we had the pleasure of interacting with several visitors

throughout the show. Among them, we were delighted to welcome a few from Pretoria and a lovely family from Hazyview who made a special trip to join us and we are grateful for their support. A very special thank to Urna from The Orchid Farm Stall for the generous use of your property.

There were 43 plants entered by 7 exhibitors. Oosie Strydom and Greg Jones acted as judges, The results were:

Best on Show – Jurie Lintvelt; 1st Runner-Up – Ronnie Brink; 2nd Runner-Up – Morne Dorfling; Most Exquisite Flowers – Paul Kloeck

Once again, thank you to everyone who participated and contributed to making this event a success. 🌺



Best on Show – Jurie Lintvelt



1st Runner-Up – Ronnie Brink



2nd Runner-Up – Morne Dorfling



Best on Show – Jurie Lintvelt (left), with Morne Dorfling, Chair LCC, on the right



1st Runner-Up – Ronnie Brink (left), with Morne Dorfling, Chair LCC, on the right



2nd Runner-Up – Morne Dorfling (right), with Oosie Strydom, the Judge, on the left

The Northern Clivia Club Winter Show

George Mann

The Northern Clivia Club Winter Show preparations started early on the Friday morning on the 26th of July with the preparation of the show terrain and show area, at Safari Garden Centre. Benching opened at 11:00 and the show plants started rolling in. We had a fantastic turnout of 90 plants in the flowering classes and 39 in the leaf with no flower section (total of 129 Plants).

The newly developed Northern Clivia Club show classes where updated to only include flared and tubular shaped flowers, as it was decided that the previous groupings of Tubular, Conical, Bell and Flared shapes only lead to extensive confusion with no clear line between where the one starts and the other stops; two shapes where thus discarded by the NCC going forward.

Some spectacular beauties were benched with truly exceptional and complex hybrids making their way onto the show tables. It was quite noticeable how much fewer "old F1 Type" made their way onto the benches than previous years. The orange class was still well represented, as

well as the peach class which was predominantly made up of Ngome type Interspecifics that seem to flower in large numbers towards the end of July. One of the classes that had some of the most spectacular plants on the show was the versicolour flared class. Benching closed at 16:00, stalls were full and everyone was ready for a weekend of flowers and fun.

By early on the Saturday all show plants were packed into their respective classes and at 08:00 judging commenced. The judges organised themselves into two teams consisting of Danie Pretorius, Hendrik Botha and George Mann, and the second group by Paul Kloeck, Oosie Strydom and Pieter Saayman, both groups being assisted by the new benching stewards and judge in training Dalain (D.J.) Malan.

Best on Show and Runner-Up to Best on Show was awarded to Wilbur van Wyk, whereas 2nd Runner-Up was awarded to Pieter Saayman and Michael Holt. All three plants were outstanding. An interesting observation was that both the Best on Show and Second Runner-Up were



Best on Show – Wilbur van Wyk



1st Runner-Up to Best on Show – Wilbur van Wyk



Runner-Up to Best on Show – Pieter Saayman and Michael Holt



The Northern Clivia Club Judging Team



Best on Show no Flower – Andre Swart



2nd Runner-Up to Best on Show – George Mann



Runner-Up to Best on Show no Flower – Wilbur van Wyk



A striking Light of Buddha Interspecifics exhibited by Hilton and Liza Atherstone

pulled out of the Versicolour with flared shaped flower class, the second runner-Up was a bronze flowering interspecific *Clivia*. In the leaf with no flower classes the Best on Show was awarded to Andre Swart with a beautifully compact Light of Buddha, Wilbur van Wyk got 1st Runner-Up with a neat compact broad leaf Daruma type C. *min-iata*. George Mann was awarded 2nd Runner-Up with an Akebono variegated plant, and special mention was also made for a compact dwarf Interspecifics with a compact umbel of petite

pendulous flowers of Hilton and Liza Atherstone.

We had a total of 12 stallholders and some beautiful, as well as some very expensive plants found themselves new homes and/or gardens, feet from the public where lacking but we hope this was just an after effect of the extremely cold winter the province was experiencing.

Overall it was by far one of the best winter shows to date, with great representation. We would just like to thank all 21 exhibitors and 12 stall holders for making for the making the show such a success, as well as our hosts at Safari Garden Centre, the judging team and all other parties involved in making this such a great weekend. 🌺

Reminiscing over the Overberg Clivia Interest Group

Felicity Weeden

All Committee Members of the Cape Clivia Club were required by the then Chairman, John Winter, to submit a list of projects to undertake as board members. My main project was to try and establish a *Clivia* Group in Hermanus.

In an effort to attract members to create such a group, an article was placed in the local Newspaper inviting interested people to attend a meeting at the United Church Hall one windy afternoon in 2004, to which we had a good response. So the Overberg Clivia Interest Group came into being.

From the outset meetings were held at members' homes so that we were able to view different plants and different ways of growing *Clivia* both in the garden and in pots and also

how to grow seeds and seedlings. We held interesting meetings with people like Christo Lotter and Les Brown sharing knowledge as well as seed, plants and pollen. At other times we had guest speakers, TV presentations and hands-on demonstrations.

Besides the Hermanus members we had interested individuals attending the meetings from Bettys Bay, Kleinmond, Stanford, Napier, Caledon and Gansbaai.

After a year or two it was decided to stage our own show. This was quite an undertaking as we had to rent a hall, arrange advertising, find material to cover the tables and Winners Display, buy awards and we had NO MONEY! However, we achieved our objective with the help from members who provided rolls of



From left to right: Andre and Sandra du Plessis, Felicity, Alet and Gerrit Roland

brown paper and table cloths, someone printed numbered cards for the classes and so it eventually all came together.

Coca-Cola donated a huge street banner and a number of top quality full colour posters, including the artwork, free of charge. At that time few members had many plants to bench, so when it came to judging and removing the winning plants there were some very large gaps on the tables which were hurriedly filled with plants from my greenhouse.

Stall holders sold interesting indigenous plants, orchids, *Clivia* of course, eco-friendly snail pellets and other interesting products and plant food. Not to mention delicious cakes and bakes. The first show was successful and we were able to build on that in the following years. Some interesting placards were created. One describing the hybridizing work with *Clivia* of Yoshikazu Nakamura of Japan and another of how *Clivia* have been hybridized in different directions in different countries, such as the super broad-leaved clones in China.

We had catering at most shows which created a very pleasant family atmosphere with guests chatting at tables and enjoying themselves and the lovely flowers.

We had some members from the Cape who competed and one in particular, Pieter Kok who showed with us for years and went home with a good many Awards. Well done Pieter! The Overberg Shows were well presented and professionally arranged with accredited Judges such as John Winter and Christo Lotter.

Each class could be awarded a first, 2nd and third prize. Overall winners were Best On Show, 1st Runner-Up and 2nd Runner-Up for leaves and flowers. We also always ran a "People's Choice" competition which was a lot of fun.

The Overberg *Clivia* Interest Group Show became a popular and sought after event during the Spring Festivities in Hermanus, coinciding with

the Whale Festival. We regularly held a Year End Braai and Prize Giving either in my backyard or at Etienne Kriel's 'Moerse Pies' venue in Napier. Usually Gerrit Rohlandt took care of the fire and made a big pot of "stywe pap". The highlight of this event was that we always had a big raffle of plants, usually with many in bloom.

At one point we numbered 25 members which would have allowed us to be a fully fledged Club, but we chose to remain an offshoot of the Cape *Clivia* Club. Then Covid happened which put an end to meetings and the show. Our last proper show was held in 2019.

In 2021 I resigned as Leader of the Group because I moved away from Hermanus. Andre

du Plessis took over for a short time. Willem Fourie was keen to keep the Group going so he and Andre agreed to share responsibilities, Willem as Leader and Andre as Treasurer. During this time a small display of *Clivia* was staged at the Harold Porter Botanical Gardens in Bettys Bay for a year or two. Sadly, Willem passed away earlier this year, 2024.

Members who were particularly supportive were:

Caroline Phipps – Show Chairperson for some years. She also gave a talk at the very first get together.

Alex Sherriff – Treasurer and

go to man for show admin.

Gerrit Rohlandt – Setting up and generally helping.

Dries and Mirjam Dreyer – Secretary and help.

Andre du Plessis – Printing full colour posters for the last few years.

Retrospectively, I have to thank an awful lot of people for helping to set up the Show Hall the evening before and being available to fill the gaps, including selling eats and making tea and coffee, selling entrance and raffle tickets and supervising the show hall. All helping to make the shows a success. Thank you all. I do hope I haven't left anyone out. If I have, please forgive me. 🌸

Retrospectively, I have to thank an awful lot of people for helping to set up the Show Hall the evening before and being available to fill the gaps, including selling eats and making tea and coffee, selling entrance and raffle tickets and supervising the show hall. All helping to make the shows a success. Thank you all.

The Rooihuiskraal Winter Show

Karel Stanz

The Rooihuiskraal Winter Show (Inter-specifics) kicked off early on Saturday, July 20th. Although the chilly weather led to a smaller selection of plants this year, with many members having to withdraw due to frost damage, we still saw some remarkable entries – even those that had to be trimmed a bit made the cut!

The plants that were on display were absolutely stunning. At RHK, we love involving everyone in the judging process with our “People’s Choice” awards. This year, we also welcomed guest judges to share their top picks. It was a thrill to see Corra and Dawie van Heerden sweep the awards, taking home People’s Choice, Best on Show, Runner-Up, and Second Runner-Up – all of their entries were truly exceptional! Jan Lessing also got a prize for 2nd Runner-Up. Despite the cold snap, we had a lovely array of both gorgeous and valuable plants up for sale, many of which found new

homes and gardens. Visitor numbers were a bit low, likely due to the frosty weather, but we’re optimistic that this was just a temporary dip.

A huge thank you goes to all the exhibitors and stallholders who helped make the show a success, and to our gracious hosts at Laerskool Rooihuiskraal. Your efforts and participation brought warmth and excitement to this chilly winter event! 🌸



Right: People’s Choice: Best on Show



Corra and Dawie van Heerden, Johann and Lizl Etsebeth with the Best Flowers on Show



Left: People's Choice 1st Runner-Up to Best on Show – Dawie and Corra van Heerden

People's Choice: 1st Runner-Up to Best on Show



Below: Two additional photos of plants on display

Below: People's Choice: Joint 2nd Runner-Up to Best on Show



Northern Free State Clivia Club

Renzi Mattana

On the 10th August 2024, The Northern Free State Clivia Club made its appearance at the monthly Flea market in Welkom to promote the upcoming Annual Clivia Show. Attending

members displayed their plants and engaged with the public. The Annual Clivia Show and Sales is scheduled for the 14th September 2024 and will be held at the NG Moeder Gemeente church hall. 🌺



Members present from left to right: Renzi Mattana, Hendrik Lindeque, Jan Schmidt, Thys Bezuidenhout, Stefan Ferreira and Johan Wiesner.





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Stemming Poaching and Advancing Conservation of *Clivia mirabilis*

Dave Garriock

Late 2023 and early 2024 was the start of a journey that the Clivia Society Committee never envisaged or saw coming. We found ourselves suddenly thrown into the midst of *Clivia mirabilis* being poached out of the habitat and smuggled out of the country. We were all hoping that the poaching was going to be a once-off and would die down. Little did we know how wrong we would be.

The Clivia Society Committee's strategy was a four-pronged approach:

- support the care of the confiscated plants ensuring their survival,
- investigate the legislation regarding *C. mirabilis* and the other species,
- make seeds, pollen and offsets available to satisfy the appetite for the plants in the overseas market and
- protect the remaining plants in the habitat.

The Society has not only had to deal with emotional outbursts on one side from members, but also enthusiastic pleas from SANBI and Nature Conservation to get involved. Periodically we were receiving negative WhatsApp messages from the reserve informing us of the pillage in Oorlogskloof and requests to issue valuation statements used to prosecute the poachers. Consequently, we found ourselves in an extremely negative environment.

Support and care:

At the AGM, the Clivia Society Committee approached the chairs of the different clubs and asked for an amount of money to be used so that we could purchase materials needed to properly look after the confiscated *C. mirabilis*, as well as finance needs in the future. It was a unanimous decision from the chairs that we could use R50 000,00 from the Research Fund and we purchased potting mix from Barko in George. After hearing our plight, the C Pack Company came forward and offered to transport the ten cubic metres free of charge to Cape Town. We also purchased fertilizer for the confiscated plants.

Investigate the legislation protecting the plants:

To determine just how the *C. mirabilis* was protected we spent hours of searching the internet, and realized that the protection was totally inadequate. Just by chance we also discovered there was a small window of opportunity to make formal representations on THE DRAFT NATIONAL ENVIRONMENTAL MANAGEMENT: BIODIVERSITY BILL.

We are thankful that several members were prepared to assist with the drafting of our submission. After numerous discussions we submitted our representations. Receipt of the submission has been acknowledged and we are currently waiting for a substantive reply.

Investigate ways of making material available to the public:

We recognize the substantial role that SANBI plays in the conservation of plant diversity. We therefore applied to SANBI to become the custodians of *C. mirabilis* so that, within the framework of the legislation, we could supply the world with pollen and seeds, hopefully taking the pressure off the plants in nature. Over the last few months, we have received information that the *C. mirabilis* price in China has drastically fallen, which is good news.

Protect the remaining plants:

The poachers are continually changing their modus operandi. They started going in groups, which makes a lot of easily detectable noise. Now they go into the reserve in the early evening and leave the reserve very early the next morning, carrying the bags. The suspicion is that one person spends the day removing and packing the plants and the others come in under cover of darkness to collect it. With the original R50k the Clivia Society has also managed to secure surveillance equipment for Oorlogskloof.

There have been some fifty known incidents, leading to forty-seven arrests, many of whom were foreign nationals. Over four thousand *C. mirabilis* plants have been confiscated. We now must wait for the court cases to play out.

Meetings are continuously being held with Cape Nature, Northern Cape Nature Conservation and SANBI to understand where we are and what we need to do to move forward with all the different role players. It is vital that we continue to network with everyone to be able to make the right decisions.

SANBI are overwhelmed and cannot cope with the volume of plants, not only *C. mirabilis* that they were expected to look after, but all the other species being poached. We realized very quickly that part of the problem is the socio-economic conditions around the reserve and surrounding areas.

In every communication I have sent out we have appealed to anyone who has any information to please come forward and report it to the relevant authorities. So far, we have received some unbelievably valuable information which was passed on to the authorities. At this stage I would like to thank all the people who have come forward. The disappointment is we know of some members who have been approached, but have not come forward to report the matter. If we do not all get involved to fight this scourge, we will not win the battle.

I want to thank the Society Committee and

especially Clayton Jonkers who helped to drive the agreed process forward and is not scared to get involved, André Swart for all his legal advice, contracts, proposals, as well as checking all correspondence and André Schlemmer, retired from Nature Conservation, for all his advice. They have all put in an incredible amount of their private time doing the best for our *Clivia* plants. It is quite amazing to see these people's natural cohesion saying we can and will make a difference. It has been hours of networking with all the different entities, having to deal with the politics, resignations, sickness, etc., numerous meetings to try and find all the relevant information, deciphering the information once found, realising there is a timeline for comments, visiting the reserve for information, sourcing both products to look after the confiscated plants and protection devices for the plants left in the habitat, all while needing to still put in a full day's work in our different occupations.

Hopefully, some of our applications will soon bear fruit and we will be able to give some positive feedback. From all our learning it is going to hopefully make it easier for us all to protect the other five species in the habitat from poachers. 🌸



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CLIVIA PERSONALITIES**Hendrik Wentzel and his Son Eduard Wentzel****Cindy Dorfling**

1. *Tell us who you are and where are you from?*

We are from White River, Mpumalanga.

2. *When did you first develop an interest in Clivia, and who or what sparked your initial introduction to them?*

- H: As a plant ecologist working as a landscaper, I always had a passion for nature. Specific interest for *Clivia* was sparked by George Mann and my son and I was very fortunate that Paul Kloeck took us under his wing and taught us the finer details of *Clivia* growing and breeding.

- E: I got involved in *Clivia* through my dad's passion for plants and that led to my interest in *Clivia*.

3. *How large has your Clivia collection grown over time, and do you have a particular favorite among them?*

Our collection started very small in the beginning but over time we bought in superior seeds and suckers from reputable breeders.

We have approximately 1200 *Clivia* in our collection.

We both share a specific interest in the foliage plants:

Variegated *Clivia* as well as more compact clivias with colours other than orange.

4. *Could you describe your nursery setup and the daily or weekly tasks involved in maintaining it?*

Our shadehouse is covered with 80% shadenet.

Plants are watered once or twice a week depending on the season.

Fungicide and insecticide application: preventative.

Soluble fertilizer on seedlings to enhance growth.

5. *What do both of you enjoy most about the flowering and pollination season?*

The excitement when the flowering buds starts to emerge and the anticipation in hoping that maybe something exiting or different could emerge.

Pollination: experimenting to create something new that has not been tried before.

6. *Do you participate in shows and competitions? If so, which accomplishments are you most proud of?*

We have participated at the Lowveld Clivia Show the last 3 years.

I am vice chairman and we are both on the committee:

Show committee and both learner judges.

Best achievement: First year: Eduard winning gold in the category:

Most exquisite flower (plant was bred by George Mann).

We also enjoy engaging with all the *Clivia* members and sharing knowledge and experiences.

7. *Eduard, how do you perceive the Clivia community from the perspective of young people? Do you think it's an engaging interest for the younger generation?*

- E: I enjoy doing something different other than normal school and academics.

I would recommend this to anybody who would like to take up a hobby where they can engage with new people as well as to be creative and getting closer to nature.

8. *What improvements or changes do you believe could attract and inspire a new generation of Clivia growers?*



Hendrik Wentzel and his son Eduard Wentzel



This is a hobby that anyone can enjoy, no matter how old you are.

The younger you begin the more time there is to enjoy it.

The love of nature is a passion that should be stimulated from a early age.

Maybe have more youth categories.

9. *Is growing clivias purely a hobby for you, or has it become something more, like a passion or business?*

Clivia growing is a hobby and passion combined.

Will probably become seasonal source of income as time goes on.

10. *Sharing a passion for growing clivias as a father and son is truly special. Are there any memorable moments or experiences you've had together that you'd like to share?*

Spending time together as father and son is a privilege.

H: To be able to enjoy this hobby with Eduard is something that I cherish. We enjoy doing everything together: Growing of the plants, flowering time and pollenating.

Clivia meetings where we can interact with fellow members and share information.

Clivia shows: experiencing every bodies passion and effort coming together. 🌸

Remembering Stef de Swardt: A Passionate Plantsman and Beloved Friend

The *Clivia* community mourns the loss of Stef de Swardt, who passed away on 2 August 2024 after a long illness.

Stef served on the board of the Free State *Clivia* Club for many years before retiring in Hartenbos seven years ago. As a mentor and advisor to many club members, Stef's wisdom and experience were invaluable. His knowledge of Chinese plants was particularly impressive, and when he imported seedlings, he sometimes involved fellow enthusiasts in the process.

Maintaining a close relationship with members of the Free State *Clivia* Club, his home in Hartenbos became a welcoming haven for visitors. True to his nature, no one ever left without a plant for their garden, even when he was already quite ill. Many club members and friends now cherish plants received from him over the years as part of their *Clivia* collections and gardens. His generosity is exemplified by the fact that he even shared a *Clivia* he had personally obtained from the collection of former Bophuthatswana president Lucas Mangope. His legacy thus lives on in the gardens of those whose lives he touched.

As an enthusiastic botanist, Stef had a particular love for indigenous plants, especially *Clivia* – of course – but also succulents and aloes.



This passion took him on journeys to every native *Clivia* habitat in South Africa. As an avid caravanner, he often combined his love for camping with plant-hunting expeditions; the Kgalagadi was one of his favorite getaway spots.

Beyond his botanical pursuits, Stef was a talented photographer with a keen eye for natural beauty. His Facebook page was a testament to

his skill, featuring stunning photos of sunrises, sunsets, birds, and wildlife from his camping trips. These daily posts brought joy to many of his friends and followers. His warm personality and passion for plants endeared him to his nationwide circle of friends.

Stef was a multifaceted individual – a philosopher with wide-ranging knowledge and a deep understanding of people. His love for his wife Louie, his family, and people in general remained constant throughout his life.

The gardening community and his wide circle of friends have lost a beloved companion but as one friend poignantly noted, "I believe that where he is now, he's still collecting plants."

Stef de Swardt will be deeply missed, but his passion for plants and his impact on those who knew him will ensure that his memory lives on in gardens across South Africa. Our condolences go out to Louie, his children, grandchildren, and many friends. 🌸

For Love not Money – André du Toit Shares his Special Relationship with his *Clivia*

I am an avid *Clivia* collector, but although I sell some of them from time to time to make space and cover expenses, I like to gift my beloved plants to friends, family, and the school my granddaughters attend.

You see, for me, the true value of my *Clivia* plants extends far beyond their monetary worth. I believe this sentiment is shared by most collectors, but I sometimes wonder if commercial breeders feel the same emotional attachment.

I tend to develop deep connections with many of my plants, and I would like to share a few of these with you. The first of my special plants are a simple yellow one given to me by my late brother David, and a Tipperary Peach from my late sister Anta. I cherish these plants and feel emotional when they bloom or when I tend to them.

My collection began in earnest in 2004 with a few plants from my brother, Dr Neethling du Toit, and I have since bred several high-quality plants from them. I mostly breed my plants from my own seeds, but I also purchase seeds, suckers, seedlings, and plants from various breeders.

I also have a deep sentimental and loyal connection to both 'Vlinder' and the single offspring that I managed to grow from it, which I named Vlinderkind. With this special plant I won my first medal at the show of the Free State *Clivia* club in 2008 and to this day it remains one of my favorite orange *Clivia*.

Another plant that I hold dear is the beautiful green *Clivia* that I bought as a seedling from the late Attie le Roux in 2010. This plant is an offspring of his famous 'Hirao' x 'Charl's Green', which has received numerous. It will always remind me of Attie and his generosity in sharing his knowledge of *Clivia*.

Of course, my first good interspecific also



'holds a special place in my heart. I received it from my brother Neethling; it is a sucker of 'Aandklokkie', so named by his wife, Erika. Aandklokkie is a bit capricious and flowers sometimes apricot and





'Aandklokkie'



'Ellie'

sometimes light orange. However, it is its unique flower shape that makes it extraordinary.

Another *Clivia* that I hold dear is 'Ellie', which surprised me with its stunning pink colour when it flowered the first time. 'Ellie', named after my youngest granddaughter, was honored by being featured on the cover of *Clivia News* in 2021. Naturally, as many *Clivia* enthusiasts do, I also named other special flowers after my grandchildren and Vida, Emma, and Lea eagerly anticipate their namesakes to flower every season.

In philosophy, sentimentalism is considered a morality grounded in moral sentiments or emotions. My *Clivia* collection and the people I have met through my interest in these amazing plants have enriched my life considerably since my retirement. I am not ashamed to say that I am sentimental about many of my plants, and my emotional connection with them far surpasses their commercial value. 🌺



'Hirao' x 'Charl's Green'



'Emma'



'Vida'



'Lea'

Interspecific Breeding – Emerging Trends and Exciting Outcomes

Bernard Slippers and Karel Stanz

Interspecific breeding holds tremendous potential to introduce unique colors and shapes to the already extensive diversity of Clivia flowers, and to extend the flowering season and enjoyment. It can also be demanding and uncertain, as the outcomes can vary dramatically from a single cross. To explore this potential, complexity and some of the new directions emerging in interspecific breeding, we asked breeders about outcomes of their recent breeding and what they foresee as the future of interspecific breeding. We intend for this to be a series of articles in coming newsletters. Here we feature two responses, from Paul and Sue Kloock and Carrie Kruger.

What recent outcome(s) of your interspecific breeding do you consider to be the most exciting and holds the most promise for future breeding?

CK: "To us, our 'Star Green' range, 'Secret' series and our 'Dreaming' Series hold the most promise for future breeding of unusual colours, shapes

and combinations."

PSK: "One of the most exciting outcomes of our Interspecific breeding is the range of bronzes, olives, almost brown and shades of green that are coming through. These colours hold promise for future breeding as these colours are relatively scarce amongst interspecifics at the moment."

What was the cross that produced this outcome?

CK: "To name one cross is difficult as there are more than one cross that had excellent results. I will single out 2 specific crosses for this purpose. ('Apricot Dreams' x 'Dreaming') = "Dare to Dream"; and ('Jupiter' x 'Secret Desire') = "Jevon's Desire"

1. PSK: "The crosses are 3-way crosses using 'CK Kumikazi', 'CK Gangrene Swirl' as pollen parents on a range of bronze green-throated Miniatas and Hiraos. Unfortunately both plants are sterile and we have thus not been able to use either as a pod parent. Their pollen is, however, potent and has



'Jevon's Desire' – Carrie Kruger



'Secret Desire' – Carrie Kruger



'Gangrene Swirl' – Paul and Sue Kloeck

been used with great success over the last 7 years."

How variable was the outcome of this cross? ie. what other results did you notice from the cross? Any additional photographs will also be appreciated, but is not essential.

CK: "Unfortunately I have not flowered enough of these specific crosses to give an exact answer to this question."

PSK: "In our case the outcome is fairly uniform and now quite predictable. Some turn out a little more bronze than others. A few have come out burnt orange, not quite orange, but verging on bronze."

What does the future of interspecific breeding hold?

CK: "I have always seen interspecific breeding as



'Kumikazi' – Paul and Sue Kloeck



'A star is born' – Carrie Kruger



'Majestic Goblin' – Paul and Sue Kloeck



'Star Green Supernova' – Carrie Kruger



'Bufo Bronze' – Paul and Sue Kloeck

the “future” of *Clivia* breeding regarding colour combinations, flower shapes and extending the flowering season. I think with further breeding we will achieve these colour combinations in larger flower types, although my preference lies with the pendulous shapes.”

PSK: “We, at Clivia Kingdom, think we have only touched the tip of the iceberg in ‘new age’ interspecific breeding. The popularity of our interspecific seed items on our seed list is proof of the pudding. Most items are sold out within a week of launching. The future of Interspecific breeding is bright and exciting. They offset readily, flower every year, push their umbels well above their leaves and gardeners and *Clivia* enthusiasts



'Gun Metal Hir' – Paul and Sue Kloeck

are having the pleasure of flowering hybrids from April all the way through to October.” 🌸

Thurlow Flora Bronze/Red Interspecific Hybrid Range

Sean Chubb

I find the very dark coloured Bronze and Red Interspecific hybrids very attractive.

Initially I could not find suitable breeding plants, so I crossed haphazardly between all the darkest orange Interspecifics, hoping that something suitable would be produced.

I did produce some nice dark plants but all were very tubular pendulous plants. My aim was to produce semi-pendulous, more open flared flowers in these dark colours.

Neels Botha kindly sold me an offset of Kira '87, one of his bronze selections which appears to be Interspecific but has small *Miniata*-type bronze flowers. I also introduced a plant named 'Heidi' from Leon van Rooyen, but originally bred by Hilton Atherstone. Heidi has a very high flower count umbel with good shaped flowers.



I have produced some plants which have very dark maroon/carmine peduncles, namely "Maroon Peduncle" and Blood Bank. Other good results of my breeding are 'Red Belle', 'Witcher' and 'Burn Out', all superior, very darkly coloured plants.

The crosses I have flowered so far from the plants mentioned above have proved very pleasing with a high percentage of good dark coloured plants, many with maroon/carmine coloured peduncles.

There are still very few of these type plants on the market and I believe with the introduction of *Clivia mirabilis* and its carmine genetics that it might improve even further. My breeding of dark interspecifics should produce good results in the near future. 🌺



'Blood Bank'



Sean Chubb

Clivia Breeder



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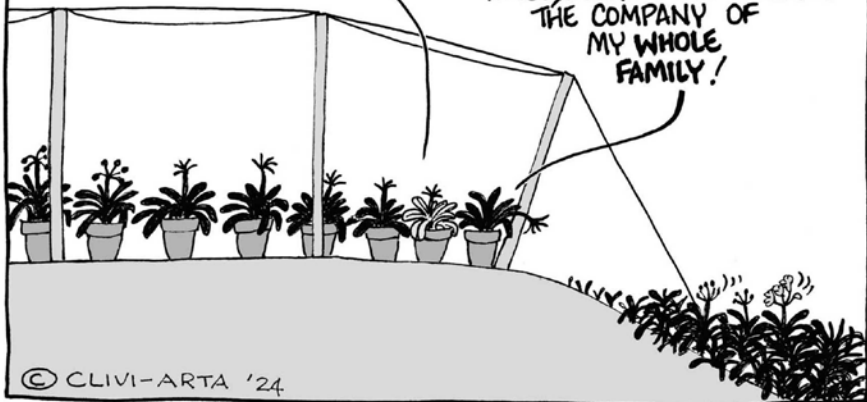
**MY SEEDS WERE CLEANED, LABELLED, TAKEN AWAY
AND SOWN!**

**MY SEEDS ARE CLEANED, LABELLED,
TAKEN AWAY AND SOWN
- EVERY YEAR!**



HA!
**MY SEEDS ARE CLEANED, LABELLED,
TAKEN AWAY AND SENT OVERSEAS
- EVERY YEAR!**

**WELL,
EVERY YEAR MY SEEDS ARE
SELF-SOWN BEHIND THE SHADE-
HOUSE, WHERE I GET TO ENJOY
THE COMPANY OF
MY WHOLE
FAMILY!**



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The Complexity of Flower Colour Formation in Plants: Regulation of Anthocyanin Production and its Relevance to Flower Colour in *Clivia* (Part A)

Bernard Slippers

Background

The colour in *Clivia* flowers is produced by three types of pigments, namely anthocyanins (red), carotenoids (yellow) and chlorophyll (green). The colour in the flowers is formed by the intensity (amount) and pattern of the deposition of these colour-reflecting molecules in a 3D matrix of the cellular layers of the tepal/sepal. The colour we perceive is not formed by the physical mixture of these pigments (like paint), but by the patterns in which the pigments are deposited across the tepal/sepal (and in layers) and the mixture of light reflections from these pigments.

Anthocyanins, carotenoids and chlorophyll are ubiquitous in flowering plants. These pigments are not only involved in reproduction for the formation of colour in flowers, but are produced throughout the tissues and developmental stages, with various critical functions in growth, development and defense. They are pleiotropic, meaning they affect a variety of biological functions in different plant parts. Consequently, the genes and pathways that underlie the production of these pigments are highly conserved amongst plants. While these genes have not been characterized in *Clivia*, they are also expected to be conserved in this genus.

In this article, I discuss what the production and regulation of anthocyanins in flowering plants. For this purpose I specifically refer to a recent international review on the topic by LaFountain and Yuan (2021).

Anthocyanin production

Anthocyanin is part of a group of chemicals or metabolites called flavonoids. These chemical compounds occur widely in plants and are responsible for red, blue and purple colors in flowers, autumn leaves and fruits. They are also present, albeit not always visible, in vegetative tissues, where they have various roles, for example, protecting the photosynthesis machinery from UV radiation, detoxifying harmful oxidants that

build up during environmental stresses (such as drought, temperature and more) or to protect plants against pests and pathogens.

Anthocyanins are produced through a highly conserved pathway or process called the anthocyanin biosynthesis pathway (ABP). This pathway includes 10 or more proteins that all play a role, which consecutively converts starting chemicals into the eventual anthocyanin products.

The production of anthocyanins is regulated because the pigments are needed in different tissues of the plant at different times and in different quantities. For this reason, plants have evolved very complex regulatory mechanisms that can respond to a myriad of different internal (eg. development stage) and external (e.g. physical damage, temperature, etc.) signals during the development of the plant.

The regulatory mechanism of anthocyanin production is known as a 'double-negative logic' regulation. This regulatory mechanism is common in plants with molecular processes that require rapid response to environmental or other cues. The double-negative regulation means that there is a two-step process to the regulation of the gene – a primary regulator (often stimulating production continuously) and a secondary regulator (often repressing the primary regulator) that responds to various input signals. Signals that suppress the secondary regulator (suppresses the suppressor – thus the 'double negative logic'), indirectly activate the primary regulator/stimulator.

An analogy to understand this is water in our homes (Figure 1). The water comes from a reservoir via a pipeline to our homes. This pipeline is like a primary regulator and is always full of water or 'turned on'. The flow of the water from this pipeline is regulated by a tap, the secondary regulator. The tap, however, needs a hand or a signal to open it – and can be opened fully or partly. The hand that acts on the tap is

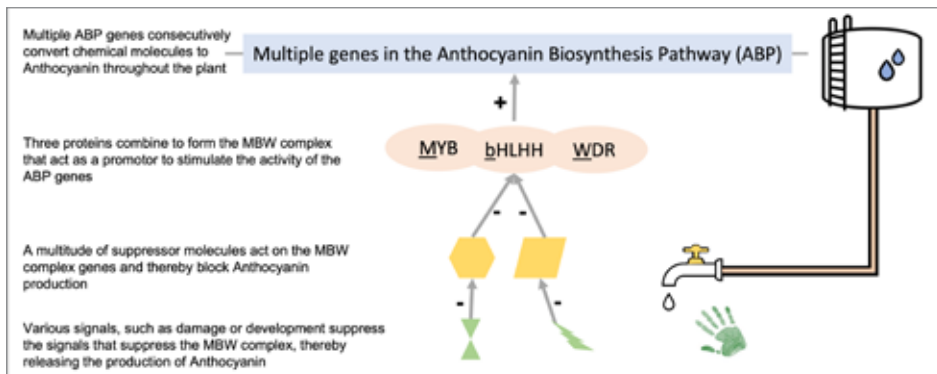


Figure 1. A schematic explanation of elements of the Anthocyanin production and suppression process.

An analogy for the process is provided, as water flowing from a reservoir, through a pipe to a tap where its flow can be controlled by an external factors (hand). Colors on the schematic and analogy match parts of the process.

the 'double negative logic' that allows the water to flow.

The main or primary regulator of the ABP (Anthocyanin Biosynthesis Pathway) is called the MBW complex (Regulatory complex) and is conserved in all angiosperms studied to date. The complex is made up of different proteins that interact and bind each other. This regulator

activates genes in the ABP, and thereby stimulates the production of anthocyanins.

In addition, there is a whole range of secondary regulators, most of which act on the MBW complex, and mostly to suppress its action. By suppressing the MBW complex, these regulators also suppress the production of anthocyanins. Various signals, such as environmental triggers

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such as temperature, development – chemical processes relating to development (ripening, petal formation, etc), can deactivate the suppressors, and thus release the MBW complex to stimulate anthocyanin production.

In the case of anthocyanin production in flowers, the MBW complex is like a pipeline, while the secondary factors that regulate the MBW complex are like taps. The signals that control these secondary factors are like hands that turn the taps.

While these processes have not been fully studied in *Clivia*, it is expected that *Clivia* would have these same conserved processes as found in all other flowering plants (as explained by LaFountain and Yuan (2021)). Albeit limited, prior work done on *Clivia* and related plants support this hypothesis. This includes work to characterize the pigments, as well as on the genes underlying the production of the pigments in *Clivia* (see for example Snyman, Spies and Viljoen (2010), and Hammett 2006). Quite extensive work has also been done in other *Amaryllidaceae*, which also support this hypothesis (see for example Wang et al. 2021). The study by Snyman, Spies and Viljoen confirms the presence of key genes in the ABP pathway in *Clivia*, and its close relation to those of other related monocots.

In a follow-up article, I will discuss how the regulation of anthocyanin could be interpreted in different *Clivia* lines.

Summary

- Anthocyanins are produced in various tissues and have a variety of roles throughout the life cycle of the plant
- Anthocyanins are produced through a serious of steps involving many genes and regulators (ABP- Anthocyanin Biosynthetic Pathway)

Some useful terms

DNA – carries the codes for all life in each cell, including structural elements and processes. These codes are long strings of millions of repeats of four basic coding elements (abbreviated ACGT). The code carried in cells in the roots, leaves and flowers are identical, but regulated differently.

Proteins – are both the building blocks and engines of life, some proteins form part of the physical structures of cells, while others perform the processes inside cells.

Genes – are pieces (usually a few 100 to a few 1000 of the building blocks ACGT) of the DNA string in each cell that contain the code for a particular protein.

Allele – Each plant has one copy of each gene

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from each parent. If these two copies differ from each other, then we called them alleles of the gene.

RNA – The code in a DNA string is transcribed into another molecule called RNA, which in turn contains the code for the order and length of the building blocks of the proteins (called amino acids). Some RNA molecules can also interact with DNA and other RNA molecules.

Gene regulation – How quickly and how often a gene is transcribed to RNA and from there translated to proteins control the extent to which a process is performed in a cell. Various molecules can bind to DNA to speed up or slow down this process, called transcription factors. Various external environmental and internal cellular processes affect whether a gene is 'turned on' or 'turned off'.

MBW complex – Three molecules, called MYB, bHLH, and WDR, that combine to form a larger, complex molecule that inhibit Anthocyanin biosynthesis.

Secondary metabolite pathway – Most products in cells, including the pigments of flowers, are produced through chain of reactions, performed by a set order of enzymes, each of which is produced by a different gene. Each process takes the slightly modified product from the previous process and modifies it further, until the end-product is produced. This is much like a factory process that starts with various ingredients that are mixed and packaged through multiple steps to produce the products we buy off a shelf. An example is the Anthocyanin Biosynthesis Pathway (ABP).

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Motley and Exquisite Flower: Proposals for New Show Classes to Respond to New Developments

Hennie van der Mescht

After our judging committee received a request to describe the phenomenon where *Clivia* flowers often do not develop evenly and we do not have a good *Clivia* term for such a variegated head, we looked into it. Charl Coetzee then consulted the dictionary. There he came across the word "Medley." It is an athletic term meaning athletes take turns carrying the baton.

The term "Medley," in color terminology, is "Motley," an old English word for colors that "take turns." Therefore, his suggestion is "Motley," which we as a committee would like to propose to describe such a variegated head in *Clivia*.

The request that the committee consider an award for a plant with extraordinarily unique-colored flowers was also discussed.

Over the years, the concept has developed that a round inflorescence without gaps would be a show winner. What we have overlooked in this process are extraordinary flowers with unique colors that do not meet the standard of a show flower. Simply put, if I ask someone to choose a flower from all the show flowers to take home if they had a choice, there are such flowers at most shows.

We believe the grower should be rewarded for such new additions to *Clivia* – uniqueness. Such a flower should be recognized as a new addition to the main table. Paul Kloeck's suggestion for such a flower was "Exquisite Flower," and it was accepted. It is not a new class, just an award.

These two proposals are submitted for approval at the AGM. 🌺



Top left:
'A star is born' –
Carrie Kruger;
Bottom left:
'Hattori' –
Cora de Kock;
Top right:
'Star Green' fresh
– Carrie Kruger;
Bottom right:
'Star Green' mature
– Carrie Kruger



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