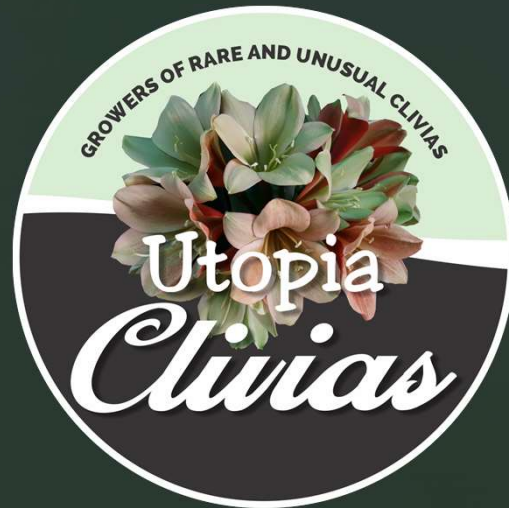


Interspecific Clivia Breeding Results



By Carrie Kruger

Carrie Kruger of Utopia Clivias in South Africa, shares some of their breeding results with interspecific Clivias.

Introduction:

- Breeding Clivias for 20 years
- Endless array of breeding possibilities
- Potential for the development of *Clivia*
- Results are never guaranteed
- Select the best



• **Introduction:**

- I started growing Clivias more than 20 years ago.
- Since then I have taken a particular interest in the hybridization of Interspecific varieties.
- With colour mutations, leaf variations and flower shapes within the six species there is an amazing gene pool to work with.
- Therefore there is considerable potential for the development of Clivia with the breeding of interspecific hybrids.
- Because of the large gene pool in a single interspecific plant, results are never guaranteed.
- It is therefore advisable to grow these crosses to flowering size, and then to select the best.
- Choose seedlings with good potential for further breeding.

Breeding Objectives

- Set realistic goals
- Know the background of your parent plants
- Strive for superior characteristics
- Improving flower size and/or shape
- Achieving a specific colour range
- Improving the flower count



Setting Breeding Objectives

- Setting realistic goals are important in breeding Interspecific Clivias.
- It is important to know the background of your parent plants.
- This will help to plan your pollinations accordingly.
- Breeding with a special plant without any specific breeding history remains a challenge.
- Striving for superior characteristics should be the final goal of every breeder.
- This will include improving flower size and/or shape
- achieving a specific colour range
- and improving the flower count where necessary

Breeding results with plants from the “Secret Series”

- “Secrets” were bred using “5 Star”
- Versicolour is a recessive trait in the first generation
- Versicolour carries over into f2
- Used as both pollen and pod parents
- Flower count will improve



Breeding results with plants from the “Secret Series”

- All the original “Secrets” were bred using a versicolour interspecific plant named “5 Star” as pollen parent.
- These were all pastels and pinks.
- Although the versicolour is a recessive trait in the first generation, this trait has carried down into the f2 generation.
- We have used the “Secret” pinks as both pollen and pod parents.
 1. “Whole of the moon” (New moon x Secret Strawberry Parfait)
 2. “Aspiration” (Secret Strawberry Parfait x Soft Whisper)
 3. “Obsession” (Desert Rose x Secret Desire)
 4. “Ember Spirit” (Carnival x Secret Wish)
 5. “Over the Moon” (Soft Whisper x New Moon)
- Although some of these may seem to have lower flower counts, keep in mind these were first flowers that will improve with their next flowering season.

▸ Cross A

New moon

X

Secret Strawberry Parfait



1. (New moon x Secret Strawberry Parfait)= "Whole of the Moon"

Result A: "Whole of the Moon"



"Whole of the moon" (New moon x Secret Strawberry Parfait)

▸ Cross B

Secret Strawberry Parfait

x

Secret Soft Whisper



2. (Secret Strawberry Parfait x Soft Whisper) = "Aspiration"

Result B: "Aspiration"



"Aspiration" (Secret Strawberry Parfait x Soft Whisper)

▶ **Cross C**

Desert Rose



x

Secret Desire



3. (Desert Rose x Secret Desire) = "Obsession"

Result C: "Obsession"



"Obsession" (Desert Rose x Secret Desire)

Cross D

Carnival

X

Secret Wish



4. (Carnival x Secret Wish) = "Ember Spirit"

Result D: "Ember Spirit"



"Ember Spirit" (Carnival x Secret Wish)

▸ **Cross E**

Secret Soft Whisper

X

New Moon



5. (Soft Whisper x New Moon)= "Over the Moon"

Result E: "Over the Moon"



"Over the Moon" (Soft Whisper x New Moon)

▶ **Breeding results with plants from the “Dream Series”**

- “Dreaming” plants are all selfed seedlings of a Nakamura bred interspecific
- Large picotee type edged flowers
- Leaves are semi to broad
- Crosses are superior to the original plants



Breeding results with plants from the “Dream Series”

The original “Dreaming” plants are all selfed seedlings of a Nakamura bred interspecific.

The flowers are large and semi open with typical picotee type edging.

The leaves are semi to broad leaves, up to 90mm.

The crosses that we have flowered so far, have all been superior to the original plants.

1. “Dream Big” (Daydream x Dreaming)
2. “Sweetheart” (Berry Blaze x Dreamcatcher) is a Secret x Dream
3. “Catch my fall” (Dreamcatcher x Baby’s Breath) is a Dream x a Secret

▶ **Cross F:**

Daydream

x

Dreaming



1. (Daydream x Dreaming)= "Dream Big"

Result F: "Dream Big"



"Dream Big" (Daydream x Dreaming)

▲ **Cross G:**

Berry Blaze

x

Dreamcatcher



2. (Berry Blaze x Dreamcatcher) = "Sweetheart"
(Here we used the Secret series onto a Dreaming variety)

Result G: "Sweetheart"



"Sweetheart" (Berry Blaze x Dreamcatcher)

▶ **Cross H**

Dreamcatcher



x

Secret Baby`s Breath



3. (Dreamcatcher x Baby`s Breath) = "Catch my fall"
(this is the same type of cross reversed)

Result H: "Catch my fall"



"Catch my fall" (Dreamcatcher x Baby's Breath)

➤ **Breeding results
with “Two to Tango”**

- Seed from Mick Dower
- Largest interspecific flower in our collection
- Slightly darker colour on the outside tepals
- White edge on the inside
- Breeds huge versicolour flowers



Breeding results with “Two to Tango”

“Two to Tango” was grown from seed from Mick Dower which was just marked Tango x.

It is the largest interspecific flower in our collection and has a slightly darker colour on the outside tepals, and a white edge on the inside.

A good example of one of our crosses was a huge versicolour flower we have named “Nobleman”

1. “Nobleman” (African Sunset x Two to Tango)
2. “Two to Tango” was only the pollen parent in this cross, but the versi-colour gene was very strong as can seen in the result.

▶ **Cross I**

African Sunset

X

Two to Tango



1. (African Sunset x Two to Tango)= "Nobleman"

Result I: "Nobleman"



"Nobleman" (African Sunset x Two to Tango)

Breeding results with “QO8” Original:

- Originates from Belgium
- Only used as pollen parent
- Does not set many seeds
- Pollen is extremely viable
- Versicolour is a dominant gene in breeding



Breeding results with “QO8” original:

- QO8 is a famous plant that originates from Dirk Lootens in Belgium.
 - In these crosses, QO8 was used only as the pollen parent as QO8 self does not set many seeds.
 - The pollen is very viable and we have done a lot of breeding with her.
 - The versicolour is a dominant gene and can be seen clearly in these first generation results.
 - In this first cross, the objective was to improve the shape and increase the size of the flower.
 - We were hopeful that the versicolour trait would be dominant and carry over to the next generation.
 - This first flower exceeded all expectations with regard to shape, colour and umbel.
1. “Lucky 8” was a clear favourite of our 2020 first flowers. (“Lucky Girl” x “QO8”)
 2. “Rainman” (f1 Interspecific x QO8)

Although the flowers were smaller compared to “Lucky 8” both the shape and colours were great.

▲ **Cross J**

Lucky Girl



X

Q08 Original



1. ("Lucky Girl" x "Q08")= ."Lucky 8"

Result J: "Lucky 8"



"Lucky 8" ("Lucky Girl" x "QO8")

This plant was a clear favourite of our 2020 first flowers.

It was chosen as the best versi-colour in the Clivia Society Virtual Show 2020.

Cross K

f1 Interspecific

X

Q08



2. (*f1 Interspecific* x *Q08*)= "Rainman"

Result K: "Rainman"



"Rainman" (f1 Interspecific x Q08)

Although the flowers were smaller compared to "Lucky 8", the shape and colours were great.

Breeding results with “Jupiter”

- Our first interspecific
- (Gardenii x Miniata)x(Miniata x Gardenii)
- Two special plants have resulted from selfing
- Selfing is always an option



Breeding results with “Jupiter”

“Jupiter” was one of our first interspecifics and was bred from (Gardenii x Miniata)x(Miniata x Gardenii)

I would like to share two special plants that have resulted from selfing “Jupiter”.

Both these results show that selfing is always an option if you are unsure of what to cross a specific plant with.

1. “Planet Earth”
2. “Callisto”

Result L 1: Planet Earth(Jupiter x self)



1. "Planet Earth"

Result L 2: "Callisto" (Jupiter x Self)



2. "Callisto"
(named after one of Jupiter's moons)

Customer feedback: A

(Caul. x Chanel)

x

5 Star Versi



Feedback from customers:

We always appreciate feedback from clients who have grown and flowered special interspecifics from our breeding.

Here are two interspecific results shared by a client from our breeding:

Photo.A (Caul. x Chanel) x 5 Star Versi

Photo.B (Caul. x Chanel) x Dad`s Memory

Result: A



Result A from: (Caul. x Chanel) x 5 Star Versi
(photo credit Jacques van Eck)

Customer feedback B:

(Caul. x Chanel) x Dad's Memory



B: (Caul. x Chanel) x Dad's Memory

Result: B



Result B: (Caul. x Chanel) x Dad's Memory
(photo credit Jacques van Eck)

Conclusion:

- Under-developed category of Clivia Breeding
- Keep records of pollinations
- Breeding without breeding history remains a challenge
- Understand the shortcomings of your crosses
- It could take one or more generations to achieve goals
- Be patient and never give up
- Great things take time



• **Conclusion:**

- Interspecific breeding is a hugely under-developed category of Clivia, thus allowing much scope for new creations.
- Most of the new and unusual colours in Clivias originate from interspecific breeding
- Make sure you keep records of all your pollinations every season.
- Breeding with a special plant without any specific breeding history remains a challenge.
- It is important to understand the shortcomings of your crosses and to know how to eliminate or improve them in the future.
- It could take one or more generations to achieve these breeding goals you have set.
- Be patient and never give up. Great things take time.

The End



Utopia Clivias