

## *Interspecific breeding at Utopia Clivias*

The name interspecific Clivia is not well known to the general public, although grown and collected by most Clivia growers all over the world. Interspecifics are crosses with Clivia miniata as pod parent and a specie Clivia as pollen parent, or vice versa. The resulting plant is then called an interspecific. In other words, interbreeding with different species of Clivia. This is a new trend in breeding clivias which can flower at different times of the year. The flowers are pendulous, but larger and more open than those of the wild species. In F2 generations flowers become larger with more flared or open flowers. These plants can flower any time between May and September yearly, with the main flowering time in July when we have small interspecific shows and displays to promote these plants. They are robust, fast growing and more resistant to pests and diseases. Make sure to add one to your collection and it will bring some colour into your garden over the winter months.

Our collection also includes some of the late Rudo Lotter`s finest interspecifics, which his father Wessel Lotter has bred. We also use these extensively in our breeding programme. They include registered hybrids like, Cinderella, Moondrops, Ginger Bells, Ruben, Sunrise Surprise, Brown Eyed Girl, Rosy Cheeks, Pink Baby and his best interspecific called Chanel.

Interspecifics flower when little else is flowering in your garden. We have bred and acquired some wonderful plants in the last few years of which Secret Desire is a prime example. This plant won best Interspecific on show in PE in 2009 and is by far more superior to most others in colouration and flower shape.

### **A: Why do we breed with interspecifics**

We consider interspecific breeding as the "new age" breeding of Clivias. Most of the new and unusual colours in Clivias originate from interspecific breeding. We at Utopia Clivias believe that the future of Clivias lie hidden in these genetics. The largest range of colours are found in interspecific flowers.

### **B: Interspecific breeding through the years.**

The name "interspecific" says it all, interbreeding with different species of Clivias. The first crosses were made many years ago between Nobilis and Miniata and these were named "Cyrtanthiflora". Breeders have since crossed all the various species to miniate and vice versa. Some proven results of f1 breeding are that using miniata as a pod parent will give larger more open flowers in the first generation. We see the F1 generation of interspecifics only as a stepping stone to much better, more diverse flowers in the second and third generations.

### **C: About our breeding lines:**

#### **The "Secret" Series:**

The parent plants of this range are a Pastel miniata x 5 Star (Gardenii x group 1 yellow). These are all the most beautiful pinks and pastels with open recurved flowers. I am currently line breeding with these plants and the first f3 flowered in 2016.



*Secret Love*



*Secret Desire*



*Secret Hope*



Pink clivias are still rare and hard to come by. With the large gene pool in interspecific breeding, pink flowers are now also seen in the interspecific range of clivias. My first pink pastel types emerged from ten plants I received as a gift from a friend in 2007, as two-year old seedlings. These were all grown from seed of the same cross namely, (Coromandel Orange x Group 1 Yellow) x 5 Star (Gardenii x group 1 yellow). These F1 plants are all split for Group 1 Yellow and therefore, when sibling crosses are made, a percentage of them have green stems.

The first of these ten plants flowered in 2009 and to my surprise, it was a beautiful creamy pastel which developed pink tinges as it matured. The flowers were large and semi-open on a small to medium sized plant. It flowered during the interspecific time and I decided to take it to the Eastern Province Interspecific Show where it was voted best on show. I named this one "Secret Desire" as it was desired by so many at that show. During 2011 two more opened. I participated in both the Eastern Province and Garden Route Clivia Shows, where both these plants were selected as winners. At the Eastern Province show in July, "Secret Wish" was voted best on show. It is salmon pink with semi-open flowers on a sturdy medium sized plant. In August the third plant started opening and I named her "Secret Hope". Although all the flowers were not open yet, it was voted second best on show. It is a beautiful pink with large semi-open flowers on a medium sized plant. Since then, others have all flowered, mostly as beautiful pink pastels. Two of the ten plants flowered as yellow interspecifics.

They do not all flower during show times, but I have named and numbered them for breeding purposes. I did sibling crosses with them and the first f1 flowered in 2015. It was a beautiful large pink semi-pendulous flower named "Secret Child". Although the flower count was low, as the plant was only three years old at that stage, I have good expectations for the crosses. The other plants in this range are as follows: "Secret Love" has lovely salmon pink flowers on a semi broad leaf, compact plant. "Secret Rose" opens in a lovely round cream flower that matures into an apricot pastel. "Secret Dream" is almost a pink versi colour with cream on the inside and pink on the outside of the petals. As the flowers mature, they change to pink. "Secret Strawberry Parfait" has the pinkest flowers and is the only one that offsets well. "Secret Baby Doll" is a more pendulous flower in soft shades of cream, pink and pastel.

What makes these plants stand out from the rest, is the size of the plants. Most of them are much smaller and more compact than the average interspecific with shorter leaves. They are neat, tidy plants and it seems that the umbels keep on improving every year. They have viable pollen and set seeds well. I am extremely excited to see the results of all these sibling crosses, where I used the pollen on pink *miniata* and other interspecifics. It was surely one of my best gifts ever.



*Secret Strawberry Parfait*

### The "Dream" series

These are all selfed seedlings of a Nakamura bred interspecific, grown from seed. The first selfing of this plant only produced about 8 -10 seeds which grew into these magnificent plants. The flowers are large and semi open. These plants all have flowers with Picotee-type edging, and semi to broad leaves, up to 90mm. We are linebreeding these plants as well as using them in other crosses.

When I first laid eyes on these plants eight years ago, I was blown away by the shape and size of these three-year old plants in comparison to our normal interspecifics. They were broad-leafed, sturdy and large. All were selfed seedlings of a Nakamura bred interspecific, grown from seed by Kerneels Buitendag. The first selfing of this plant only produced about 8 -10 seeds which grew into these magnificent plants.

I fell head over heels in love with them and managed to persuade Kerneels to part with them. These have grown into large robust, broad-leafed plants. When they came into flower, I knew they were special.

The first plant to flower, I named "Dreaming" and it has a distinct white Picotee edge around the flower. The flowers are large and semi open. These plants all have flowers with Picotee-type edging, and semi to broad leaves, up to 90mm.

I have named this collection, the "Dream Series". I have been crossing them with each other, in order to line-breed and keep the quality of the flowers with the unique characteristics of these plants.

Some of the others that have flowered and have been named: " Dream Catcher", "Sweet Dreams", "Apricot Dreams", "Dream On", "Dream Land", "Dreaming Hearts", "Day Dreamer" and "Dreamscapes".

These are very fertile plants which set seeds well. I have also utilised their pollen extensively on my other interspecifics and cannot wait for the resultant seedlings to flower within the next season or two. Some of the seedlings show signs of variegation, making them even more striking. I will keep you updated on the results. Exciting times await us, as these seedlings grow and come into flower over the next few seasons!

These plants are now being registered at the International Clivia register and checklist.



DREAMSCAPES





DREAM OF HEARTS



DREAM ON



DREAMING

### New versicolour range

We are breeding a new range of versi colours from different breeding material. They range from pink versi colours to dark red and brick brown versi colours. Versi colour genes are very dominant and are carried over to the next generation even only as a pollen parent. The famous "Star Green" is used in this breeding line. "Star Green" is truly a one of a kind flower with dark brick red outer petals and green inner petals which gradually change to a dusty pink as it matures. We are very excited about seeing the outcomes of these Star Green crosses, but that will only be in a year or two.

Versicolour flowers – Here the colours on the inside and outside of the tepals are different.

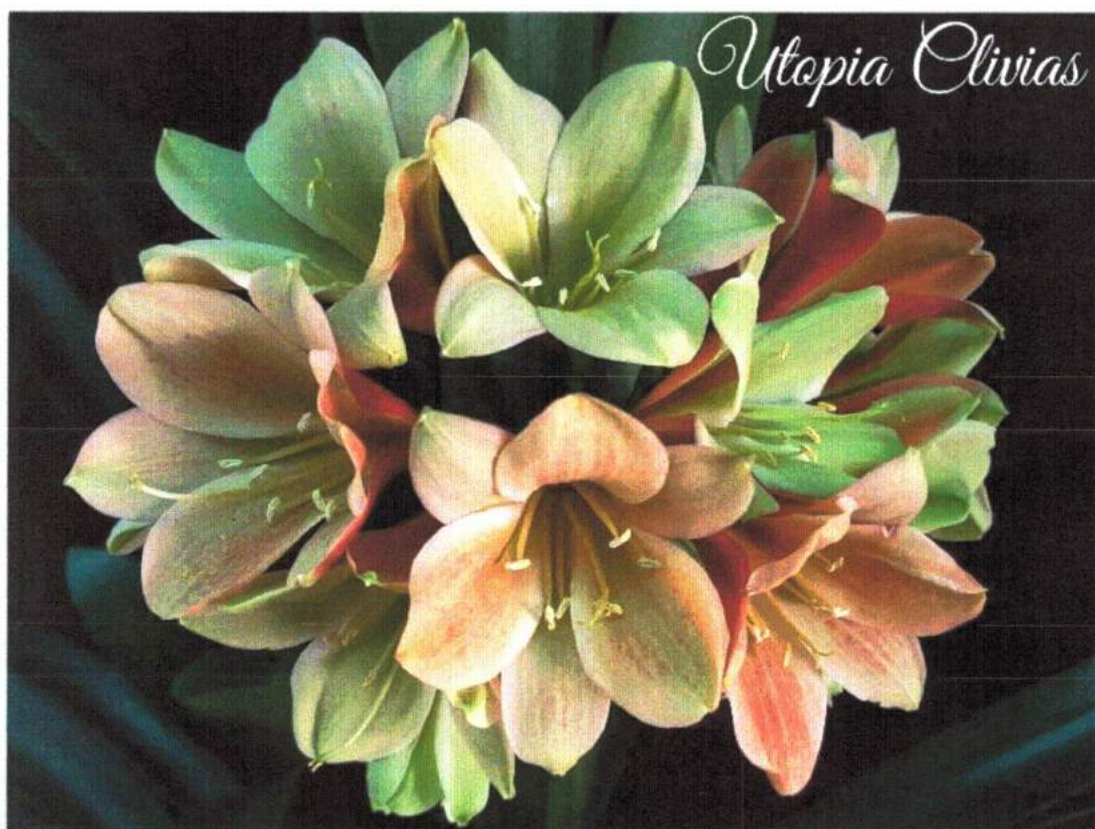
The best f1 of "Star Green" is a plant that flowered for the first time in 2018. We have named this f1 "Star Green Destiny". "Star Green Destiny" is far superior to the original Star Green in many ways, and therefore we have decided to use this F1 in all our breeding with the Star Green range for the following reasons: Star Green original versus F1 Star Green Destiny:

"Star Green Destiny" produces viable pollen which Star Green original does not.

"Star Green Destiny" has larger, more flared flowers than the mother plant.

The flower count on this first flower of "Star Green Destiny" is (20) florets, where "Star Green Original" has never produced more than (15) florets at maturity. It also has the strong dark brick red versi-colour on the back of the petals. As the colour change in the flowers is not so extreme when it matures as with the original "Star Green", the versi-colour seems to show up better on the mature flowers.

The F1 is a larger, stronger more vigorous plant and hopefully will be less prone to pests and disease.



STAR GREEN ORIGINAL





STAR GREEN VERSI ON THE BACK OF THE TEPALS



STAR GREEN DESTINY



STAR GREEN DESTINY MATURE



5 STAR VERSI

#### 4. Conclusion:

Interspecifics give us a longer flowering period as they start flowering from June to September. They are fast growing and more disease resistant than miniata. The range of colours and forms of flowers are unlimited, and they are therefore a must in any breeder`s collection.

Why do we breed Interspecifics at Utopia Clivias by Carrie Kruger



*Mirajohn*

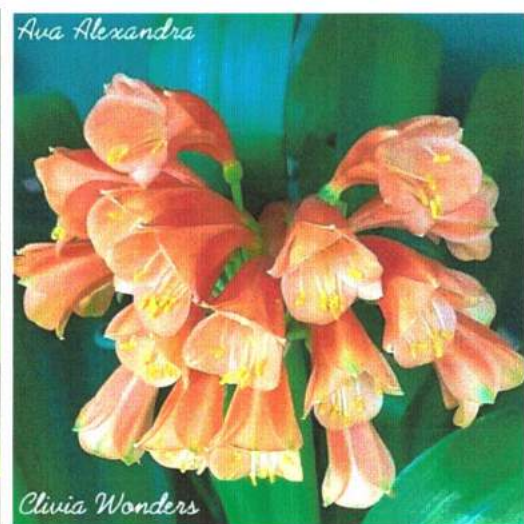


*Clivia Wonders*

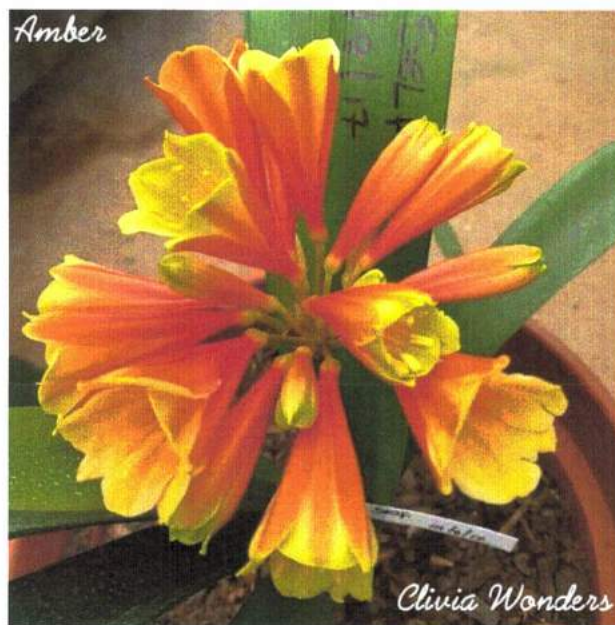




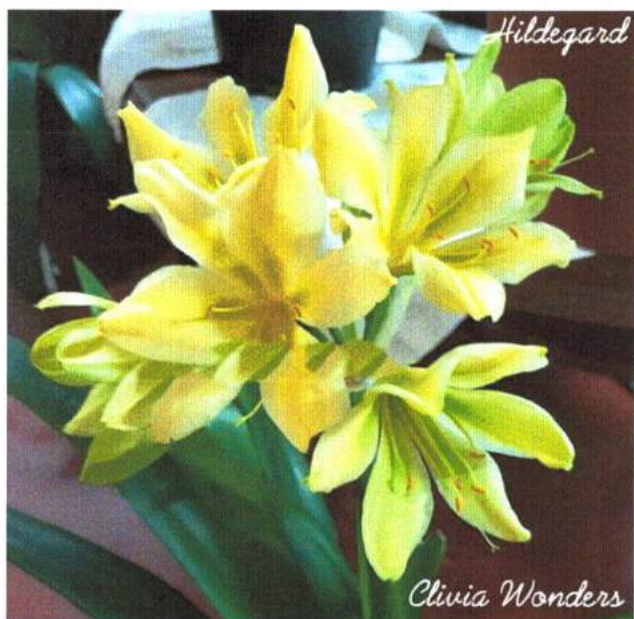
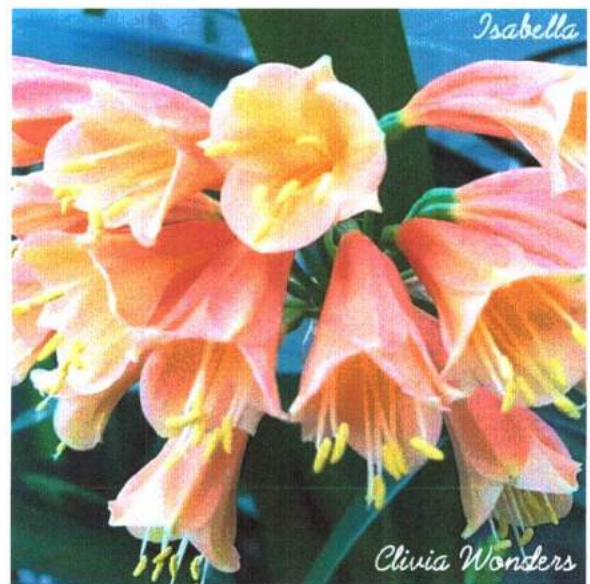


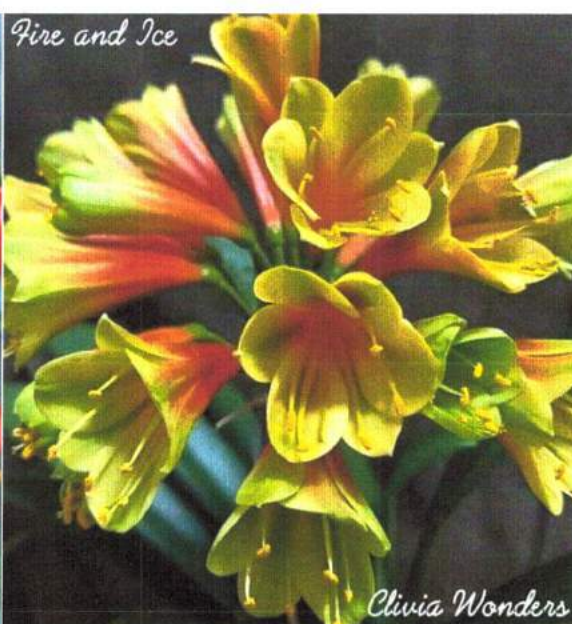




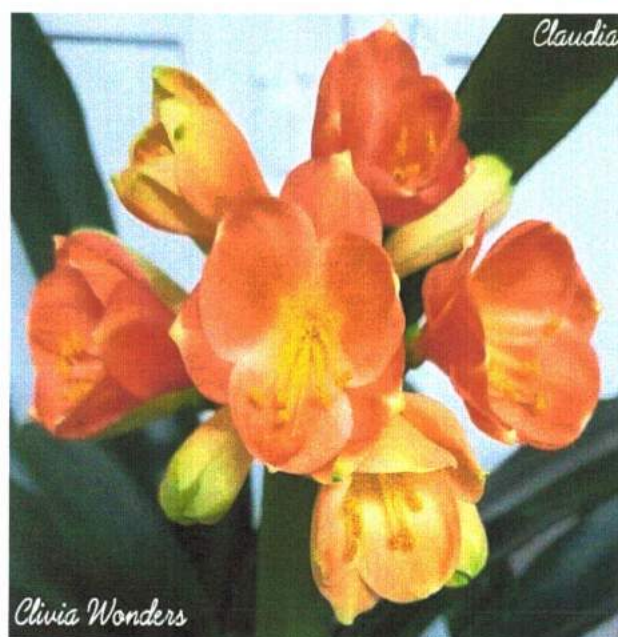


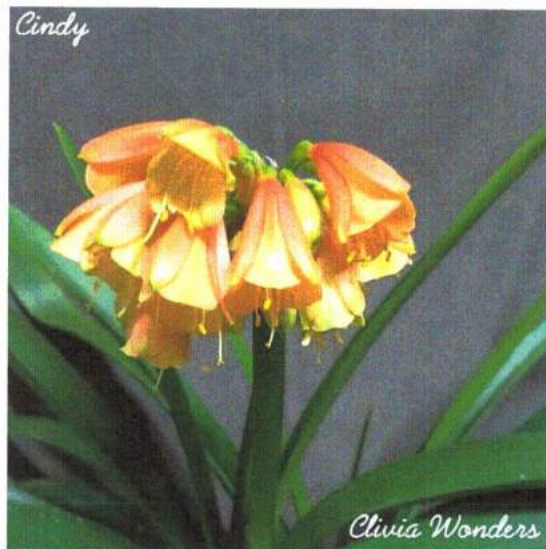
















### **Tribute to the Late Rudo Lotter who passed away on 11 November 2019.**

For many of his life years Rudo was a great lover of Clivias especially his beautiful, colourful Interspecific Clivia hybrids. Rudo's passion for Interspecifics led him to gain registration of 19 individual plants with the Clivia Society's Clivia Register.

Recognition of his love of Interspecifics spread throughout the world's Clivia community with his knowledge being sought after by many Breeders and growers. Carrie Kruger from Utopia Clivias is one of these breeders who, to this day, breeds many of Rudo's hybrids to pass on to the Clivia Community.

Rudo's plant of choice was a versicolour Interspecific he named "Chanel", after his daughter Chanel. A picture of both Chanel's follows.

His passion and interest in passing on his knowledge led Rudo to write many articles for the Clivia Society's Clivia News and the Clivia Society Yearbooks. Included within this tribute to Rudo, is an article on Breeding of Interspecifics. His purpose was to introduce the Clivia breeder to the wonder of Interspecific breeding which he did so well.

To showcase the passion and knowledge of Rudo Lotter, the following is provided:-

- ) Versicolour Interspecific 'Chanel', Rudo and his daughter, Chanel,
- ) A presentation by Rudo on Interspecific Breeding,
- ) The story behind Rudo's Versicolour flower,
- ) A little peek at Rudo's Interspecific Collection and
- ) A few examples of the Registered Interspecifics of Rudo Lotter.

**Vale, Rudo Lotter, RIP**





*Rudo, with another winner*

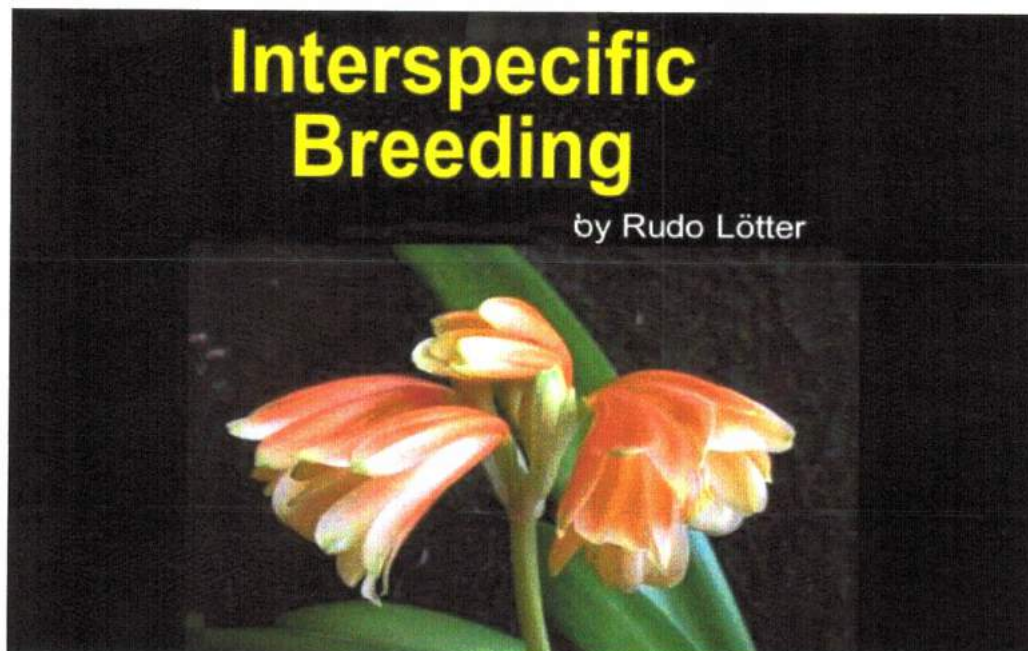




*Multicolored Interspecific - 'Chanel'*



*Rudo and Chanel*



### Introduction

The purpose of this presentation is to introduce the Clivia breeder to the wonder of Interspecific breeding.

The art of creating new Clivias by using the six known Clivia species and some basic knowledge of genetics.

Topics of discussion will be:

- Parent Generation and characteristics
- Creating the F1 generation
- Selecting for the F2 generation
- Progressing to the F3 generation and
- Establishing new Cultivators.

### Parent generation and characteristics

The parent generation consists of all species and varieties that we can use for hybridization. Now one may think that we have a limited approach with the six species available to us. This is not true.

Take in mind all the colour mutations and leaf variations that have been created thus far. Look at the genetic variation in each species. There is an endless array of breeding possibilities, too many to show here.

It will make no sense to use two pendulous species as parents. The hybrids between *C. miniata* and other pendulous species, however, are most desirable. The hybrids will have the characteristics of both parents.





The well-known normal orange *Clivia miniata* must be the most attractive of all the species. It has been widely used as a landscaping plant or an ornamental pot plant. There are many mutations and variations in this species for the breeder to choose from. All the other species are pendulous with little variation.



The yellow *Clivia miniata* is a recessive mutation. The recessive gene blocks the production of anthocyanin. This gene can be used in a breeding program to produce yellow flowering hybrids in the F<sub>2</sub> generation.



Thanks to the marvelous work done by Sean Chubb and Victor Murrillo, we now also have a recessive peach mutation to add to the equation. These peaches are dominant over yellow! It is important for the breeder to understand how mutations inherit and how the mutation can be retrieved in the following generations.



There are Clivias with excessive chlorophyll pigments in the flower. The inheritance of chlorophyll in Clivia seems to be maternal. This is necessary to develop new colours such as bronze and lime.





Bicoloured flowers and Picotees are the spectacular result of mutations in the pattern genes. Little is known about the way these genes inherit. The mutation alters the way in which the pigment is distributed in the petals.



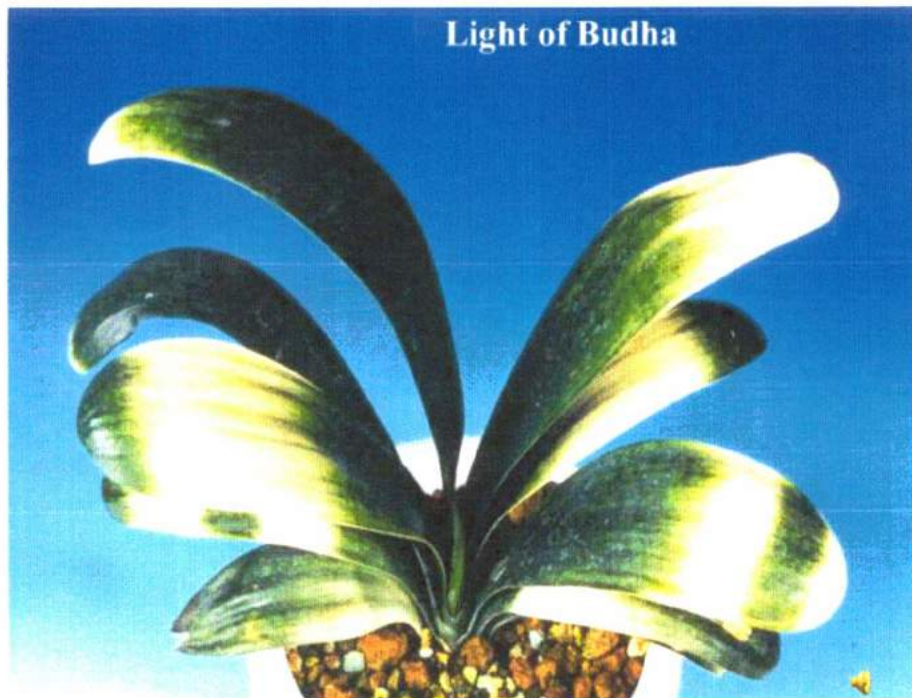
**Multipetal (L. Rijke)**

Multipetals are Clivias that have more than six petals. This trait can be enhanced through selective breeding. There could be as many as twenty petals on a single flower.



**Compact, broadleaf Daruma**

Clivias as pot plants need to be small and compact. The Daruma variety has short broad leaves. The breeder should not only concentrate on the flowers. It is important that he creates an attractive plant too.



There are so many variegated leaf patterns to choose from. The advantage of variegated plants is that they do not need to be in flower. The leaves make for an attractive display.



Some gene mutations can cause a plant to be smaller than normal. Dwarf Clivias are very attractive and highly desirable.





*C. nobilis* is a hardy species, it can be used to create darker red flowers. More flowers per umbel and some resistance to amaryllis worm. However, it is a slow growing plant and offsets poorly.



*C. gardenii* is a very good plant to use as a parent. This species is fast growing and offsets well. The hybrids have attractive curved flowers. It flowers in early winter and can be used to create early flowering hybrids.

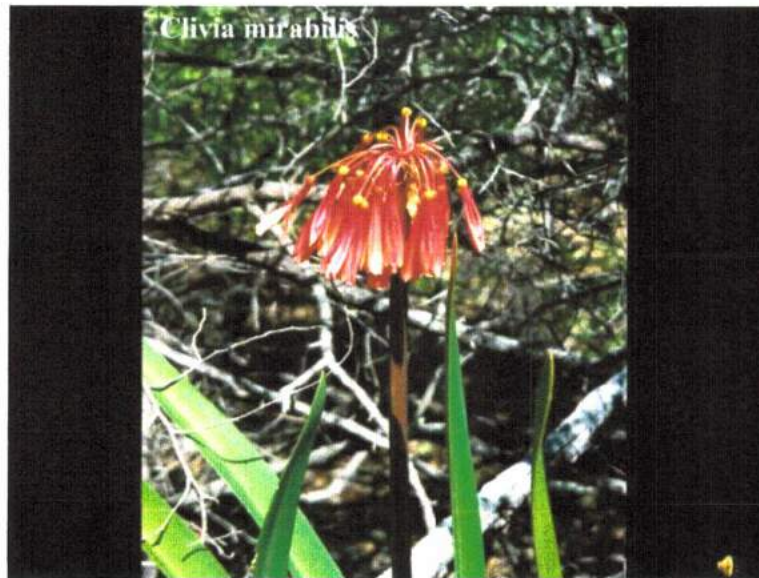


This is one of the best parents to use. *C. caulescens* hybrids are fast growing and flower in three years' time. The hybrids tend to flower twice a year, just before winter and again in early summer.



The newly described *C. robusta* is a large robust broadleaf Clivia. They can grow to 1.5 metres tall. They make spectacular hybrids. The name *Swamp Clivia* is derived from the fact that they grow in running water and marshy areas.

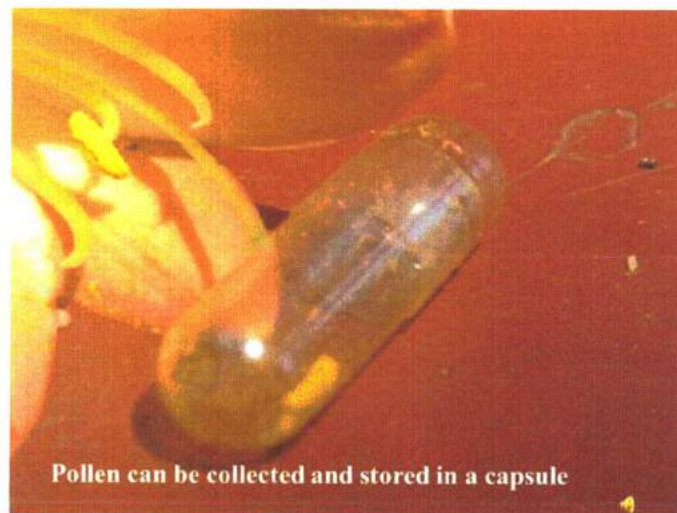




*C. mirabilis* is an unusual Clivia. They grow naturally in an area that is semi desert. They are drought resistant and can tolerate full sun.

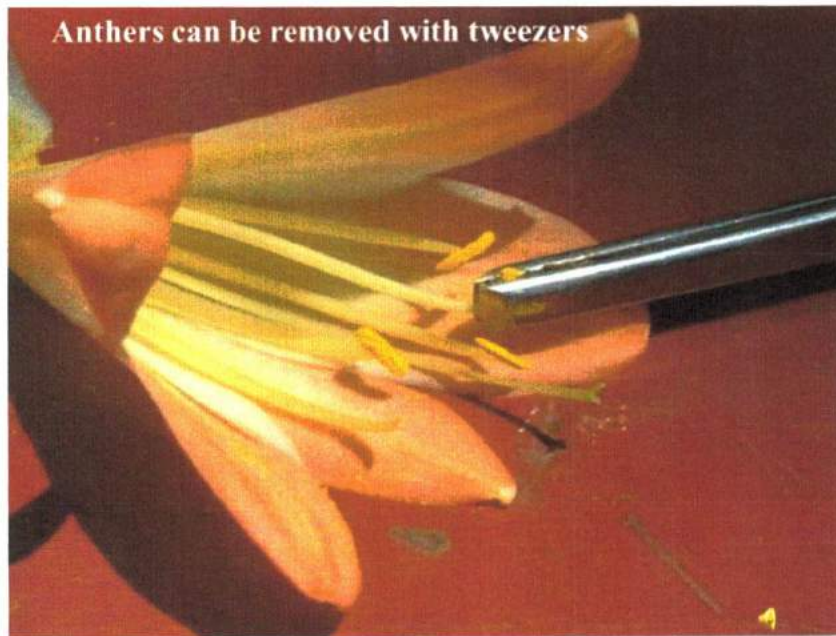
### Creating the F1 generation

The breeder needs to set down some goals before choosing the parent generation. To create an attractive pot plant with pendulous flowers. Choose the best Daruma type (Light of Budha) as one parent and perhaps nobilis as the other parent. Remember that it will take many years for you to achieve your goal, select the best quality parent plants that you can obtain.



**Pollen can be collected and stored in a capsule**

It is highly unlikely that the two plants you choose as parents will flower simultaneously. Save pollen of both parents. This can be done by dry storing fresh pollen in a refrigerator. If stored correctly, pollen can be used for up to five years.



When your parent plant comes into flower, make sure that you isolate it. No foreign pollen should be able to reach the stamens. A technique called emasculation involves the removal of the anthers before they ripen, this prevents self-pollination.

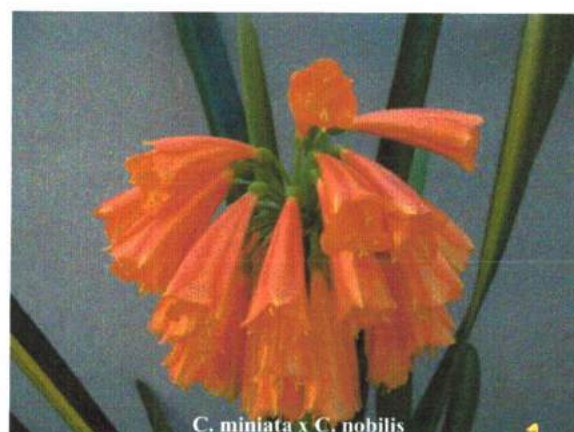


There will always be some maternal dominance. The hybrid receives roughly 60% of its genetic makeup from the ovary parent and 40% from the pollen parent. Therefore, the cross between gardenii and miniata is more pendulous than the same cross between miniata and gardenii.





The F1 siblings show little variation. Characteristics of both parents are inherited. The flowers of *gardenii* hybrids are curved and tend to open up a little more.



*Nobilis* hybrids are slow growing, the leaves are harder with a median stripe. The flowers are long, pendulous and straight. They flower in 6 – 7 years.



The best F1 flowers are from crosses between miniata and caulescens where miniata was used as the ovary parent. The flowers are larger, more open with a nice full umbel.

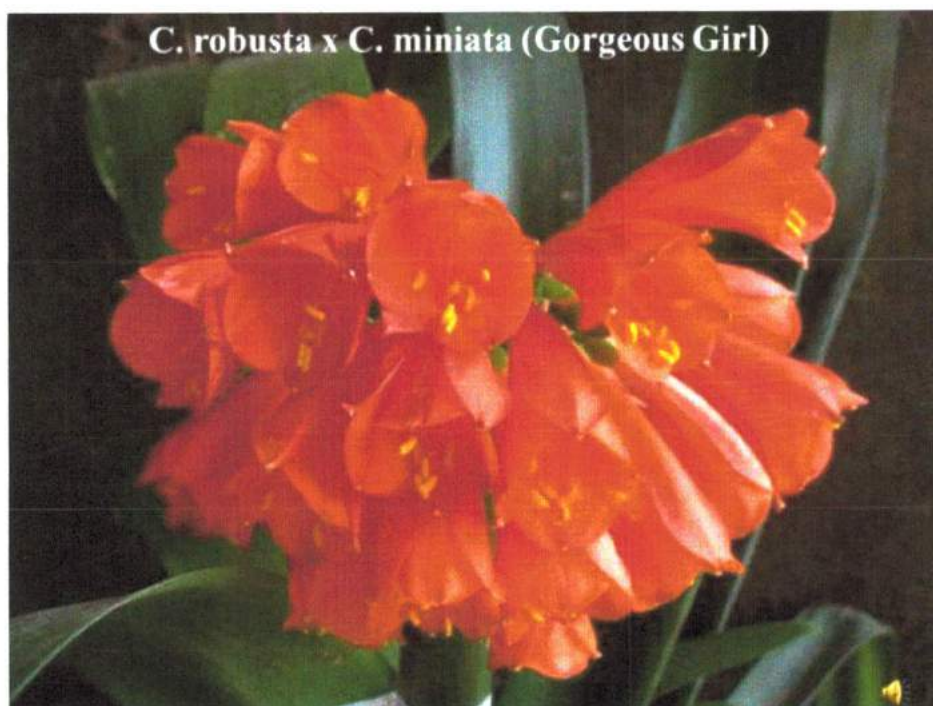


When caulescens is used as the ovary parent the flowers are more pendulous. Because the F1 gets more genetic material from the ovary parent, it is better to use C. miniata as the mother plant.





The large robust F1 hybrids between *C. miniata* and *C. robusta* are very attractive. The flowers are darker in colour, well curved and open up nicely. They grow fast and can flower in four years. The reverse cross looks somewhat different but just as beautiful.



### Selecting the F2 generation

To get to the F2 generation, only the best F1 plants should be chosen. The F1 may not show the desirable characteristics. Through segregation and recombination these new combinations of genes can only be achieved, if the F1's are crossed with each other.

If a yellow *C. miniata* was crossed with a normal *C. gardenii*, the F1 offspring will be orange split for yellow. To create yellow interspecifics, the F1 plants must be cross pollinated. the next generation will yield 25% yellow flowering plants.



**P-generation (*C. miniata* (yellow)) x (*C. gardenii*):**

Yellow Open flowers x Orange Pendulous flowers

**Fi-generation:**

Open Yellow	Pendulous orange
(60%)	(40%)

**F1:**

Semi open, half pendulous orange

(Split for yellow)



When we self-pollinate the F1, the following combinations are available for recombination in the F2 generation.

Open Yellow

Pendulous Yellow

Open Orange

Pendulous Orange

	Open Orange	Pendulous Orange	Open Yellow	Pendulous Yellow
Open Orange	Open Miniata Type	Open Semi Pendulous	Open Split yellow	Semi Pendulous Split Yellow
Pendulous Orange	Open Semi Pendulous	Pendulous	Semi Pendulous Split Yellow	Pendulous Split Yellow
Open Yellow	Open Split Yellow	Semi Pendulous Split Yellow	Open Yellow	Semi Pendulous Yellow
Pendulous Yellow	Semi Pendulous Split Yellow	Pendulous Split Yellow	Semi Pendulous Yellow	Pendulous Gardenii Type Yellow

Only 25% of the F2 offspring will be yellow of which:

6.25% will revert back to *C. miniata*

6.25% revert back to *C. gardenii*

12.5% will be yellow hybrids with a new flower shape.

Fortunately, the colour of the flowers is not the only qualities that recombine in the F2 generation. One can expect to combine other characteristics as well like new flowering times, plants that are more drought resistant, new flower colours and shapes, new leaf forms and many more.

The following pictures show some F2 hybrids that are really outstanding.



Daybreak



Honeysuckle



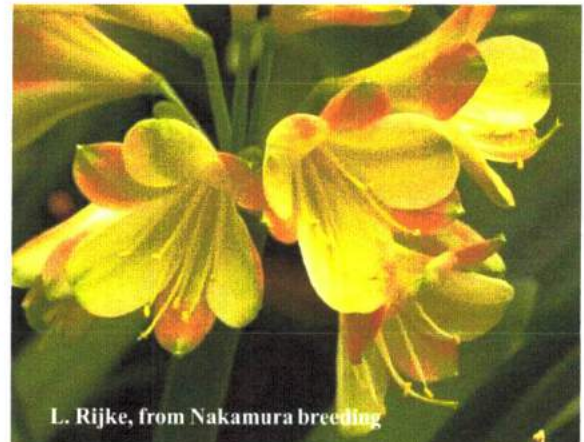
Virna



Sunrise Surprise



Chanèl



L. Rijke, from Nakamura breeding



Cinderella



Green Goblet





Charl's Green (Charl Coetzee)



Warmheart



Warmheart close up



Shrimpy



Chandelier



Chandelier 2

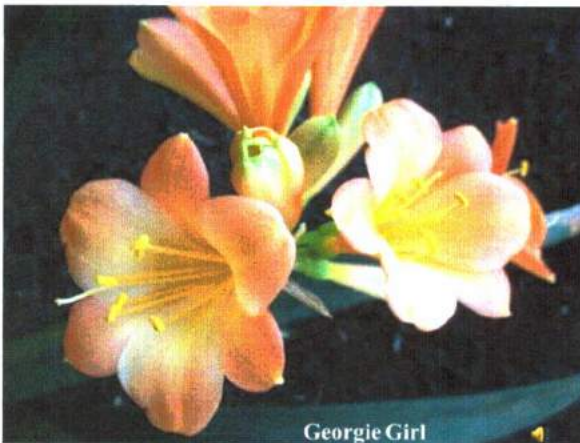


Pink Sensation



Rosy Cheeks









### Progressing to the F3 generation

The planned results are achieved in the F2 generation. The best qualities will combine. It is impossible to add new ones in the next generation. It is now time to establish your new cultivars.

### Establishing new cultivars

There are three ways to establish new clones:

1. Line breeding, 2. Divisions , and 3. Tissue culture

#### Line Breeding

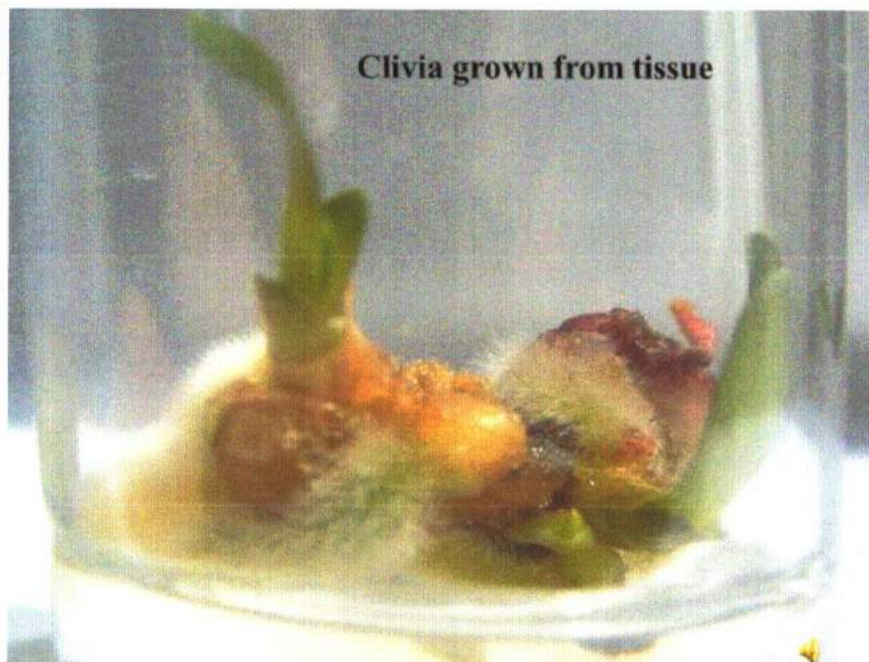
Select the two F2 hybrids as parents that have similar characteristics. Cross pollinate them. Select from the F3's and keep on line breeding until you managed to establish a pure breeding strain. This is a slow and time-consuming process.

#### Divisions

Some Clivia hybrids offset well, keep on dividing until you have enough mother stock. At least a hundred flowering divisions are required before a hybrid can be registered as a new cultivar. It is important to get plant breeding rights on your new creations.

#### Tissue culture

The fastest way to establish new cultivars is with tissue culture. Plants are grown in vitro from a single offshoot. Thousands of plantlets, all identical, can be grown in less than one year.



#### Conclusion

There are many reasons to breed Interspecifics. The goals may vary from a basic F1 strain with pendulous flowers. Perhaps to combine better qualities to breed back to miniata or to establish brand new cultivars. What ever your goal is, enjoy your Clivia breeding.

**Interspecific Breeding written by Rudo Lotter, RSA**



## Exciting new colour variation in *Clivia miniata*

### The Versicolour flower



When I first flowered a versicolour interspecific Herold Koopowitch described the plant as unbelievable, I named this plant after my daughter Chanel. Since then many versicoloured interspecifics were bred all over the world, proving that this is feasible colour variation in clivia but yet unknown in *Clivia miniata*.



Interspecific bred by Rudo Lotter Clivia "Chanel"

In 1995 I visited the Pietermaritzburg show, there was a plant called Naude's Peach, this plant had several outstanding features, there were two umbels on the same plant the older blushed to a deep peach and the younger umbel opened yellow, also the older umbel developed red spots on the outside of each petal.

Obtaining pollen from Naude's Peach, not knowing to which group it may belong and the only pod parent available we pollinated a F1 orange Natal yellow grp2 x group 1 yellow. The seedlings from this cross varied from normal orange to pastel in flower colour. Two of these pastels were selected for quality flowers and labelled F1 Naude's Peach split yellow.



Naude's F1 pastel

I knew that the only way to recover Naude's Peach was to pollinate the two F1 and to wait for the F2 generation, as expected 50% flowered orange 25% yellow and some not yellow not peach but to my surprise VERSICOLOUR.



Versicolour opening



From these the two best were selected for further line breeding, seedlings from these flowered and proofed that I knew colour variation was made through years of patience and some luck.



Rudo Lotter

a little peek at Rudo's Interspecific Collection



*'Vima'*



*'Simone'*



*'Rosy Cheeks'*



*'Romantic Lanterns'*



*'Pink Sensation'*



*'Olympic Torch'*



a little peek at Rudo's Interspecific Collection



*'Jenny'*



*'Halo'*



*'Georgious Girl' 2*



*'Dark Vico Peach'*

a little peek at Rudo's Interspecific Collection



*'Cinderella'*



*'Chanel'*



*'Chanel'*



*'Chandelier'*



*'Chandelier'*



*'Browneyed Girl '2'*



a little peek at Rudo's Interspecific Collection



*'Bronze Lady'*



*'Bronze Baby'*



*'Bella Rosa'*



*'Ballerina'*



*'Vima'*



Name: **Virna**  
Species: interspecific  
Color: Orange  
Other traits:  
Raiser: Rudo Lotter  
Breeder: Rudo Lotter  
Ref: rl/2002  
Country: South Africa



Ian Coates

Philip Theron

Description: a Lotter hybrid, F2 *C. nobilis* x *C. miniata*, medium open flowers with orange outside and yellow on the inside.



Name: **Rosy Cheeks**  
Species: interspecific  
Color: Orange  
Other traits:  
Raiser: Rudo Lotter  
Breeder: Rudo Lotter  
Ref: rl/2002  
Country: South Africa

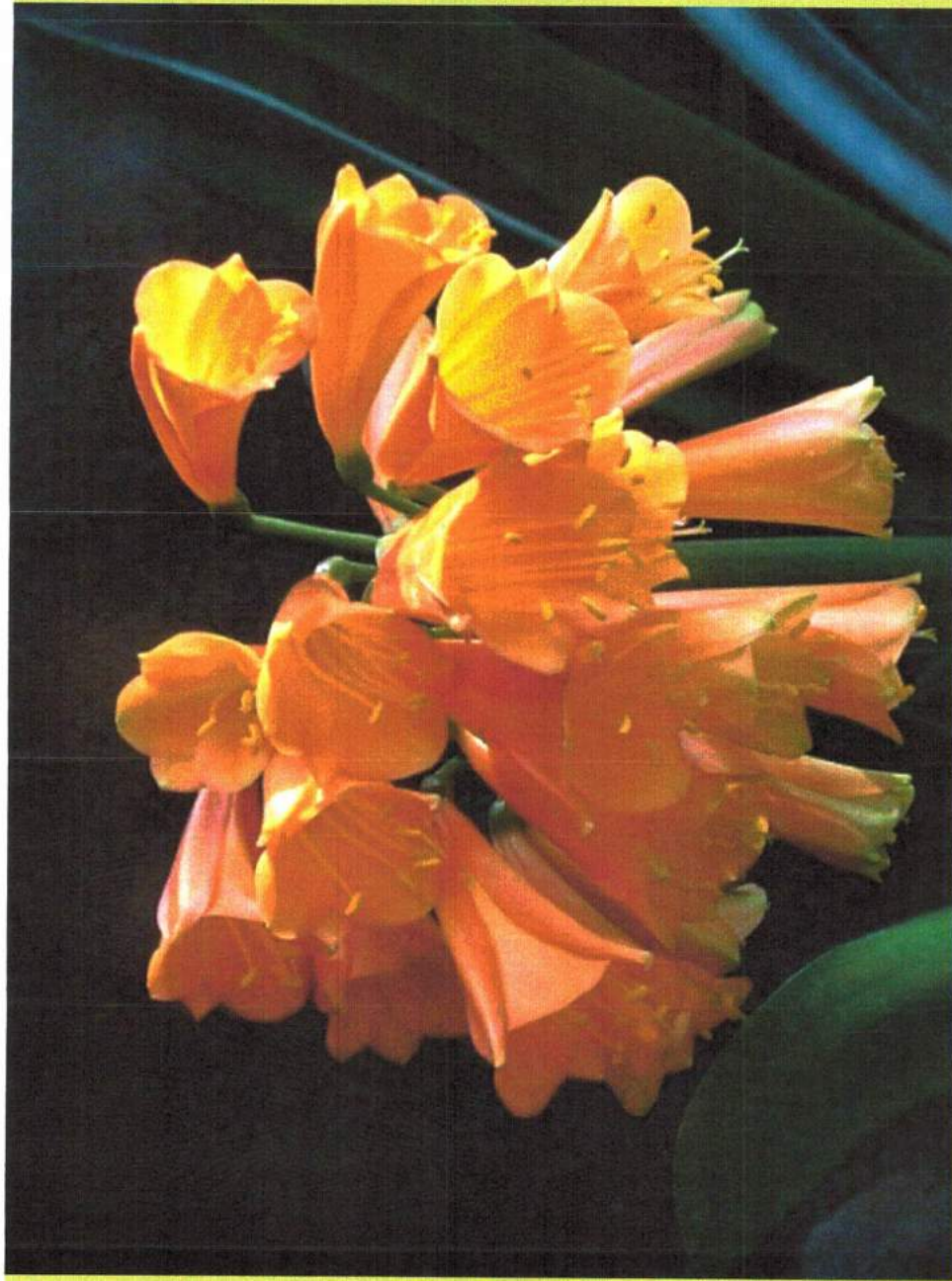


Rudo Lotter

Description: a Lotter F2 *C. miniata* x *C. gardenii*, medium open erect flowers, orange on the outside and blushing peach on the inside. Flowerhead dia 17cm on an 80cm high peduncle. Leaves are 45mm wide.



Name: **Olympic Torch**  
Species: interspecific  
Color: Orange  
Other traits:  
Raiser: Rudo Lotter  
Breeder: Rudo Lotter  
Ref: rl/2002  
Country: South Africa



Rudo Lotter

Description: a Lotter F1 *C. miniata* x *C. gardenii*, bright fiery orange flowers. This large robust hybrid was one of the first named clones. Flowerhead dia 12cm on a 1m high peduncle. Leaves are 50mm wide.



Name: **Jenny (2)**  
Species: interspecific  
Color: Orange  
Other traits:  
Raiser: Rudo Lotter  
Breeder: Rudo Lotter  
Ref: 2006  
Country: South Africa



Rudo Lotter

Description: a Lotter *C. miniata* x *C. robusta* hybrid with dark orange, well curved flowers that flare at the mouth. A strong grower and one of the newer releases. Flowerhead dia 17cm on a 105cm high peduncle. Leaves are 65mm wide.



Name: **Halo**  
Species: interspecific  
Color: Multicolor  
Other traits:  
Raiser: Rudo Lotter  
Breeder: Rudo Lotter  
Ref: rl/2002  
Country: South Africa



Rudo Lotter

Description: a Lotter hybrid F2 (*C. miniata* x *C. gardenii*) x (*C. nobilis* x *C. miniata*), straight orange flowers opening from the middle with a yellow inside and touches of green on tips. Flowerhead dia 1cm on an 85cm high peduncle. Leaves are 40mm wide.



Name: **Gorgeous Girl (2)**

Species: interspecific

Color: Red

Other traits:

Raiser: Rudo Lotter

Breeder: Rudo Lotter

Ref: 2006

Country: South Africa

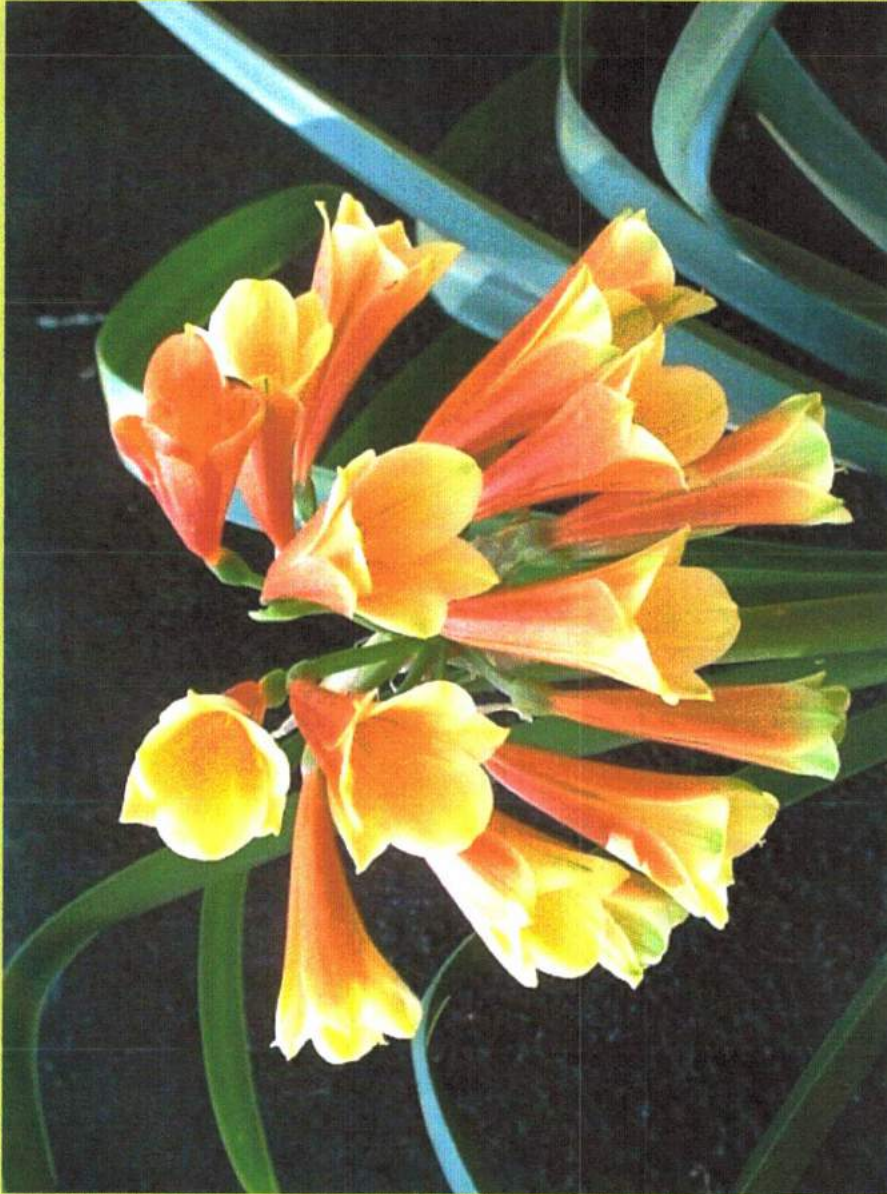


Rudo Lotter

Description: a Lotter F2 *C.robusta* x *C. miniata* hybrid producing a large umbel of dark red flowers. Flowerhead dia 13cm on a 101cm high peduncle. Leaves are 80mm wide. Do not confuse with the Keith Rose selection of the same name.



Name: **'Chanel'**  
Species: interspecific  
Color: Multicolor  
Other traits:  
Raiser: Rudo Lotter  
Breeder: Rudo Lotter  
Ref: y2/2000  
Country: South Africa



Rudo Lotter





Rudo Lotter

Description: beautiful pendulous F2 *C. nobilis* x *C. miniata* hybrid with pendant bi-colour blooms, pale yellow inside, red outside. Striking.



Name: **'Bronze Lady'**  
Species: interspecific  
Color: Multicolor  
Other traits:  
Raiser: Rudo Lotter  
Breeder: Rudo Lotter  
Ref: 2006  
Country: South Africa



Rudo Lotter



Name: **'Bronze Baby'**  
Species: interspecific  
Color: Bronze  
Other traits:  
Raiser: Rudo Lotter  
Breeder: Rudo Lotter  
Ref: 2006  
Country: South Africa



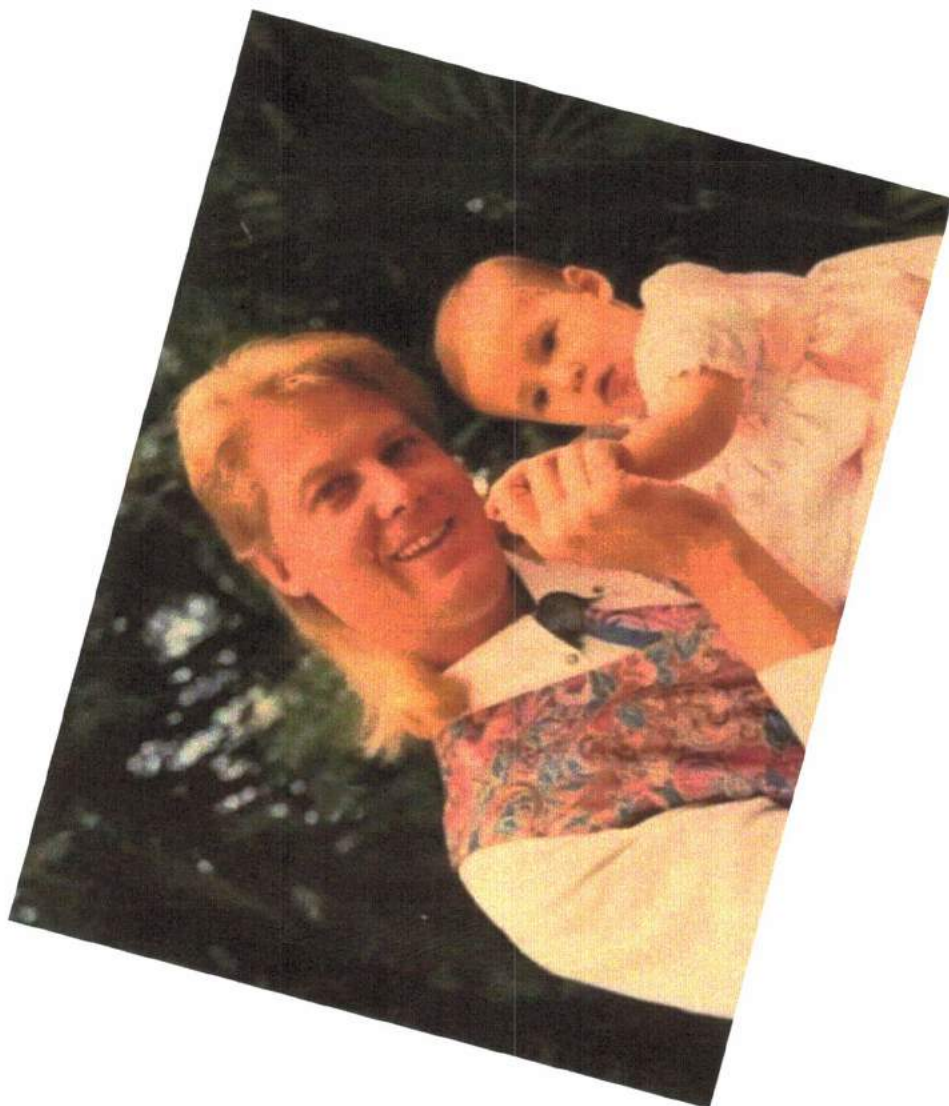
Rudo Lotter

Description: a Lotter hybrid producing small brick red flowers on a large 14cm dia umbel, held 85cm high. Leaves are 55mm wide.





*Pink Sensation*



*A very proud Dad and Chanel*





*Rudo Lotter Interspecific x Cream Miniata*



**Requiem**



**LISA FOX, Australia**

**Christine**



**LISA FOX, Australia**



**Nakamura Miniata x Caulescens**



LISA FOX, Australia



LISA FOX, Australia



LISA FOX, Australia





**H.N. - (Hirao x Green Goblin)**



LISA FOX, Australia

**Green Imp**



LISA FOX, Australia

**Felicia (Miniata x Cyrtanthiflora hybrid)**



LISA FOX, Australia







Chandelier



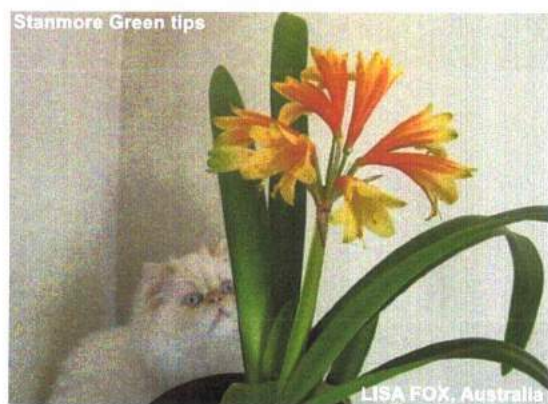
LISA FOX, Australia

Brightie (Orange x Yellow)x(Yellow x Can. Green)



LISA FOX, Australia







Sophia

(x Gardenii)



LISA FOX, Australia

Requiem



LISA FOX, Australia

Pink Sensation



LISA FOX, Australia

Nicole - Nakamura Miniata x Nobilis



LISA FOX, Australia



# Interspecific enjoyment

By Willie Le Roux, Eastern Province Clivia Club

I found the article and stunning photos and graphs by Felicity Weeden on the hybridisation of *Clivia* and the way forward in Clivia News No 2 of 2014 most enjoyable. As far as the breeding of interspecific *Clivia* is concerned, I agree with

her that there is plenty of scope in this field and I feel that we need to give more exposure to these plants and promote them amongst our members.

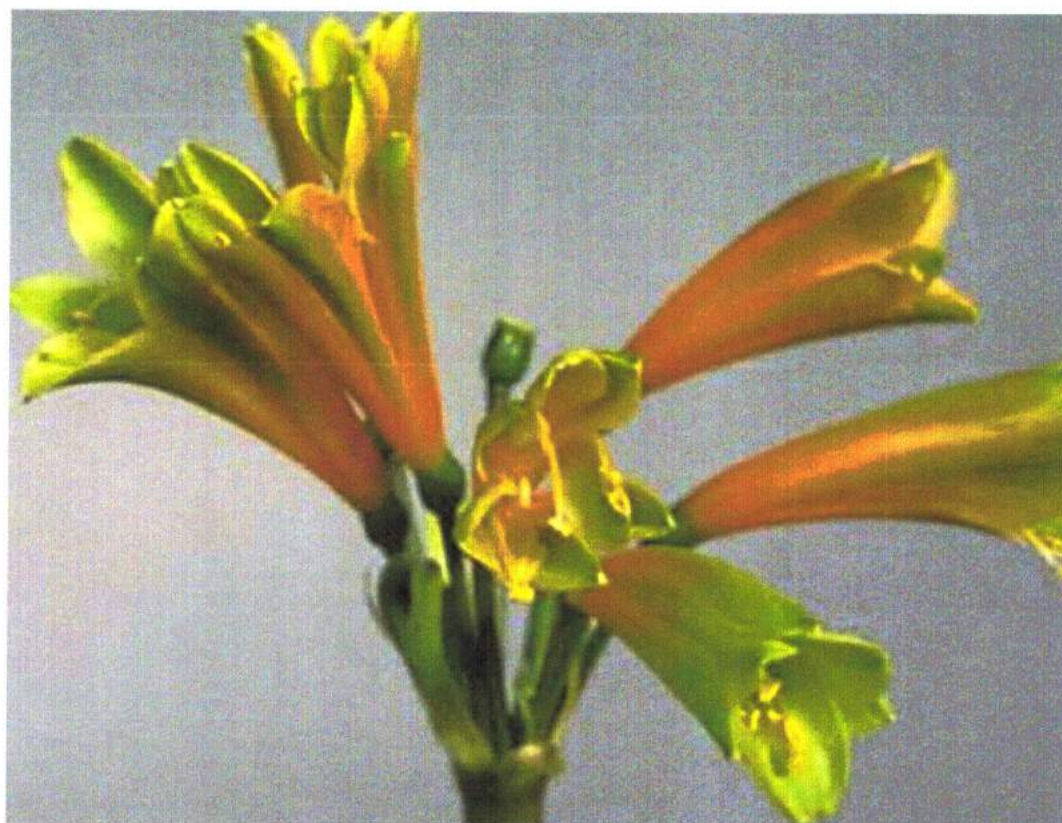
The EPCC introduced an Annual Interspecific



Pastel *C. miniata* X Orange *C. gardenii*



Peach *C. miniata* X Orange *C. gardenii*



Orange  
*C. gardenii*  
X Peach  
*C. miniata*





'Victorian Peach' X 'Gem's Golden Renaissance' *C. gardenii* (3)



'Victorian Peach' X 'Gem's Golden Renaissance' *C. gardenii* (2)





'Victorian Peach' X 'Gem's  
Golden Renaissance'  
*C. gardenii*

Yellow *C. miniata* X  
Orange *C. gardenii*



Yellow *C. miniata* X  
Yellow *C. gardenii*



Show quite a few years ago with only a few plants on display, but this has increased steadily over the years. The large variety of flower shades and shapes amongst the interspecific flowers not only display a different beauty but also attracts the attention of those not familiar with these out-of-the-ordinary flower shapes. I am sure that there is still a large percentage of members who have not tried their hand at interspecific breeding and we should encourage them to explore this avenue. ▼








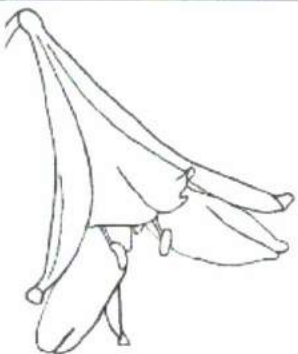


## Interspecific Flower Forms

Interspecific hybrid – This includes any cross between two or more species of *Clivia*. Should this interspecific plant be crossed with any other species or with itself, this plant remains an interspecific.

It is very important to take note that interspecific forms have been identified as the shape of the flower and not the shape of the umbel.

The four shapes identified are:

1	<b>Tubular:</b> Flowers that have tepals that runs almost parallel to the vertical axis of the flower with a maximum divergence of 5°. (This is kept, as pendulous crosses amongst the 5 species are still and Interspecific, which most likely will still present as Tubular Shape)		
2	<b>Conical:</b> Flowers that have tepals with a small divergence from the vertical axis of the flower with a maximum divergence of 15°.		
3	<b>Bell:</b> The tepals move outward from the vertical axis of the flower at the proximal end, near the ovary.		
4	<b>Trumpet:</b> The tepals are almost parallel to the vertical axis in the proximal part of the flower and then flare outwardly at the open end of the flower.		



## Ngamamaku Garden

Ngamamaku Garden is nestled below the Kaitake Ranges adjacent to Egmont National Park. The site is very historic, with the garden facing North West and looks down towards the Tasman Sea. The area of the garden is approx. 1.2 hectares (3 acres) and has been developed from scratch over the last eighteen years. It is a mixture of natural native bush and formal gardens. The most recent development is the Japanese Garden built in early 2004.

Much of the garden is wheel chair accessible.

There is an entry charge

**Contact:** Tony and John

**Address:**

1521 Surf Highway 45  
Oakura  
RD4 New Plymouth  
Taranaki  
New Zealand

**Tel:** 00 64 6 7527873

**Fax:** 00 64 6 7527873

**e:mail:** [tony.john@xtra.co.nz](mailto:tony.john@xtra.co.nz)



John

Tony

Approximately 20 minutes scenic coastal drive south west of New Plymouth, 4km past Oakura. Ngamamaku is on the left opposite Lower Ahu Ahu Rd and near Lucy's Gully.

Open during Taranaki Rhododendron Festival (late October/early November)  
Other times by appointment - please feel free to telephone at any time.



Tony Barnes was a Member of the former New Zealand Clivia Club



# INTERSPECIFIC SHOWS

The blooming time of the Interspecific plants varies a lot. Not only does the time vary within a province, but also from year to year. Timing of a show date is difficult and never suits everyone. The enthusiasm shown at the shows this year, displayed a renewed interest in the Interspecific hybrid plants. In South Africa, Interspecific Shows were held by five clubs. The clubs with an Interspecific Show, include the Northern Clivia Club, The Garden Route Clivia Club, The Lowveld Clivia Club, The Newcastle Interest Group and the Eastern Province Clivia Club.

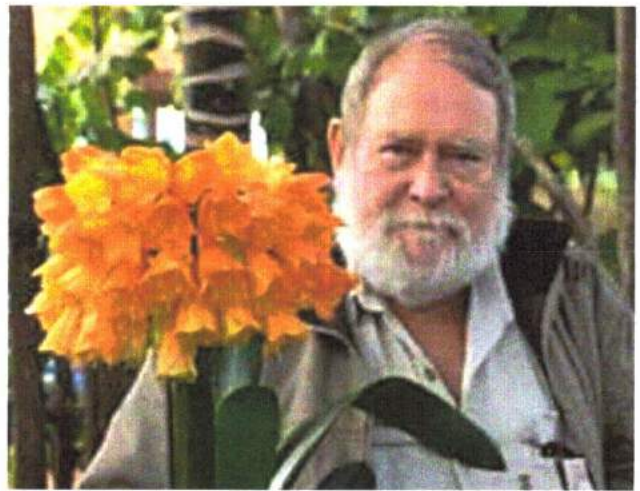
## Northern Clivia Club Interspecific Show

George Mann and Karel Stanz

**T**his year the Northern Clivia Club hosted its annual Interspecific Show on the 27th and 28th of July, at the Safari Garden Centre.

The show was a great success. This is the largest show the Northern Clivia Club has presented of Interspecific hybrids to date. The sales stalls and entries were impressive.

Right: Best on Show at the  
NCC Interspecific Show 2019 –  
Hilton Atherstone.



Corra and Dawie van Heerden with their Runner-up to Best on Show at the Northern Clivia Club Interspecific Show 2019.





Second Runner-up to Best on Show – Oosie Strydom.  
NCC Interspecific Show.

Safari Garden Centre turned out to be a fantastic venue, with many visitors to the show area.

Judging of the plants was carried out by Danie Pretorius and Joubert van Wyk.

The award for Best on Show was won by Hilton Atherstone, with a magnificent plant called 'Peach Strobe'. The plant was bred by the late Mark Lewis. (Pink *Clivia nobilis* x *Clivia miniata* 'Tekkies Peach') x self.

Runner-up to the Best on Show was won by Corra and Dawie van Heerden with a yellow Ngome *Clivia gardenii* interspecific hybrid.

Second Runner-up to the Best on show was won by Oosie Strydom, also with an yellow Ngome *C. gardenii* interspecific.

Overall show winner with the most points was Hilton Atherstone, Second place went to Andre Swart. Third place was shared by Pieter Saayman and Paul Kloeck.

Dawie Strydom donated an offset of one of his best breeding interspecifics, 'Yellow Drops' to the club

as a raffle plant. Free raffle tickets were given to the members of the public at the entrance.

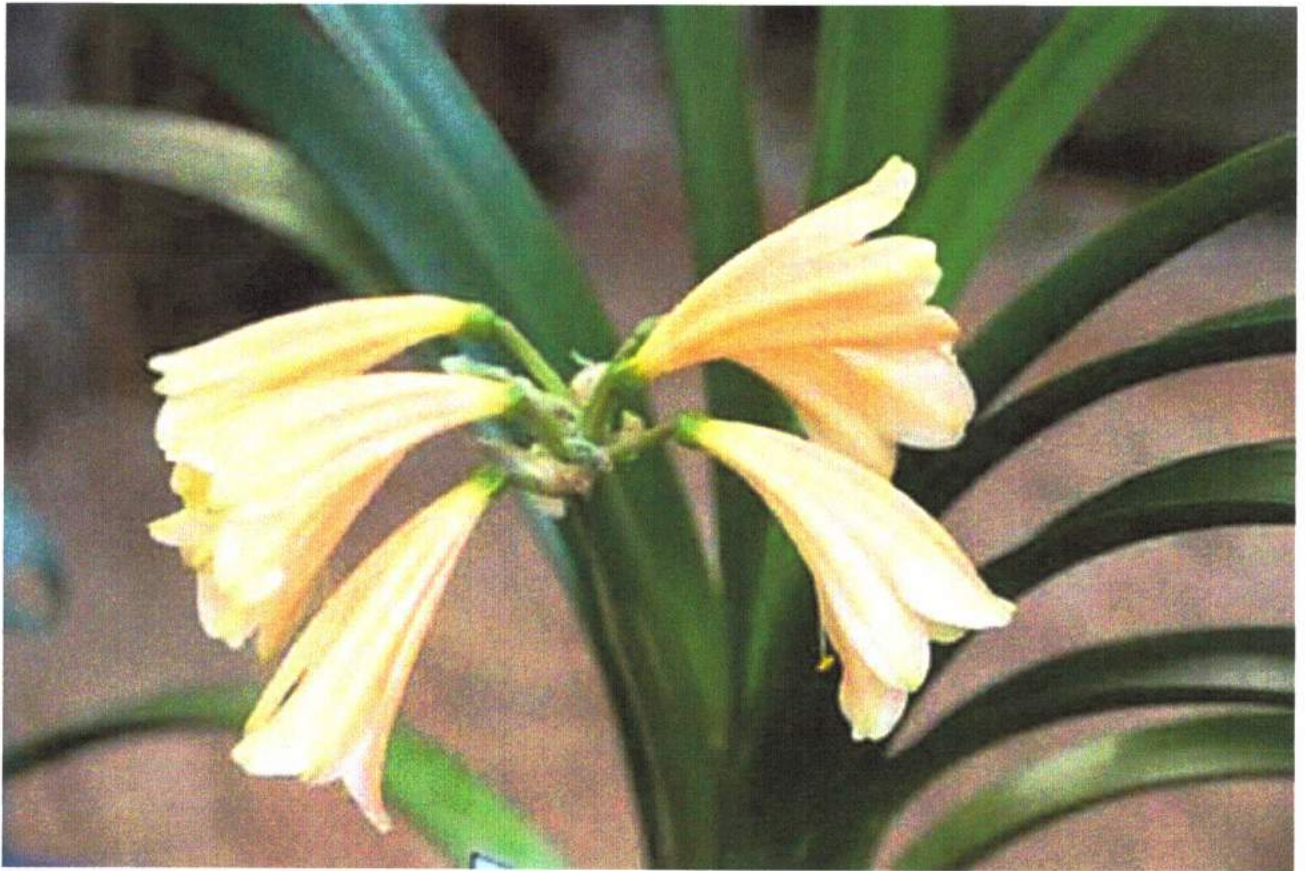
The 'Peoples Choice' was the Best on Show plant of Hilton Atherstone.

Sales were excellent, with the date of the show ideal for the flowering plants. Almost half the interspecifics were bred from the Ngome form of *Clivia gardenii*. 🌺



Martiens Erasmus and Hilton Atherstone.







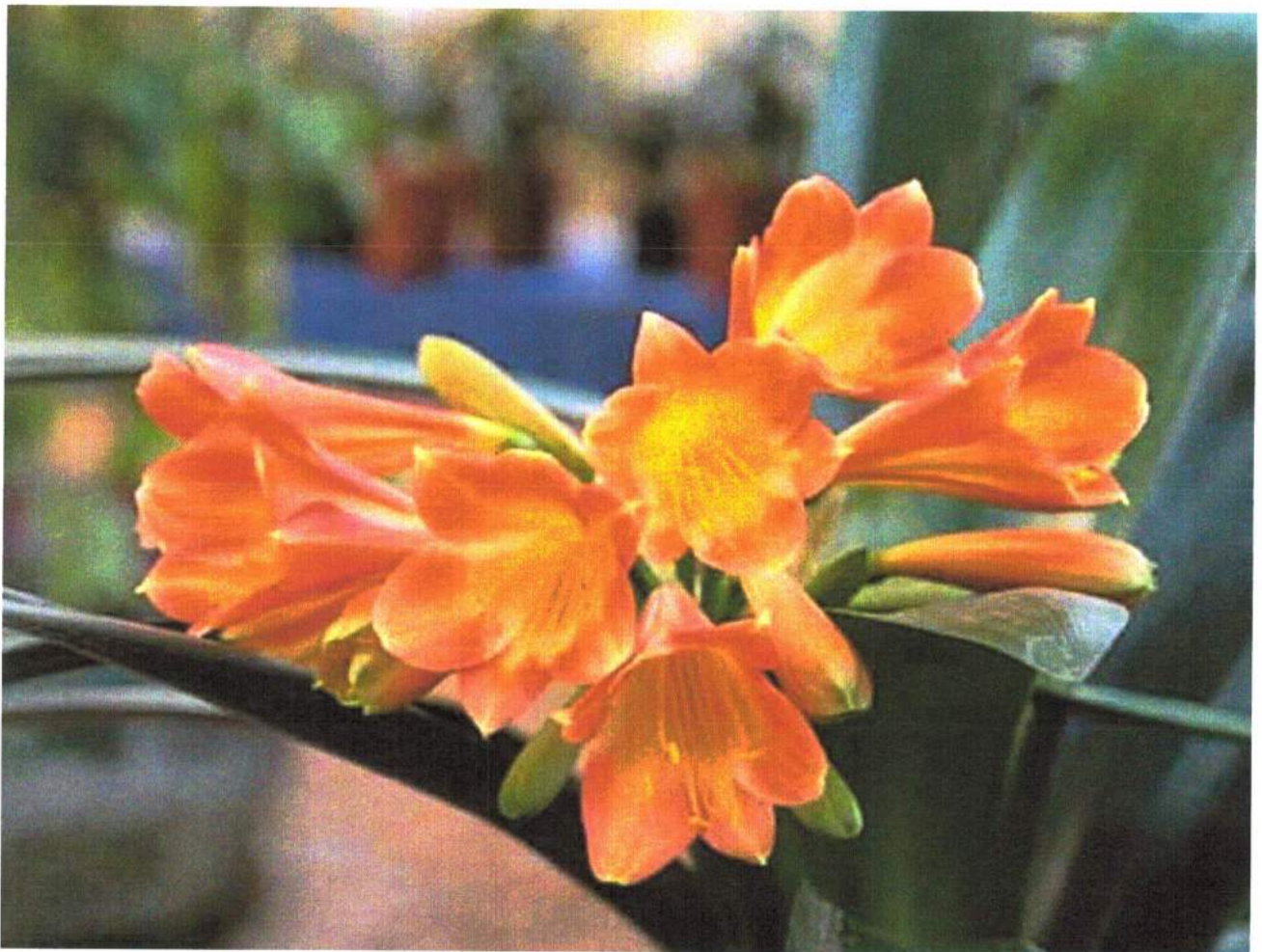


Ginny van Rooyen and Bronwyn Engelbrecht at the NCC Interspecific Show.





Best on Show – Hilton Atherstone



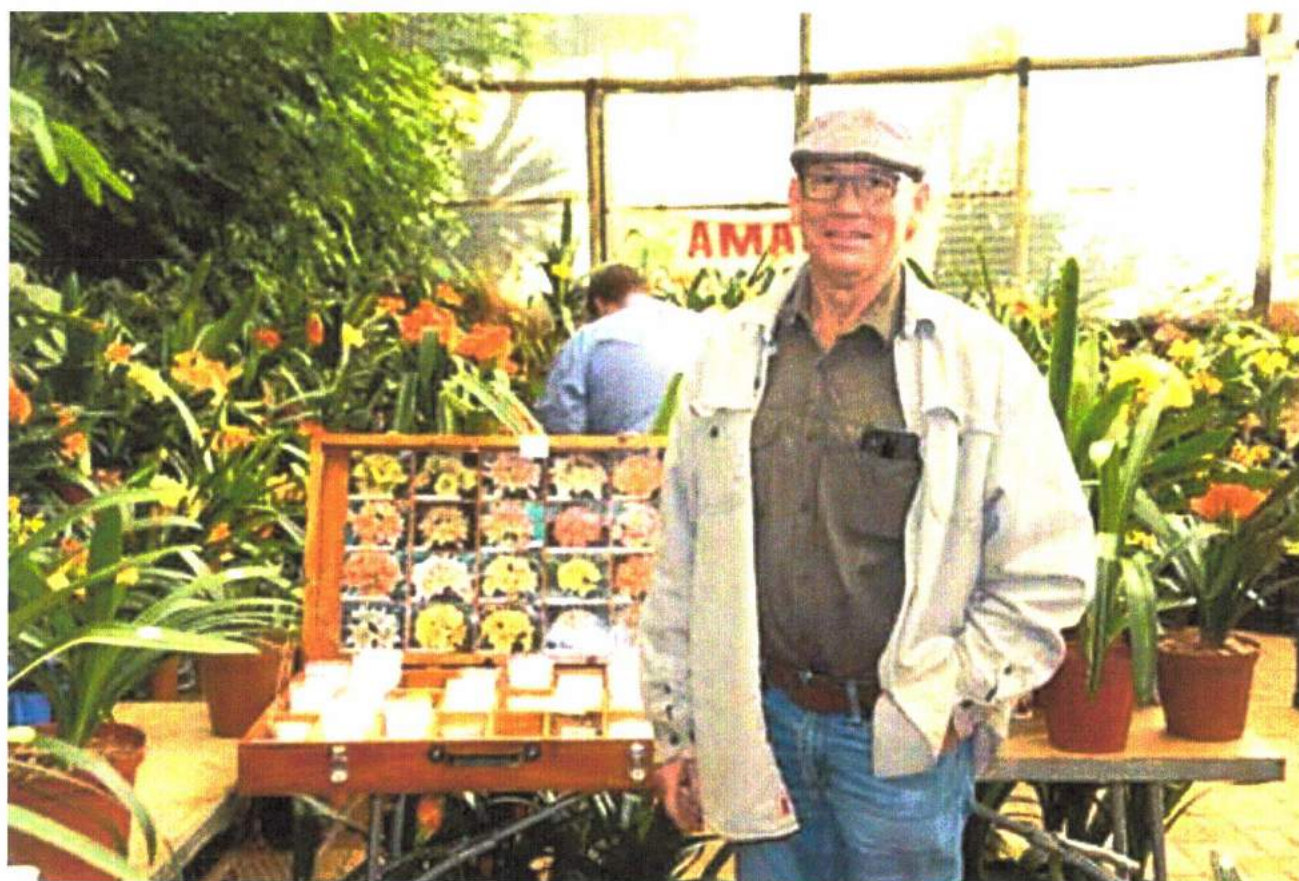










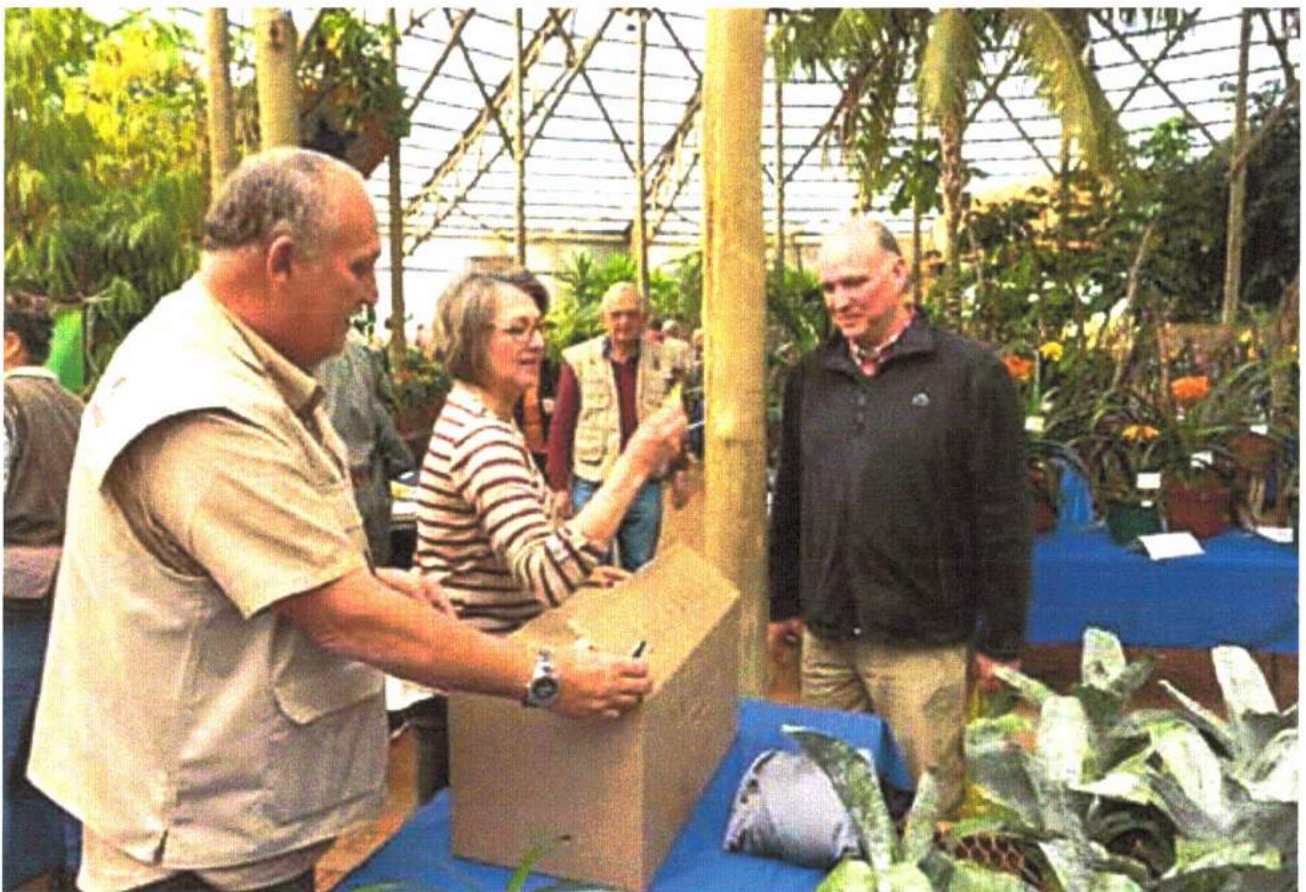


Chris Viljoen at his stall. Interspecific show Pretoria 2019.





Pikkie Strumpher, Christo Topham, Elize Strumpher and Norman Weitz. Hilton Atherstone seated.



Northern Clivia Club Show. The raffle draw: Cobus Roos, Ticky Lombard, Joubert van Wyk. In the background is Norman Weitz.



# Lowveld Clivia Club Interspecific and Pendulous Show 2019

**Sue Kloeck**

**T**he Lowveld Clivia Club Interspecific and Pendulous Show was held at Montana Garden Pavilion over the weekend of 20 - 21 July. Nine exhibitors displayed 42 plants this year.

'Best on Show' for 2019 went to Jurie Lintvelt for

a plant called 'Cialis', bred by Paul Kloeck. 1st and 2nd Runner Up awards went to Jurie Lintvelt and Hilton Atherstone respectively.

A new award for the 'Most Exquisite Flower on Show' went to Paul Kloeck for his Interspecific *Clivia* called 'Gangrene Swirl.' 🌺



Jurie Lintvelt, Paul Kloeck and Francois van Rooyen – Judge, at the Lowveld Clivia Club Interspecific Show.





Winning plants at the Lowveld Clivia Club Interspecific Show.



Winning plants at the Lowveld Clivia Club Interspecific Show



'Gangrene Swirl' – Awarded  
the most 'Exquisite Plant on  
Show' – grown by Paul Kloeck.



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Text by Graham Duncan

**B**arbara Jeppe, botanical artist extraordinaire, began work on the paintings in July 1971 and for the next 28 years she collected and painted over 200 species of Amaryllidaceae. After her death in 1999, her daughter, Leigh Voigt, a versatile and highly acclaimed artist herself, picked up where she left off and painted most of the subsequently described species. This thorough easy-to-use guide is the first book dedicated entirely to the 18 genera in the family Amaryllidaceae in southern Africa. Apart from the over 240 exceptional watercolour plates there are detailed distribution maps and magnificent photographs showing plants in typical habitat conditions. There is an index, glossary and bibliography. This is a handsome publication with a sturdy hard cover, elegant dust-jacket and is printed on high quality paper.

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# Garden Route Clivia Club Interspecific Show 2019

Carrie Kruger



ur 2019 Interspecific Show was held at the George Nursery on the 11th of August 2019. 🌺

Best on Show	Carrie Kruger.
Runner-up to Best on Show	Carrie Kruger.
Second Runner-up to Best on Show	Carrie Kruger
People`s choice	Carrie Kruger

Winning plant at the Garden Route Interspecific Show of Carrie Kruger.



Best on Show, Second and Third Best on Show - Carrie Kruger with a clean sweep of the top three awards





Best in Orange Class at the Garden Route Clivia Club Interspecific Show 2019.



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# Newcastle Interest Group

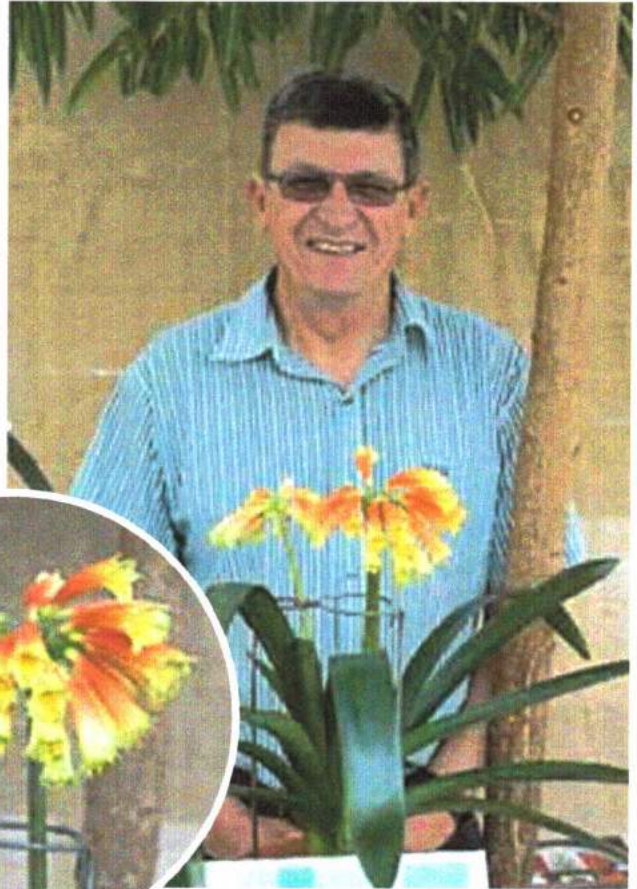
Alfred Everson

## NEWCASTLE CLIVIA INTERSPECIFIC SHOW – SATURDAY 14 JULY 2019

The Newcastle Clivia Interest Group Show was held at the Newcastle Mall. This was our first Interspecific Show. There were a large number of visitors who expressed an interest in the display. In addition to the Show plants, plants were offered for sale.

Liz Boyd was the judge, with Louis Lötter as a Learner Judge. The results were as follows:

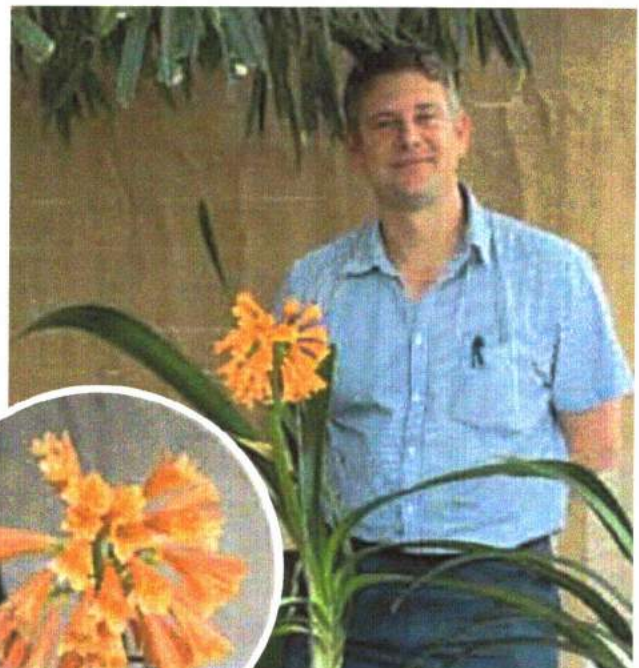
Best on Show	Henry Howard
First Runner-up	Felix Middleton
Second Runner-up	Alfred Everson



Best on Show – Henry Howard.



Runner-up to Best on Show – Felix Middleton.



Second Runner-up to Best on Show – Alfred Everson.





Most points on Show – Louis Lotter with Alfred Everson.



Best Novice entry – Wilmarie Lotter.



Exceptional plant – Louis Lotter.





# Eastern Province Clivia Club

**Dawid Botha**

**E**astern Province Clivia Club held their Interspecific Show on the 27 July 2019. One of the conference rooms of the Bay West Shopping was used for the Interspecific Show. The visitors were allowed to choose the Best on Show.

The Best on Show Interspecific went to 'Glistening Rose' owned by Carrie Kruger.

Runner-up to Best on Show was awarded to Carrie Kruger. 🌺



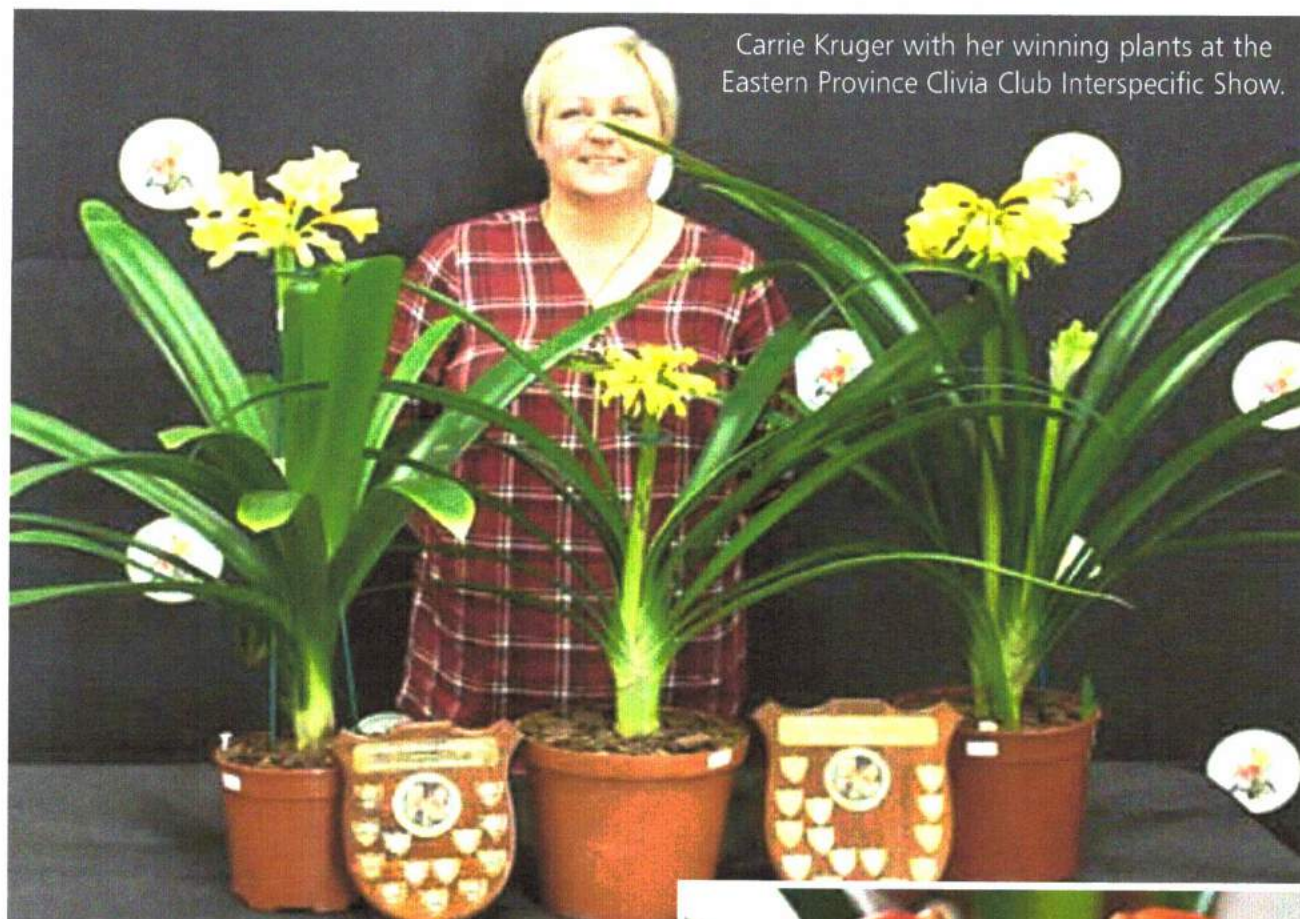
Best on Show Carrie Kruger  
- 'Glistening Rose'.



The best species  
was a *C. gardenii*  
'Ngome green'.



Carrie Kruger with her winning plants at the Eastern Province Clivia Club Interspecific Show.



Right: Entry of Carrie Kruger at the EPCC Interspecific Show.



Runner-up to Best on Show – Carrie Kruger – 'Secret Desire'.



EPCC Interspecific Show entry.





EPCC Interspecific Show entries.





## Taking interspecific breeding a step further:

By Carrie Kruger Utopia Clivias

Interspecific flowering season is always a very exciting time for breeders. Nothing gives us more pleasure than seeing the start of a new flower forming on a cross that you made four to five years ago. From the moment a bud appears till the first flower opens, you are held in suspense to see if the result is what you had imagined it would be.

We all know that in clivia breeding there are good and bad results and then, there are those few that stand out from the rest where you just know you have hit the jackpot. These are the flowers that make the long wait worthwhile.

We consider interspecific breeding as the “new age” of clivia breeding. Most of the new and unusual colours in clivias originate from interspecific breeding. We believe that the future of clivia lie hidden in these genetics. The largest range of colours are found in interspecific flowers.

It has been proven that with interspecific breeding the second generation produces improved colours and flower shapes. Most of the F1 hybrids are narrow tubular flowers, sometimes with a slight flare as we have seen with robusta and caulescens breeding.

When we started breeding interspecifics many years ago, there were not many good interspecifics to choose from. These were mostly F1 crosses. We selected the ones we thought at that time were more superior regarding flower shape and colour. We now breed with our best F2's making sibling crosses as well as doing self-pollinations.

Because of the large gene pool in a single interspecific plant, results are never guaranteed. Therefore, it is advisable to grow these crosses to flowering size and to then select the best. Unfortunately, we do not all have the space to be able to bring them all into flower.



Fig.1 Star Green Destiny, Carrie Kruger





Fig.2 Ember Spirit, Carrie Kruger

**Findings from our breeding over the past few years:**

Ensure you breed with superior f1 or f2 plants from the start. This will save you a good few years compared to starting from scratch with any of the species.

We have bred some superior versi colours from non versi colour parents, for example "Ember Spirit" **Fig.2**. Versi colour traits are carried over in the pollen as well as pod parent plants.

If miniata pollen is used too many times in a cross, the flowers become inferior miniata like types.

We have also flowered self-pollinated F2's that were by far superior to the parent plant. This is proof that self- pollination is a good option if you are unsure of what pollen to use on a specific flower, "Planet Earth" **Fig.3**

Make sure your plants are compatible, by making sure you know which group your plant belongs to.

It is advisable to use compact plants as one of the parent plants to produce a shorter leaf, more compact interspecifics. We have used a yellow Daruma with great success. "Mirror Beauty" **Fig.6** is a good example of this type of cross.

Crosses using either variegated or LOB type plants have resulted in beautiful plants. "Light of Africa" is an example of this type of cross. This cross was made by Francois van Rooyen.





Fig.3 Planet Earth, Carrie Kruger

**Examples of our breeding results:**

**Fig 1: Star Green Destiny** - F1 of Star Green Original (Star Green Original is a f2 bred by Nakamura)

**Fig 2: Ember Spirit** – Carnival (*Miniata* x *Gardenii*) x Secret Wish (*Stella Parish miniata* x *Gardenii* x *Grp1 Yellow*)

**Fig.3: Planet Earth** - Jupiter (*Gardenii* x *miniata*) x (*Miniata* x *Gardenii*) x Self

**Fig 4: Lucid Dreams**- Dreaming (*Best Nakamura f1* x self) x sibling

**Fig 5: Over the Moon**- Secret Whisper (*Stella Parish miniata* x *Gardenii* x *Grp1 Yellow*) x New Moon (*Yellow f2 interspecific*)

**Fig 6: Mirror Beauty**- (*Yellow Daruma* x *Mirabilis*) x *Yellow Daruma*

**Some of the parent plants used in crosses:**

**Fig 7: Carnival** = (*Miniata* x *Gardenii*)

**Fig 8: Jupiter** = (*Gardenii* x *miniata*) x (*Miniata* x *Gardenii*)

**Fig 9: Dreaming** = (*Best Nakamura f1* x self)

**Conclusion:**

- Interspecific hybrids have become more popular in the last few years and most clubs now have Interspecific shows in July or August to showcase and promote the beauty of these hybrids.
- These hybrids give us a longer flowering period as they start flowering from early June all the way through to October in the Southern Hemisphere.



- Interspecifics often flower at odd times during the year which make them a welcome sight in a shade house with only foliage.
- Interspecifics are fast growing and more disease resistant than *Clivia Miniata*. They also multiply well. Some plants make offsets before they have even flowered.
- The range of colours and flower forms are unlimited.
- These special plants should be in every breeder's collection. We hope to see many of our new crosses flower in 2019.



Fig.4 Lucid Dreams, Carrie Kruger



Fig.5 Over the Moon, Carrie Kruger





Fig.6 Mirror Beauty, Carrie Kruger



Fig.7 Carnival, Carrie Kruger



Fig.8 Jupiter, Carrie Kruger





Fig.9 Dreaming, Carrie Kruger



*Utopia Clivias*



*Woodland's Mermin 71 Mirabilis Interspecific*



## *My passion for interspecifics*

*Kerrie McElroy*

Growing and breeding interspecifics has always appealed to me, and I fell in love with the pendulous interspecifics shown in the book *Clivias* by Harold Koopowitz. Although I still love pendulous interspecifics, my breeding has largely moved away from that type, as I have selected the best of my early efforts to work with.

I began in 2003 with what was available to me then, namely a few *C. miniata* and a few *C. miniata* x *cyrtanthiflora* (oznobilis). Soon I added a couple of 'minigards' (*miniata*/*gardenii* crosses) to my collection, and in 2006 I began buying seed from South Africa. Around 2007, I obtained an offset of Stanmore Bronzed Green Girl (SBGG), which I enthusiastically added to my breeding efforts. So, in addition to some of the ongoing breeding from my first humble beginnings, I am doing further breeding with some of the interspecifics grown from South African seeds, and a great deal of breeding using SBGG hybrids. In addition, I am doing further work with Chanel (a very special interspecific bred by Rudo Lotter). In reality, I have too many breeding goals, because whenever I can see further potential, I try to pollinate and grow on as much seed as I can!

I am not concerned about working with particular species of *Clivia* because I have generally moved on to using more advanced interspecifics, and in many cases I am using interspecifics to breed new colours, patterns and flowering times, into more or less *miniata*-like flowers. For example, many of my early *C. miniata* x *cyrtanthiflora* have very pretty flowers, with a slight tendency towards being versicolour (one colour or shade outside and another inside), but the flowers are generally smaller than a typical *C. miniata*. At least one of these, regularly flowers twice a year, so I have undertaken a few sibling crosses with these, which unfortunately are quite slow growing, and I have crossed some of these back to *C. miniata* in the hope of increasing the flower size and maintaining the colour of the interspecific. I am beginning to flower this second generation with mixed results.

One from this type of breeding is a cross of a Vico Yellow Hybrid with my 'Tutti Frutti' (a Belgian Hybrid x *cyrtanthiflora*).





Perhaps this plant typifies my approach, because if this *Clivia* was judged purely on the appearance of the flower, it is not especially exciting. But I look at it, knowing that it carries some genes from 'Tutti Frutti', also that it has maintained a good-sized flower and recurved petals, and therefore has more potential than a pure *C. miniata* to achieve some of my goals in the next generation. When deciding on breeding goals I often think about the genes that I know are/ or could be present in a particular *Clivia*, rather than just about its appearance. So this plant carries the mutation for group 1 yellow, and also some genes from the *cyrtanthiflora* grandparent. One needs to think carefully about the objectives of a future cross because there are so many possibilities but time, space and energy are limited.

Some of my most exciting results have come from crossing Stanmore Bronzed Green Girl (SBGG) onto a range of other *Clivia* (SBGG is an interspecific raised by Nick Powell of Stanmore Horticultural in Queensland). I am beginning to flower my second generation of plants from these lines. There is, however, so much variety among them that one could develop numerous new strains from them. Thus, I come back to trying to do too much and running out of space, etcetera. I am still moving forward with these breeding lines albeit more slowly than I would like to!

For me, there is no ideal interspecific. The plant should be vigorous with a reasonable flower count and have either very beautifully shaped flowers or an exciting colour combination, or preferably both. Examples from my breeding with SBGG include 'Emiko' (below) and 'Green Jessica'. 'Emiko' is basically a soft orange and although very beautiful, its flowers do not have an unusual or exciting colour. However, I have chosen to continue using 'Emiko' as a berry parent because it has a good flower count, well-shaped flowers that are quite large for an interspecific, it is a vigorous plant and it carries genes for green as in SBGG (its pollen parent).





'Green Jessica' (below) has resulted from my second generation of breeding with SBGG. It is a smaller plant than 'Emiko' with, so far, a low flower count. However, its colour is exceptional and in my opinion, it is an improvement on SBGG. So rather than backcross SBGG to 'Emiko', last year I chose to pollinate 'Emiko' with 'Green Jessica'. I am, of course, hoping for a strong plant like 'Emiko', with the colour of 'Green Jessica', however it could go the other way around. From my experience it is a numbers game. So once again, I will try to grow too many seeds, but thoroughly enjoy doing it!

*'Green Jessica'*



*Courtesy of Kerrie McElroy, Kerrie's Clivias, Kyogle NSW Australia*

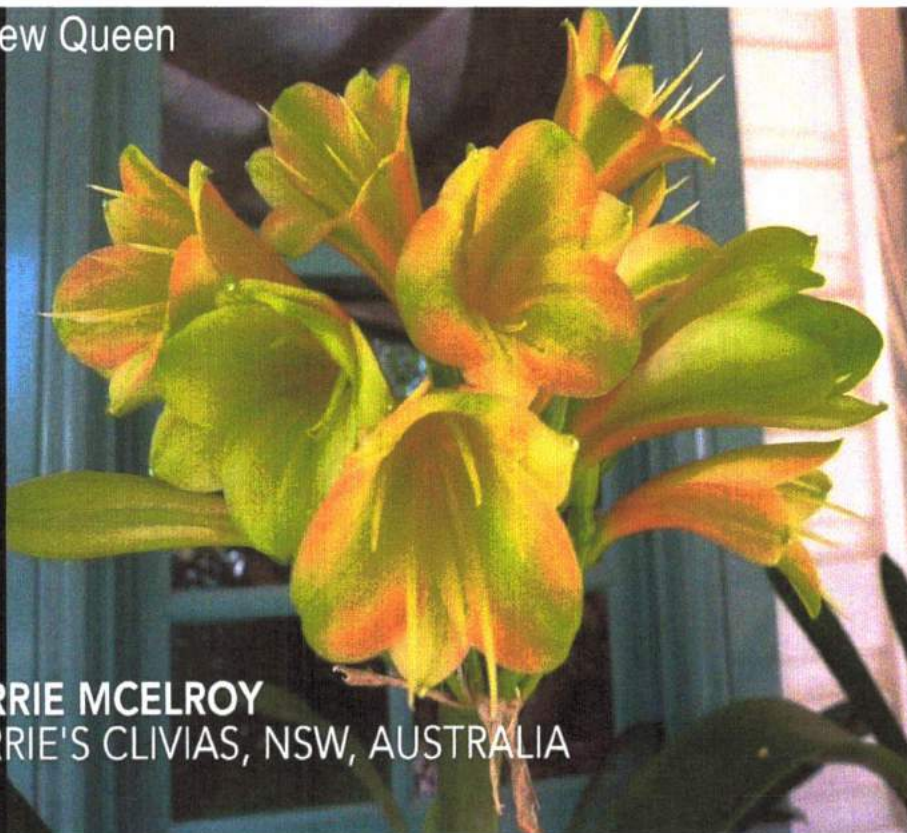
[https://www.facebook.com/kerriesclivias/?ref=page\\_internal](https://www.facebook.com/kerriesclivias/?ref=page_internal)



*'Chantelle'*



Honeydew Queen



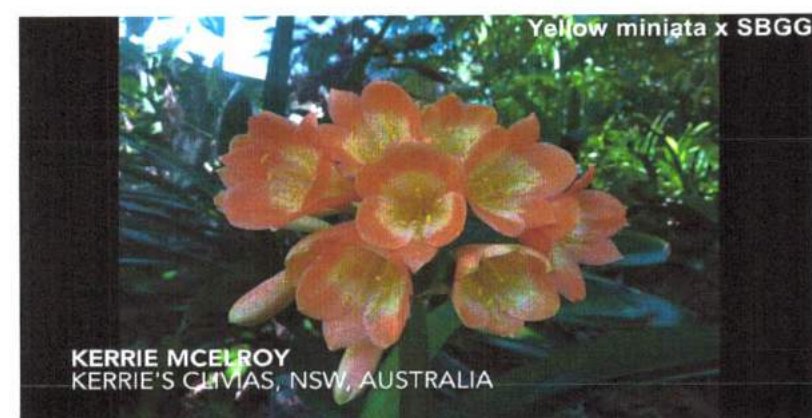
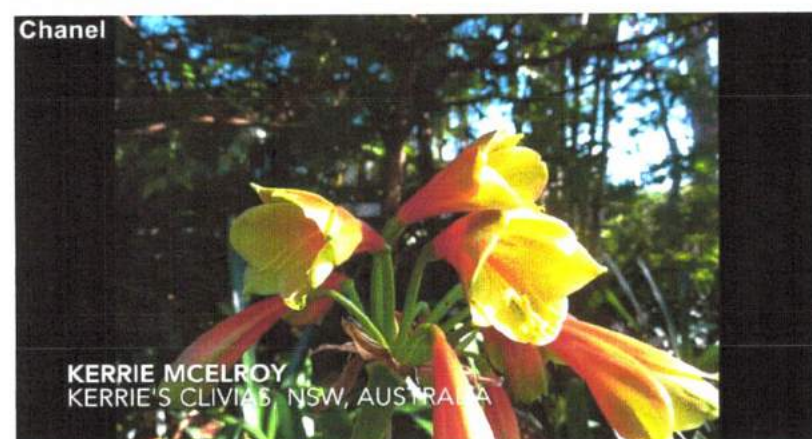
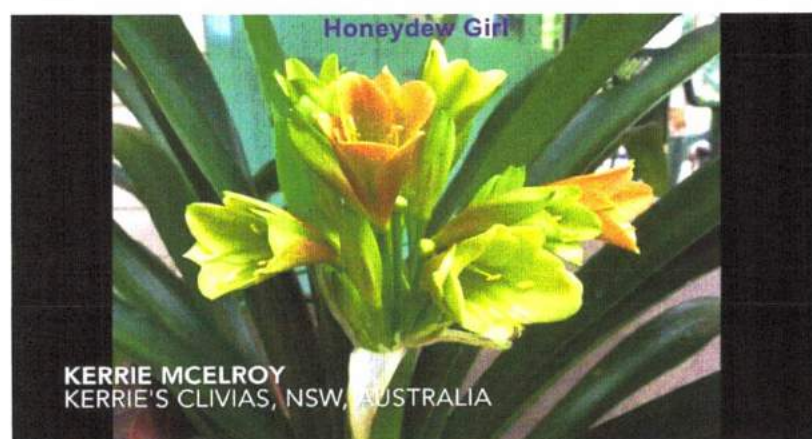
**KERRIE MCELROY**  
KERRIE'S CLIVIAS, NSW, AUSTRALIA

Chantelle

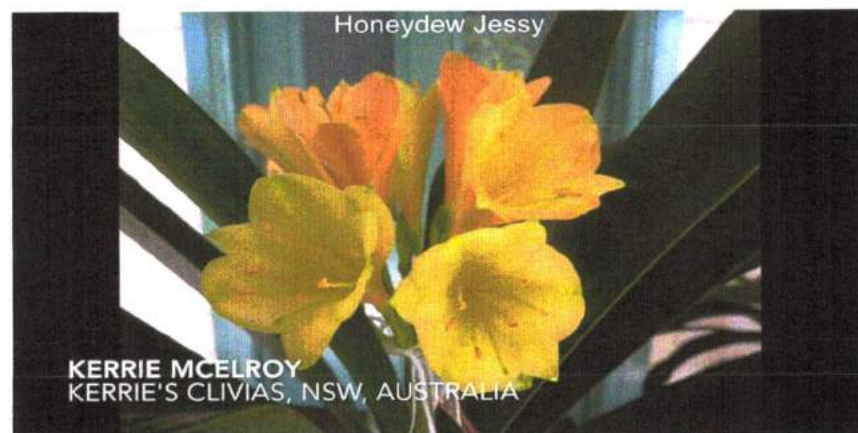
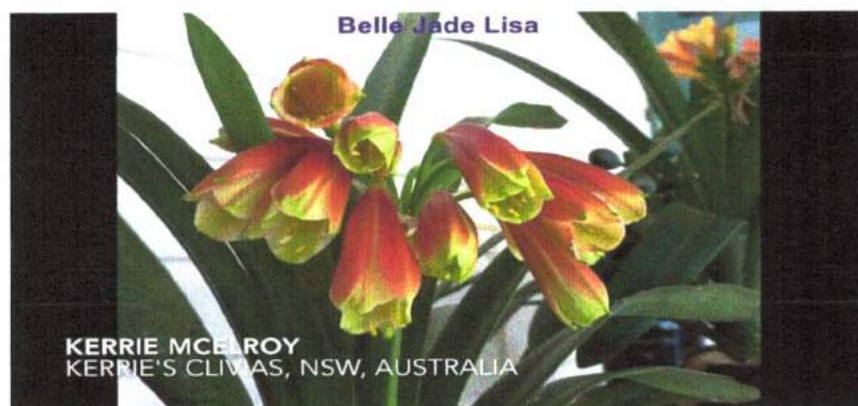


**KERRIE MCELROY**  
KERRIE'S CLIVIAS, NSW, AUSTRALIA





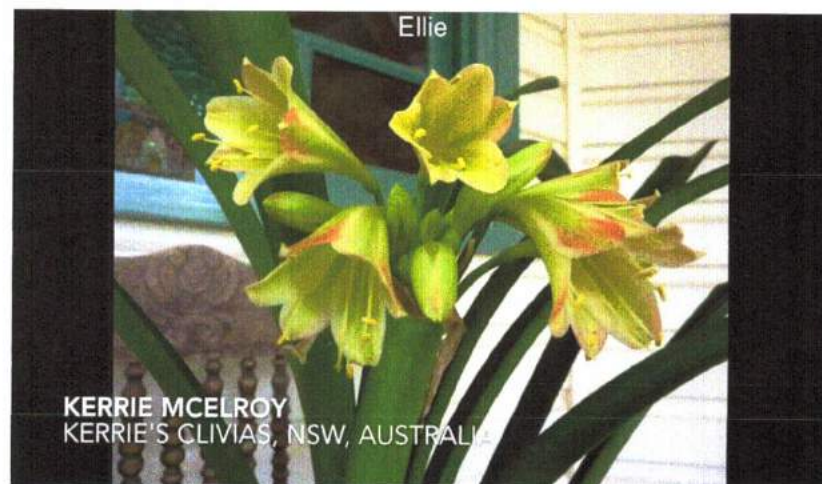














Honeydew Queen



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Drumhead - greenish Yellow from Yellow x SBGG



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Ellie - after tepals have blushed



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Bellissima - Clivia cyrtanthiflora x Red C.miniata



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Unnamed - Keeled Petals

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Stanmore Green Tint

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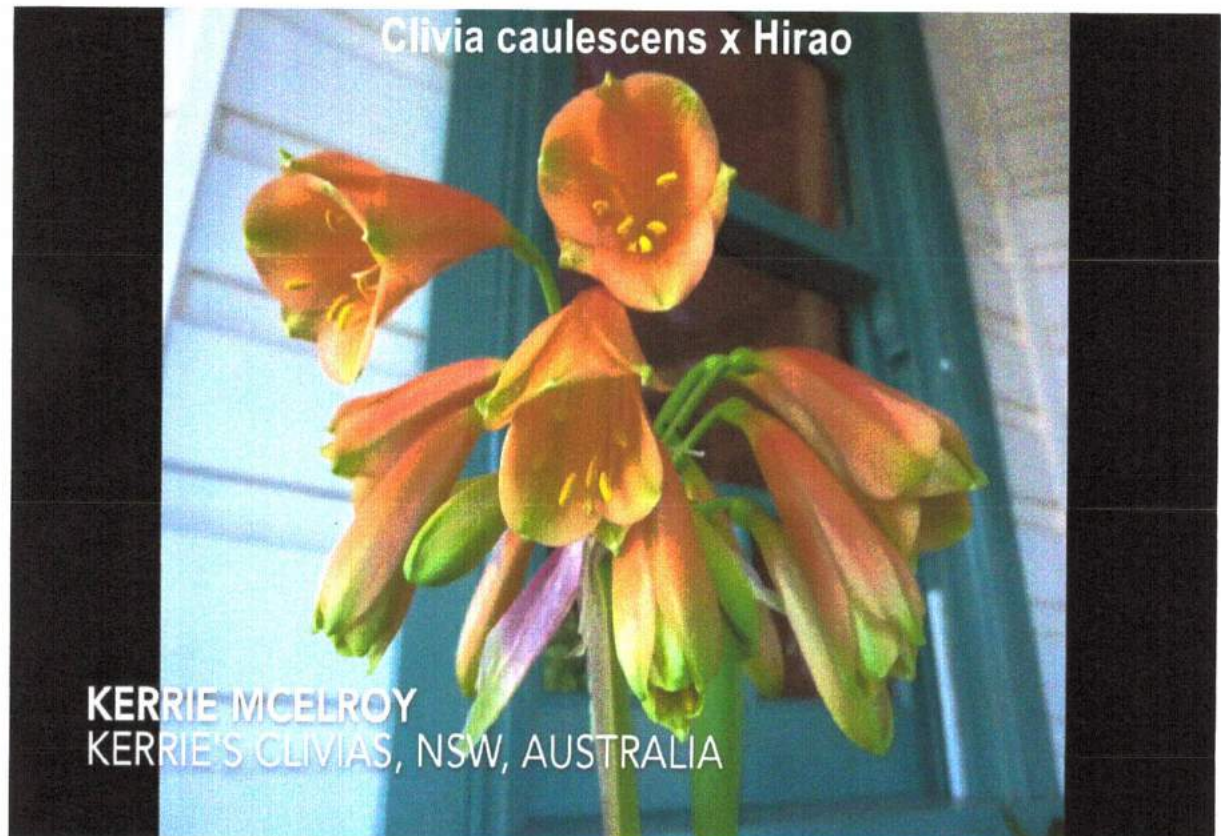
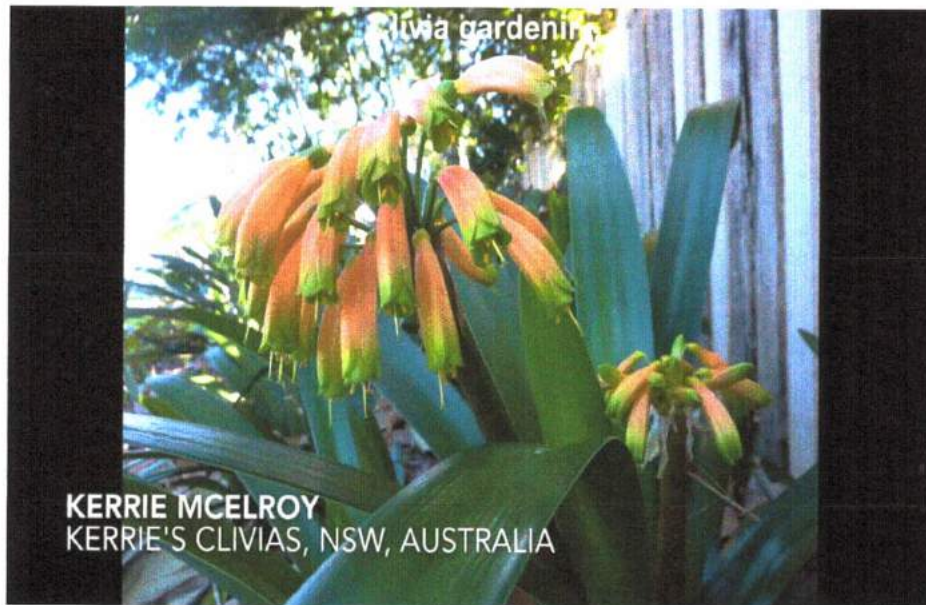
Blood Star - 2nd Gen cross

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# Unlocking the potential of interspecific breeding

Carrie Kruger

Interspecific *Clivia* flowers hold the added appeal of extending the flowering season. With the forming of the first flower, on crosses made four or five years previously, excitement is in the air. The hope that the flower will bloom in a way anticipated from your crossing, holds you in suspense and hope.

With all *Clivia* breeding there are good and disappointing results. Occasionally there are some outstanding results, which justify the time and effort spent hybridising the plants.

The range of colours found in the interspecific crosses, provides a treasure trove of hidden genetics. Most of the new and unusual colours found in clivia today originate from



Fig. 1 Star Green Destiny – Carrie Kruger



Fig. 2 'Ember Spirit' – Carrie Kruger





Fig. 3 'Planet Earth' – Carrie Kruger



Fig. 4 'Lucid Dreams' – Carrie Kruger





Fig. 5 'Over the Moon'– Carrie Kruger

the interspecific breeding programmes. The inclusion of the interspecific plants in a breeding programme, may be considered a 'new age' of clivia breeding.

As with many breeding programmes, patience is needed. Some of the F1 hybrids of interspecific crosses, provide pleasing results, but the largest improvement takes place with the second generation. Many of the F1 hybrids are tubular with a slight flare, which is not that spectacular. Many breeders may be discouraged by the appearance of the F1 hybrid flower, but will be rewarded when the F2 hybrids flower.

The interspecific breeding popularity is a relatively recent development. When I started breeding interspecifics, several years ago, the choice of plants was limited. Most of the plants available were mainly the tubular F1 hybrids. Selecting from these hybrids, for the best flower shapes and colours, I started our breeding programme. I now use the best of our F2 hybrids, making either sibling crosses or self-pollination.

Working with the interspecific plants has made me aware of the large gene pool involved in these crosses. As a result, the offspring colours are not always guaranteed. Ideally, I would grow all these plants to a flowering stage and then select the best. Unfortunately, like most breeders, I do not have the space to keep the plants until they flower.

Advice I can offer from breeding with interspecific clivia plants:

Start with superior F1 and F2 plants from the start. By doing this you will save a good few years in your programme, instead of starting from scratch.

We have bred some superior versi-colours flower plants from non-versi- coloured parents, for example 'Ember Spirit' Fig. 2. Versi-colour traits are carried over in the pollen as well as pod parent plants.

Avoid using miniata pollen, too often, on the interspecific cross. The repeated use of miniata pollen may result in an inferior looking 'miniata' type flower.





Fig. 6 'Mirror Beauty' – Carrie Kruger

Results from self-pollinating F2 hybrids have often resulted in flowers that are superior to the parent. Consider self- pollination as an option when developing your interspecific plants. An example of this is 'Planet Earth' Fig. 3.

When you do decide to hybridise plants, know which groups your plants belong to, to avoid unwanted orange offspring.

To produce shorter leafed plants, use a compact plant as a parent. I have been working with a yellow Daruma plant as a parent, producing good results. 'Mirror Beauty' Fig.6 is a good example of this type of cross.

Crossing your interspecific plants with either variegated or LOB type plants have resulted in beautiful plants. "Light of Africa" is an example of this type of cross. This cross was made by Francois van Rooyen.

#### Plants I used in breeding the various hybrids

Fig 1: 'Star Green Destiny' - F1 of 'Star Green Original' ('Star Green Original' is a F2 bred by Nakamura)

Fig 2: 'Ember Spirit' – 'Carnival' (*miniata* x



Fig. 7 'Carnival' – Carrie Kruger

*gardenii*) x 'Secret Wish' ('Stella Parish' *miniata* x *gardenii*) x Grp1 Yellow)

Fig.3: 'Planet Earth' – 'Jupiter' (*gardenii* x *miniata*) x (*miniata* x *gardenii*) x Self

Fig 4: 'Lucid Dreams'- 'Dreaming' (Best Nakamura F1 x self) x sibling

Fig 5: 'Over the Moon'- 'Secret Whisper' ('Stella Parish' *miniata* x *gardenii* x Grp1 Yellow) x 'New Moon' (Yellow F2 interspecific)





Fig.8 'Jupiter' – Carrie Kruger

Fig 6: 'Mirror Beauty'- (Yellow Daruma x *mirabilis*) x Yellow Daruma

Fig 7: 'Carnival' = (*miniata* x *gardenii*)

Fig 8: 'Jupiter' = (*gardenii* x *miniata*) x (*miniata* x *gardenii*)

Fig 9: 'Dreaming' = (Best Nakamura F1 x self)

### Developments and observations

The popularity of the interspecific hybrids has grown in the past few years and continues to attract many collectors and breeders. Many clubs now have exhibitions of the interspecific flowers. The advantage of the interspecific flowers is that they flower from the beginning of June up until the end of August in the Southern hemisphere. They often flower at odd times during the year, extending the flowering season of the *Clivia* plants.

Another advantage of interspecific flowers is that they are more disease resistant than the *Clivia miniata*. Interspecific plants grow faster and multiply well with some of the plants forming offsets before they have flowered.

The range of colours and flower forms are unlimited. These plants should be found in every collection.

I look forward to the next year's variety of interspecific colours!



Fig.9 'Dreaming' – Carrie Kruger





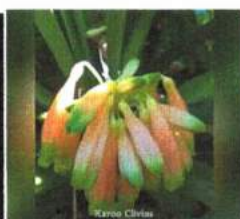
LISA FOX, Australia



Utopia Clivias



KERRIE MCELROY  
KERRIE'S CLIVIAS, NSW AUSTRALIA



Karoo Clivias



(Rudo's Pink Sensation x Doruma Y) x Angel's City

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