

The Fuchsia Breeders Initiative

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Full speed ahead?

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Contributions for the next issue, which is scheduled for the end of December 2020, should be in the editor's possession ultimately on 15 December 2020.

Please send your contribution in Word, with the photographs attached separately. Large contributions can be transferred by uploading the file with, for example, WeTransfer.

Any new Fuchsia cultivars being released? Please provide a photograph and some descriptive information, and it will be seen and get attention all over the world!

Photograph on front page:

Fuchsia 'Claire Marie McManus'
(De Cooker, 2020)

Full speed ahead? Not in the short term, I'm afraid, for the most of us.

The covid-19 virus, causing the corona-pandemic, is still empathically present and heavily influencing the life of also us Fuchsia enthusiasts.

In many countries such as Belgium and the United Kingdom, nurseries had to close down for a while. And after reopening, the required (but absolutely necessary!) social distancing also does not really contribute to human contacts and business. Activities of local and nationwide fuchsia organisations are at a low level and Fuchsia shows have been cancelled. In our local Fuchsia Society we try to sustain contacts at a very modest level, thereby planning visits of at most four people together, in the open air at 1.5 m distance. Perhaps we could expand this to six persons in the coming months, depending on further containment of corona. In Belgium, Mr. Geert Grote, owner of Fuchsia nursery 'De Nachtwaker', has decided to quit the fuchsia business per June 1st, a real blood-letting, painful step. I have visited the nursery last year, and was impressed by the excellent look of their greenhouses.

The most painful thing is the sad news that two of our dear Fuchsia friends have passed away in recent months, Mr. Jack Lamb and Mr. Sid Garcia. On p. 7 and 8 you will find a short tribute to Sid and Jack. We will deeply miss them both.

Now we are eagerly waiting for the corona vaccine to become available. Because only



Editor of The Fuchsia Breeders Initiative

Mario de Cooker

then, in my opinion, we will be able to resume our Fuchsia life. But in the meantime, whatever criticism you have on FaceBook, it helps us stay connected and communicate about Fuchsias. Why not join some active FaceBook groups? Some suggestions on page 15.



Found on FaceBook, posted by Mr. Stan Williams: *Just to say the beauty of Fuchsias is not always about the flowers. F. procumbens x F. excorticata X by Steve Yendle. 'Tom West', F. procumbens.*

Until the breaking news on a corona vaccine has arrived: stay safe, and keep enjoying your fuchsias!

Mario de Cooker

STRIKING GOLD

Being on the subject of ornamental foliage

By Edwin Goulding

Introduction

Not everything new in Fuchsias is the result of deliberate plant breeding. In this article we will examine sports and hybridising approaches. Some changes occur in the flowers, especially petals but the majority of those discussed in this article are found on the leaves of plants that we would normally expect to have green foliage. We will discuss the various types of ornamental foliage that can be found and think in some detail about variegation. Chance happenings are not under the control of hybridists but can be vegetatively propagated. Sometimes they are then worth introducing in their own right with a new name. Flower changes will be discussed in more detail in our next article.

Variegation

Fuchsia 'Marinka' is a famous basket type that makes very good flowering displays. *Fuchsia* 'Golden Marinka' forms rather smaller plants and tighter displays. It compensates for this by having bright yellow and green var-

iegated foliage. Both cultivars can carry large numbers of bright self-red blooms that show themselves against their background leaves. Their growth is reasonably bushy and their branches short jointed and sturdy.

Fuchsia 'Thames Valley' was the latest of the *Fuchsia* introductions mentioned here. It is less prone to discolouration and dulling of the foliage, in changeable weather conditions, than *F.* 'Marinka'. *Fuchsia* 'Alton Water' (p. 3) has clearly variegated leaves in green and yellow. Its habit is neat and attractive. In both the flowers are complementary to the foliage. Perhaps the smallest of the plants mentioned here, it is best suited to being grown in smaller hanging containers like pots.

The four *Fuchsias* mentioned here give good examples of variegated foliage sports that were found on already established green leaved cultivars; well known



F. 'Marinka'
(Rozain Boucharlat, 1902)



F. 'Golden Marinka'
(Webber, 1955)



F. 'Thames Valley'
(Clyne, 1976)



F. 'Alton Water'
(Ransby, 1992)



F. 'Genii'
(Reiter, 1951)



F. 'Waveney Sunrise'
(Burns, 1986)

to the market and to the public. Each sport became established with its own name and identity as a worthwhile addition to the market. It is noteworthy that the lightest sections of Fuchsia leaf always occur towards the outer edges and never towards the centre of leaves as sometimes happens with Pelargoniums.

Yellow

Fuchsia 'Genii' has brilliant yellow foliage, especially when grown in full sun. In shade the leaves assume a greener hue. As a hardy it is extremely robust and versatile with neat red and violet single flowers produced in substantial numbers. *Fuchsia* 'Waveney Sunrise', which has a strong and spreading habit of growth, also has brilliant yellow leaves. It makes excellent standards but might require some protection in very windy positions. Both introductions were raised from seed.

One striking feature of yellow leaved Fuchsias is their vigour. This is about equal to that of green plants and compares very well with variegated leaves; the more chlorophyll there is present the better the habit of growth and vigour of plants. In these Fuchsias the chlorophyll is present but at a deeper level in the leaf structures. This is unlike chlorosis in which chlorophyll is completely absent. Young growth is always the brightest because some yellowness is frequently lost as leaves turn greener with age.

Two types of variability

Fuchsia 'Sophie's Surprise', a sport coming from *F. 'Sophie Claire'*, has a particular type of chimera, ephemeral or variable variegation. Such examples are quite rare. It is interesting to



F. 'Genii' (Reiter, 1951)

note that most growers propagate the most attractive pieces of foliage on such plants. This often depletes the remaining variegation to a level where all that remains is green leaves. With plants like this it is necessary to concentrate entirely on the variegation and to dispense with the green portions as there is little likelihood of attractive change recurring. This greening effect can frequently be seen in ornamental trees where a green branch gradually takes over what was originally a variegated and more ornamental planting.

Fuchsia 'Firecracker' has fixed variegation. The difference can be clearly seen by comparing the photographs shown here. *Fuchsia* 'Firecracker' has similar vigour to that of its forebear *F.* 'Gartenmeister Bonstedt' from which it originally came as a sport. Such sports are quite common among cultivars having *F. magellanica* in their parentage but have proved rare among hybrids from other backgrounds like that of *F. triphylla*. Variegated *F.* 'Lottie Hobby' is one example from the *encliantras*.



***F.* 'Sophie Claire'**
(Stannard, 1991)



***F.* 'Sophie's Surprise'**
(Stannard, 1992)

Stepped changes

In the majority of cases in which foliage changes occur there is a set sequence that these changes follow. First a variegated sport appears on the green leaved original plant. Then, subsequently and at a later date, a yellow leaved sport springs from the variegated *Fuchsia*. Like most things in the *Fuchsia* world there will be



***F.* 'Gartenmeister Bonstedt'**
(Bonstedt, 1905)



***F.* 'Firecracker'**
(Ridding, 1987)



***F.* 'Variegated Lottie Hobby'**

exceptions to this rule but these are rare by comparison with the normal sequence described here.

Fuchsia magellanica var. *macrostema*¹ is clearly quite different in appearance from the much stronger and stiffer forms. It has wand-like branches whose delicate appearance belies an ability to withstand even violent winds. *Fuchsia magellanica* var. *macrostema* 'Variegata' has almost white lace edging on many of its leaves; this variegation is fairly randomly distributed across the whole plant. *Fuchsia magellanica* var. *macrostema* 'Aurea' has a similar vigour to its two forerunners and, of course, the flowers are identical in appearance but its leaves are yellow when young before assuming a greener tone with age.



F. magellanica var.
macrostema 'Variegata'



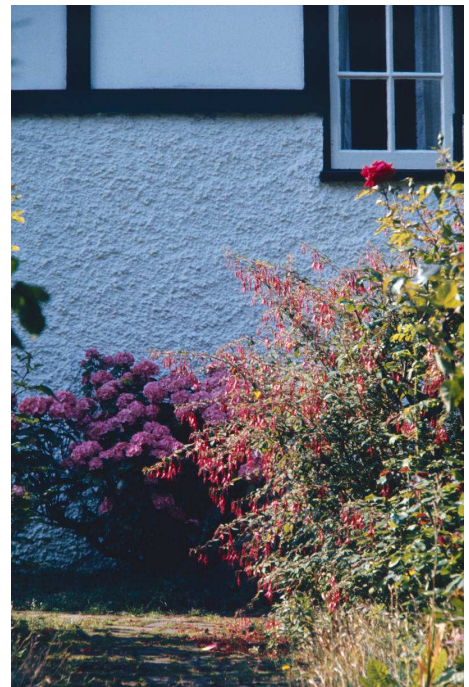
F. magellanica var.
macrostema 'Aurea'



F. 'Tolemac'
(Gouldings Fuchsias, 1984)



F. 'Lemacto'
(Gouldings Fuchsias, 1984)



F. magellanica var. *macrostema*

Fuchsia 'Camelot' (Gouldings Fuchsias, 1983) was an upright growing seedling raised from the crossing between *F. 'Lady Ramsey'* and *F. 'Norman Mitchinson'*. It resembles neither except in flower shape. *Fuchsia* 'Tolemac' and *F. 'Lemacto'* followed as sports very shortly afterwards in quick succession. All trends do not follow exclusively down specific family lines.

Fuchsia 'Waveney Gem', *F. 'Richard John'* and *F. 'Susan Diana'* (p. 6) followed the same stepped changes in foliage colour, this time on very sturdy plants eminently suitable for growing in baskets where they can be displayed at eye level and to maximum effect. Changes such as these occur quite often but it takes an observant gardener to notice them. Then, attention to the details of propagation and culture are needed in order for them to progress independently and thrive.



F. 'Waveney Gem'
(Burns, 1985)



F. 'Richard John'
(Wye, 1998)



F. 'Susan Diana'
(Wye, 1998)

Bronzing

One further foliage effect that is worth noting is bronzing of the leaves. This almost invariably occurs on the growth of basket types whose origins were probably in Section *Quelusia*. There, plants like *F. regia* var. *alpestris* show similar colouration and long scandent branches. *Fuchsia* 'Autumnale', whose origins are lost in the mists of time, used to be grown at Kew Gardens' under glass where it was trained along wires suspended just below the roof. There, the sun could highlight this bronzing and breathe

life and interest into the plant. *Fuchsia* 'Tour Eiffel' and *F. 'Chameleon'* were later additions to the plants with copper coloured leaves. Perhaps because of their red and violet, or mauve, corollas no cultivars of note have been introduced in recent years. Foliage effects also tend to reduce with the age of leaves and when plants are grown in the shade.



F. 'Autumnale'
(Courcelles, date unknown)



F. 'Chameleon'
(Dowson, 1991)



F. 'Tour Eiffel'
(De Graaff, 1985)

Chlorosis

Chlorosis is a complete lack of chlorophyll upon which plants like Fuchsias depend. Without it the sun's energy cannot be used to instigate the chemical changes needed to provide food and energy in order to grow; indeed to survive. When some chlorophyll is missing from leaves the remaining green areas can provide enough energy for plants to keep growing but not to thrive in quite the same way as those possessing a hundred per cent green pigmentation.

Where total chlorosis exists in seedlings they are likely to die before they have left the seed leaf stage and shortly after germination. In one early experiment using *F. fulgens* var. *variegata* as a parent three seeds germinated, all were without chlorophyll and all died shortly after germination; their seed leaves and stems looked as if they had been bleached white.

In some plants it has been found that mitochondrial DNA creates unusual non-Mendelian effects. In most of these cases only the seed parent has the ability to add this extra nuclear component. Pollen grains carry no extra nuclear genetic material. Whether any characteristics like those found in variegated foliage can be transferred through hybridising in Fuchsias has yet to be tested systematically and documented in Fuchsias. Our next article will discuss some of the sports that occur on the flowers of Fuchsias; variation rather than variegation.

Conclusion

In this article we have considered some of the spontaneous changes that occur in the foliage of Fuchsias. This included bronzing, chlorosis, yellowing and variegation. It is important to realise that these changes are not caused by, for example, chilling, which may cause reddening of the leaves in plants such as *F. 'Marinka'*. Nor is it the yellowing that can happen when plants are starved of nutrients such as Calcium. The changes described here are genetic and alter the phenotype in more permanent ways.

Stepped changes seem to follow a particular order of progression. Variegation usually occurs first, followed by yellowing and finally by chlorosis. We might be tempted to think these affect the whole plant but this is rarely the case. Usually a single shoot appears with the changes clearly visible. In all

except the last of these conditions the aberrant piece can be detached and propagated vegetatively.

Changes may be transient with no clear settled pattern on the leaves. Chimeras are often thrown away for this very reason. Most of the changes that have been propagated and distributed successfully over past years clearly come from Fuchsias with Section *Quelusia* in their parentage. It could be speculated that in-breeding and constant regeneration of material by propagation gives rise to this tendency but there is no evidence to support this.

It is worth mentioning that these changes can also be reversed as spontaneously as they arose. Ornamental trees are frequently planted to enhance the environment around new housing developments. Green shoots can appear at a later date and, if not removed, can soon take over the whole plant again. Careful nurturing in the form of pruning is often required to make the best of these random findings.

Foliage effects can add a new large impact to the beauty of individual plants and to our surroundings. Although such happenings are not "hybridising" keen eyes are required in order to take advantage of these changes appearing in our plants. It is vital that we know as much as possible about those introductions already on the market, too. Repetitions are quite common and new names can cause confusion.

In our next article we will consider changes that happen to flowers; in particular to the petals in a Fuchsia's corolla. In the meantime a short reading list is attached to this article for those interested in finding out more about this truly fascinating subject.

Notes

1 This variant is sometimes labelled *F. magellanica* var. *gracilis*.

Further Reading

CHEN, Y., et al, Leaf structure affects a plant's appearance: combined multiple-mechanisms intensify remarkable foliar variegation, in *Journal of Plant Research*, Volume 130, Number 2, 2017, pp.311-325. ISSN 0918 9440.

MARCOTRIGIANO, M., Chimeras and Variegation: Patterns of Deceit, in *HortScience*, Vol. 32(5), August 1997, pp.773-784.

Photographs in this article by Mr. Edwin Goulding

Tour Eiffel courtesy of Mr. Herman de Graaff

Farewell to Sid Garcia and Jack Lamb

By Mario de Cooker

SID GARCIA

Quote taken from the BFS Summer Bulletin: *"Mr. Sid Garcia, a fuchsia genius, grower, showman, hybridiser, national judge, a true gentleman and most importantly: a great friend"*.

That's how I indeed remember Sid. I had the opportunity meeting Sid several times, both in The Netherlands and in the UK, and have learned to know him as an extremely nice and amiable person. He was a constant factor in the group of Fuchsia enthusiasts visiting The Netherlands early in the season, organised by the Reading and District Fuchsia Society. Gathering fuchsias from nurseries and visiting interesting places to go were standard items on their agenda. It will be different in the future, but Sid will always be there, looking over our shoulders. Rest in peace Sid.



Sid in Chateau IMPNEY at the meeting for the British Fuchsia Society 80th Birthday Celebration.



Sid Garcia winning Best in Show at Windsor with judge Peter Holloway
Photo courtesy of Sandra Hopkins/BFS



F. 'Silver Surfer'

Photo courtesy of John Nicholass



F. 'Vera Garcia'

Photo courtesy of John Nicholass



F. 'Alyssa May Garcia'

Photo courtesy of Carol Gubler



F. 'Imogen Faye'

Photo courtesy of John Nicholass

JACK LAMB

We all know Jack best as an expert on the *Fuchsia* species and holder of a national species collection in the UK. I have met Jack a number of times at EuroFuchsia meetings on different occasions. He was a not-to-miss flamboyant and bubbly personality, always ready to impress us with his knowledge of the *Fuchsia* species and stories about his trips for finding Fuchsias in the wild. His passing away is a great loss to the fuchsia world. We will miss him.



**Jack and Joan waiting for a copious dinner
(EuroFuchsia meeting Paris, June 2009)**



**Visit to the *Fuchsia* species collection of the
Versailles-Chèvreloup arboretum
(EuroFuchsia meeting Paris, June 2009)**



Still wanting more fuchsias?

Making bi-colour triphyllas (Part I)

By Mario de Cooker

Introduction

The triphyllas form a special group within the assortment of fuchsias. They all originate directly (the triphylla hybrids) or in a short straight line (the triphyllas) from *F. triphylla* and are for a large part characterized by their well-known distinctive shape, i.e. having a long tube and a single corolla with (often, but not necessarily) relatively short sepals. The color scheme is for the majority orange, often with pink or reddish colour hues. Differently coloured new triphylla cultivars have been developed in recent years. A couple of white and pastel-coloured triphyllas have been added to the assortment, and new purple triphyllas will follow soon.

Real bi-colour flowers are rare in triphylla. Subject of this article is discussing a number of possible routes for creating new bi-colour triphylla fuchsias, thereby providing an up-to-date overview of the author's running crossing activities.

Current assortment of purple triphyllas.

Bi-colour fuchsia cultivars in various colors and shapes are available in large numbers. It's the standard in the fuchsia assortment. However, the current range of real bi-colour triphyllas is very limited. In fact, until recently no 'ideal' bi-coloured triphyllas were available. 'Orient Express' (Gouldings Fuchsias, 1985) was revolutionary in its day, however not being a clear bi-colour type. 'Lee Anthony' has better colour differentiation, which unfortunately becomes smudged and indistinct as blooms age.



***F* 'Lee Anthony'
(Gouldings Fuchsias)**



***F* 'Orient Express'
(Gouldings Fuchsias, 1985)**



***F* 'Michael Wallis'
(Kimberley, 2003)**

Better bi-colour triphyllas are ‘Michael Wallis’ (Kimberley, 2003) with its pale coral-pink tube and bright red-orange corolla and ‘Frederick Woodward’ (Kimberley, 2005), having a pale pink tube and a pink corolla.

All of the above bi-colour triphyllas are of the pinkish-pink type, with only limited real variation. Recently, ‘Fancy Dress’ (De Cooker, 2020) having an orange tube and pale pink corolla has been added to the bi-colour assortment. This triphylla fuchsia differs substantially from the existing range.

Creating new bi-colour triphyllas

A number of routes is available or could be imagined for creating new bi-colour fuchsia triphyllas. Several of these will be discussed in this article, without suggesting that not still more other possible routes could be explored.

The routes to be discussed are the following:

1. *F. triphylla* selfings and sibling crossings,
2. crossings of *F. triphylla* with commercially available cultivars and species,
3. crossings of commercial available triphyllas with other cultivars,
4. crossings using non-distributed seedlings (this subject will be addressed in part II of the article, December 2020).

Ultimate goal is creating true bi-coloured triphylla fuchsias such as triphyllas having a white tube and an orange or purple corolla.

1. Making bi-colour triphyllas on basis of *F. triphylla* selfings and sibling crossings.

In recent years several new triphyllas, still having the *F. triphylla* species genome have been developed. In 2010 Mr. Hans van der Post, a Dutch fuchsia hybridist, succeeded in creating a soft pink *F. triphylla* by making a selfing using *F. triphylla* ‘Herrenhausen’. A couple of years earlier, new seedlings of *F. triphylla*, raised from seeds provided by Dr. Paul Berry, became available for hybridization purposes. Two typical representatives of these are seedlings ‘PB7760#6’ and ‘PB7760#7’. Together with *F. triphylla* ‘Herrenhausen’ they form the basis for creating a new series of vigorous and highly fertile near white/pale pink triphyllas having the *F. triphylla* species genome. Extensive information on this development can be found in [1]. Two of such near white/pale pink triphyllas have been released: ‘Purcellian Elegancy’ (De Cooker, 2015) and ‘Purcellian Grace’ (De Cooker, 2020). Such triphyllas could offer serious potential for developing all kinds of new triphyllas, including bi-colour types.



F. ‘Frederick Woodward’
(Kimberley, 2005)



F. ‘Fancy Dress’
(De Cooker, 2020)

From crossings between *F. triphylla* ‘Herrenhausen’ and *F. triphylla* ‘PB7760’, exclusively orange seedlings were obtained in the F1 generation. By making F1 selfings and F1 sibling crossings, a mixture of F2 seedlings was obtained, having orange, pale pink and mixed bi-colour phenotypes (more

specifically: an orange tube and pink corolla; see the adjacent photograph). Subsequently, by making F1 x F2 crossings and F2 selfings, a large variety of different phenotypes of (in addition to some pale pink) orange *F. triphylla* flowers is obtained, including a number of bi-colour seedlings as is shown in the photograph below.



*A large variety of *F. triphylla* flower sizes and shapes is obtained in the F2 and F3 generations of F1 x F2 crossings and F2 selfings.*

Evidently, the ability of producing orange/pink bi-colour combinations is part of the *F. triphylla* genetic capabilities. None of such *F. triphylla* bi-colours have been released so far.

2. Making bi-colour triphyllas on basis of crossings of cultivars and species with triphyllas having the *F. triphylla* species genome.

Crossings have been made between pale pink F2 and F3 triphyllas having the *F. triphylla* species genome and various commercially available cultivars. This has resulted in a diverse mix of rather non-interesting outcomes. A couple of times, however, pale pink and near white triphyllas were produced for which it was not clear if these were the result of an unwanted selfing or genome elimination as described in [2]. This needs further investigation.

By using triphylla cultivar 'Pangea' as the crossing parent, interesting progeny was obtained. From phenotypic observations it's not unlikely that the genetic defect for making anthocyanins (which is responsible for creating the pale pink *F. triphylla* flowers) is also part of the 'Pangea' genome [3]. In combination with the pale-pink *F. triphylla* genome which also contains the defect in several chromosomes [1], the production of bi-colour triphyllas from such crossings is therefore far from unlikely.



Three types of flowers have been obtained in the F2 generation: orange, mixed orange/pink and pale pink.



F. 'Pangea' (Van der Post, 2012)



Flower buds of N 15-20



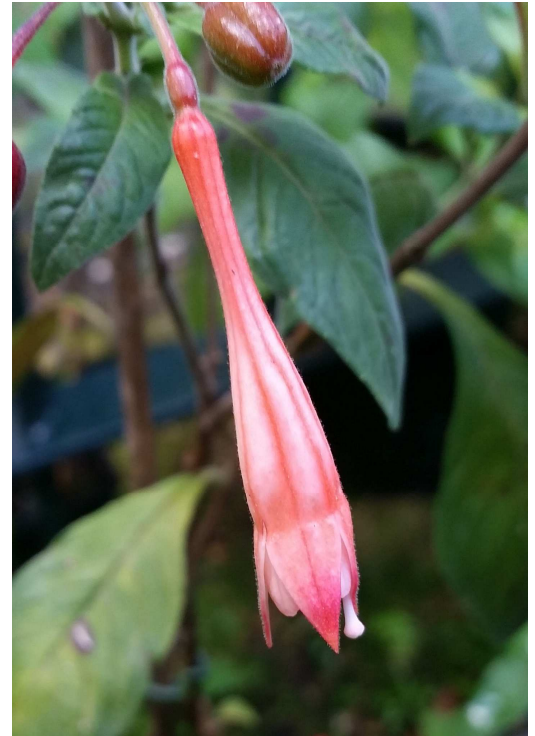
Seedling N 15-20

Typical examples of bi-colour triphylla seedlings originating from the crossing 'Pangea' x *F. triphylla* (F2 pale pink) are seedlings N 15-20, N 16-40 and N 16-12 [4]. Seedling N 16-12 has recently been released as 'Fancy Dress' (see photograph on p. 11). Several other seedlings are still in the testing phase.

Interesting routes for making new triphyllas by *F. triphylla* crossings are being explored also by other Dutch hybridist. Such routes could offer potential for making exciting new bi-colour triphyllas.

Hybridist Mr. Hans van Aspert has a running project on making Enclandra x *F. triphylla* crossings. As has been mentioned in the 2020 Spring Bulletin of The British Fuchsia Society one of his goals is making microphylla shaped triphyllas [5]. From crossings *F. obconica* x *F. triphylla* first triphylla hybrid seedlings have been obtained with orange and pink colour hues and having larger flowers and leaves as well as a longer tube than *F. obconica*. Examples are seedlings HvA 17-14-15 = *F. obconica* x *F. triphylla* and HvA 18-18-02 = (*F. obconica* x *F. triphylla*) x (*F. obconica* x *F. triphylla*).

Hybridist Mr. Jan de Boer has explored crossing *F. magellanica* 'Arauco' x *F. triphylla*. Visually judged, several of these crossings (seedling JdB-x being an example) have most probably successfully produced triphylla hybrids. Flowcytometry measurements have to be carried out for providing additional information on the seedlings' genomes.



Seedling N 16-40



Seedling HvA 17-14-15



Seedling HvA 18-18-02



Seedling JdB-x

3. Making bi-colour triphyllas on basis of crossings of existing commercially available triphyllas with cultivars.

Triphylla fuchsia cultivars 'Göttingen', 'Thalia' and 'Koralle' have all originated from the crossing *F. triphylla* x *F. fulgens* or vice versa. These cultivars have

a pentaploid genome, resulting from the combination of an unreduced *F. triphylla* gamete and a regular *F. fulgens* gamete [6]. They have good fertility and have been frequently used for making crossings. Because their genome is for 80% *F. triphylla*, it's not unlikely that also in these cultivars the defect for anthocyanins formation is part of the genome in at least one

of the *F. triphylla* chromosomes. Indication for this is the production of the near white (in fact, subtle bi-colour) 'Our Ted' (Gouldings Fuchsias, 1987) from a selfing of 'Koralle'.

The bi-colour fuchsias mentioned on p. 10 and 11 have all originated from crossings with 'Thalia' and 'Koralle' as the female parent:

'Lee Anthony' = 'Thalia' x 'Dancing Flame'

'Orient Express' = 'Koralle' x 'Lye's Unique'

'Michael Wallis' = 'Koralle' x 'Lye's Unique'

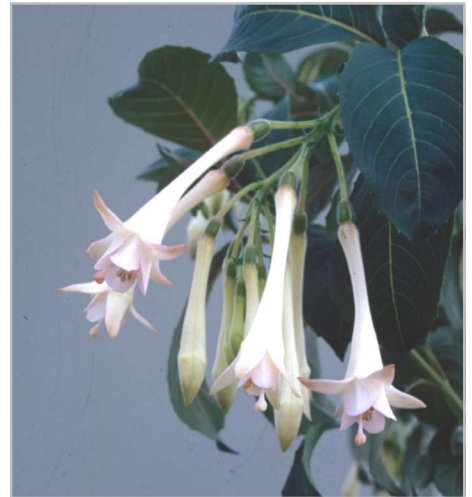
'Frederick Woodward' = 'Thalia' x 'Kolding Perle'

Moreover, they have all been created with a male crossing parent having a more or less white tube, 'Lye's Unique' being a clear example. Obviously, making crossings this way provides a successful route towards bi-colour triphyllas.

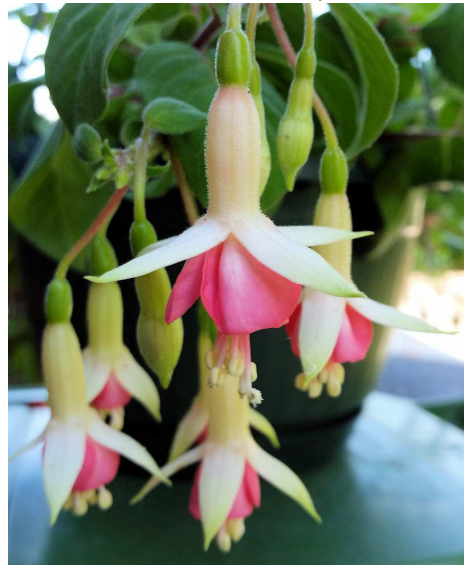
Such route has, by the way, also been experienced as being successful in crossings for making triphylla shaped, bi-colour non-triphylla cultivars. 'Roger de Cooker' as an example, has originated from the crossing ('Pangea' x ('Elsie Mitchell' x *F. magellanica* 'Alba')) x seedling N 93-08. Subsequently, from crossing 'Roger de Cooker' x N 93-08, 'Winter Has Passed' and 'Awake Sweet Love' have been produced.

N 93-08 is an unreleased seedling having a white tube, which evidently can be well passed on to its progeny. It has been used, and is still being used successfully for making all kinds of different crossings. It seems therefore obvious using N 93-08 also for making crossings aiming at bi-colour triphyllas. This will be explored further in the coming years.

To be continued: part II of making bi-colour triphyllas will be published in the December 2020 issue of The Fuchsia Breeders Initiative.



***F.* 'Our Ted' (Gouldings Fuchsias, 1987)**



Seedling N 93-08



***F.* 'Roger de Cooker'
(De Cooker, 1999)**



***F.* 'Winter Has Passed'
(De Cooker, 2016)**



***F.* 'Awake Sweet Love'
(De Cooker, 2012)**

Acknowledgement

I am deeply indebted to Mr. Edwin Goulding for sharing his stimulating ideas and knowledge in shaping the pathway for developing bi-colored triphyllas. He will undoubtedly recognize parts of our e-mail discussions in the article.

Photos 'Lee Anthony' and 'Frederick Woodward' courtesy of Mrs. Sigrid van Schaik.

Photo 'Michael Wallis' courtesy of RG Plants LTD, United Kingdom.

Photo 'Orient Express' courtesy of Mr. Eddy de Boever/FuchsiaFinder.

Photo seedling HvA 17-14-15 courtesy of Mr. Hans van Aspert.

Photo 'Our Ted' courtesy of Mr. Edwin Goulding.

Other photos M. de Cooker

References and remarks

- [1] The Fuchsia Breeders Initiative, issue 2 (December 2013, p. 12-13), issue 3 (July 2014, p.12-14), issue 4 (December 2014, p. 11-15).
- [2] Comai L (2014) Genome Elimination: Translating Basic Research into a Future Tool for Plant Breeding. PLoS Biol 12(6): e1001876. doi:10.1371/journal.pbio.1001876
- [3] Young flower buds of orange *F. triphylla* have an orange colour, those of pale pink *F. triphylla* have a white/light greenish colour and those of orange/pink *F. triphylla* have a mixed pale greenish/orange colour, turning orange on ageing. At higher temperatures, flower buds of *F. 'Pangea'* sometimes have a mixed pale greenish/orange colour, which could be an indication of the defect for anthocyanins formation being part of the genome.
- [4] Seedlings are coded as Breeder-Year-Number. Example N 16-12: **N** (= De Cooker) - **16** (= 2016)- **12** (= reference number).
- [5] M. de Cooker, British Fuchsia Society Spring Bulletin 2020, p. 39.
- [6] The Fuchsia breeders Initiative, issue 10, December 2017, p. 14-15. Flowcytometry measurements were carried out for *F. 'Göttingen'*, *F. 'Thalia'* and *F. 'Koralle'*. All three cultivars have comparable 2C DNA content. For *F. 'Göttingen'* a root tip chromosome count has been carried out. This has clearly confirmed that *F. 'Göttingen'* is a pentaploid cultivar having the genome TTTTF (T = set of *F. triphylla* chromosomes, F = set of *F. fulgens* chromosomes).

FACEBOOK

A number of actively communicating FaceBook sites (non-limiting) are available from:

BFS Fuchsia Species, Hybridisation and Heritage Group

The British Fuchsia Society

Reading and District Fuchsia Society

Camborne-Redruth Fuchsia Society

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Fuchsienfreu(n)de - Tipps, Pflegehinweise und Stecklingstausch

WHY NOT JOIN?

Please update your e-mail address!

It happens rather frequently that subscribers to The Fuchsia Breeders Initiative change their e-mail address. However, if this has not been communicated to the editor, it's not possible providing you with the most recent issue at the moment it is sent around. And you might be wondering why you are not on the list anymore.

So if you want to stay connected, please communicate any changes to fuchsia@decooker.nl and you will receive your copy at the appropriate moment.

Variegated Beauties

By Mario de Cooker

In his article STRIKING GOLD, Mr. Edwin Goulding led us through the backgrounds of the variegated fuchsias. On this and the next page another impression of variegated fuchsias in all their glory is shown.

All photo's on this page: courtesy of Mr. John Nicholass.



'Variegated Lottie Hobby'



'Golden Marinka'



'Tom West'



'Tom West'

Photos 'Anna Silveria' courtesy of Mr. Barry Knott.

Photo 'Autumnale' courtesy of Mr. Derek Luther.

Photos 'Sunray' and 'Janice Perry' courtesy of Mr. John Nicholass.



'Anna Silveria'



'Sunray'



'Autumnale'



'Janice Perry'



'Janice Perry'

The Year of the Terror Bumblebee.

In China, 2020 is the year of the rat. This means, according to tradition, that our efforts will be rewarded and seen. Well, in my garden nature seems to have a different opinion about that! It feels more like we're celebrating The Year of the Terror Bumblebee. Of course, Nature eats: the blackbird is eating my holly berries, the ringdove the berries of my *Amelanchier lamarckii*, slugs and snails are eating my hostas, the wasps eat my pears and the sparrows demolish my bamboo shoots. But please, bumblebees, why destroying my precious fuchsias? The answer is known, of course: they are looking for nectar. Last year, I was still optimistic that only white tubular triphyllas were destroyed. Now the bumblebees have expanded their working area to all other kinds of triphyllas, as long as these have available the sweet nectar, which can only be reached by demolishing the bloom. The bumblebees scrape, poke and drill until the nectar source is reached, thereby destroying dozens of fuchsia blooms within a couple of minutes.



F. triphylla PB 7760#7
demolished by bumblebees.

But it could be worse. I have been lucky. Someone else chose to feed the deer with fuchsias, so let's keep it that way!

Photograph by Marijn de Cooker

Contents of the next issue

The next issue is scheduled for the end of December 2020.

SPORTING TYPES (by Edwin Goulding)

In our first article we examined some of the processes involved in creating variegated foliage. In this article we will discuss spontaneous changes that can happen in flowers.

Making bi-colour triphylla fuchsias.

(by Mario de Cooker).

In part II of the article focus will be on making white/pink and white/purple triphyllas. White/pink proves to be rather easy, white/purple will most probably be more difficult.

Want to learn more about all this? Then stay connected!

Your contribution to the **The Fuchsia Breeders Initiative** is highly appreciated. Contributions for the next issue should be made available at the latest on 15 December 2020.

The Fuchsia Breeders Initiative

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