The Fuchsia Breeders Initiative

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Contents of this issue:

Temperatures have been super this year!



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

polytunnel

Please send your contribution in Word, with the photographs attached separately. Large contributions can be transferred by uploading the file by e.g. 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 Purcellian Grace' (De Cooker, 2020) Temperatures have been super this year. Of course it depends on how you look at it. In the South of The Netherlands we have suffered from three heat waves, including a 'super heat wave' at the end of July. All-time records have been broken by temperatures reaching values over 40 °C. Nevertheless, various fuchsias had still excellent performance, amongst which the fantastic oldies 'Checkerboard' and 'Celia Smedley'. From each I have a large standard, both about 30 years of age. For a large part of the day they are in full sun, and they have been so also during the heat waves. They have flowered for about four months, only losing a small part of their flower buds at the highest temperatures. Great Job!

It has been a difficult season for testing new fuchsias. Several had excellent performance, others have severely underperformed. Making a correct judgement about unsatisfying growth and flowering is hardly possible as it could be caused by the extreme weather conditions. Therefore, many new seedlings (amongst which the new purple triphyllas) need some additional rounds of testing before a decision about their release can be made.

The announced article on making new purple triphyllas (part 3) has been postponed till next year. Many new seedlings will flower for the first time in 2020. New development could be the creation of winter hardy purple triphyllas, but this needs several more years for being further explored.

In 'Let's Face It' Mr. Edwin Goulding pays attention this time to an interesting fuchsia niche market: the upward facing cultivars. Indeed, a commercially very interesting niche as



Editor of The Fuchsia Breeders Initiative

Mario de Cooker

is shown by the Dutch company 'Hendriks Young Plants' who have in recent years successfully developed their own proprietary Bella® line of floriferous, compact and often upward facing fuchsias.



High temperatures have been also no problem for upward facing cultivar *F*. 'Johannes Jan'

And finally, are we at the edge of a thrilling breakthrough in the coming years? Mr. Henk Waldenmaier's article on doubling the number of chromosomes of *F. procumbens* might suggest so!

I wish you and your family a Very Merry Christmas and all the best and happiness for the New Year 2020!

Mario de Corher.

Let's Face It

By Edwin Goulding

Photographs by Edwin Goulding

Introduction

Markets vary from place to place. In Japan, for example, there could be an emphasis on visitors paying to see Fuchsia displays rather than generating revenue by plant sales. In South Africa sales may be predominantly from growing large plants and hanging baskets, both in full flower. In the United Kingdom and much of northern Europe turnover is mainly in wholesale quantities of rooted cuttings. Elsewhere, especially through auction houses, substantial niches exist for cellophane-sleeved plants in pots just coming into flower; most of the time we, as hybridists, remain blissfully unaware of such things. Nevertheless, millions of Fuchsias are sold annually across the world. Hybridists need to think about the market niches their plants will fill if public success is to be a remote possibility. Competition is not as many seem to think mainly between one Fuchsia and another but between this genus and its rivals from many others.

Upward facing

Upward and outward blooming plants are not new to gardeners. Chrysanthemum spray plants are often sold in cellophane sleeves as they start to flower. Around Christmas-time Poinsettias are frequently presented in this way so that they look rather more sophisticated and impressive in order to add value. Bedding plant sales have declined in recent years due to modern houses having much smaller gardens. However, winter flowering pansies have become the supreme example in recent years of "happy upwardlooking" plants. Gardens might be smaller than before but containers can frequently compensate by giving large and effective splashes of colour at strategic focal points like patios and doorways. Some Fuchsias can display their blooms in this way. They do not all have pendant blooms "like ladies earrings".

Specialist Fuchsia nursery outlets have declined severely in number and importance over the last twen-

ty years. Their heating and labour costs have risen steeply just as the general public is chasing prices downwards due to financial pressures. Garden centres are nowadays much more familiar to the majority of young British gardeners even if they usually carry more furniture and sundries than plants of any kind. Choice in plants has been reducing steadily.

There are advantages attached to growing upright plants. Unlike trailing ones, they take up less space on production benches and marketing displays. This first applies as cuttings because the majority of Fuchsias are propagated vegetatively with material taken from mother plants. These are often grown in countries totally different from those of the sales outlets. Nowadays unrooted cuttings can be swiftly and cheaply airfreighted from one country to another. Seasons can be more amenable to outdoor growing all the year round in Portugal, for example, and are earlier than countries like those in northern Europe. Labour and heating costs are less and regulations less strict.

The angle of branching can be critical in increasing turnover and profitability for every square meter of greenhouse space used in the production of plants. This factor assumes a great significance if Fuchsias are grown to be sleeved and sold by the thousands on wholesale markets of the world like those in Aalsmeer. Trays and trolleys are able to carry more stock and transport becomes more economic. The majority of today's Fuchsia hybrids produce new growth at about 45° to their main stems. Those required to fill the upwards and outward niche, either as cuttings or as plants in heavy bud need a much more acute angle. What to breeders might seem of little importance can assume a huge significance in the profitability of a massive commercial concern. Appearance, space and costs impact cellophane sleeve growing and marketing more than other factors. Hybridists should be aware of such things if they want their "babies" to succeed in this hard competitive world.

Branch angles

The ideal angle of 30° has already been hinted at. Other aspects of upward and outward flowering cultivars that are of immense importance include internodal length and branch strength. Long, thin and whippy stems produce poor plants for this purpose. A reasonable degree of self-branching is also required if plants are to prove ideal. Nipping, as practiced with show plants, is commercially impracticable and uneconomic; a bad idea. The right habit of growth makes so much difference. Examples are F. arborescens and F. 'Trientje'.

Flower presentation

There are other examples of *Fuchsia* species with upward pointing flowers. Perhaps the most noticeable one of these is found in *Section Procumbentes*.



F. procumbens



F. arborescens



(F. 'Lechlade Chinaman' x
F. splendens) x F. 'Straat Magelhaen' (De Boer, unreleased seedling)



F. 'Trientje' (Bögemann, 1992)

Fuchsia procumbens comes from New Zealand where it spreads across the ground; is scandent. Its flowers when mature carry bright blue pollen. These and its goblets of nectar attract birds and flies both visually and nutritionally to act as pollinators. Fertilisation in the wild depends on such things; flowering plants must "sell themselves".

Of vital importance to successful sleeving is that flowers are held on quite short and sturdy pedicels. How often we see new introductions that hide their beauty by dropping their flowers within their abundant foliage. Pedicels are frequently long and weak. In the case of this month's niche, strength and beauty together make for success. Hybridising experiments with *F. procumbens* s have shown that hanging branches, even with blooms facing outwards or upwards, make sleeving undesirable if not completely impossible.

Examples

Some examples of upward and outward flowering cultivars with reasonably sized flowers have been around for many years. Invariably their failure to fill the sleeved niche has been due to inadequate vigour and usually to insufficient self-branching. A few of these early hybrids did offer enough foliage but had insufficient or imperfect blooming. Perfection is hard to achieve but it is essential in today's competitive world markets. For example, failure to produce enough growth restricts the number of cuttings produced on each mother plant. This disproportionately raises costs in relation to profitability. Too much foliage can negate any beauty that flowers may have.

Fuchsia 'Bon Accord' is a good example of a plant with both inadequate growth and self-branching. On the other hand F. 'Pink Bon Accord' has better growth and more freely produced side shoots but these tend to hide the flowers from view, a fatal flaw. Neither is adequate for today's mass markets.

Fuchsia 'Estelle Marie' lacks symmetrical side shoot production but carries its bowl-shaped blooms in large numbers near the periphery of each branch; is multi-flowering as described in TFBI, Issue 10, December 2017, pp 2-6. Fuchsia 'Look East' carries larger saucer shaped flowers near each branch end but it lacks vigorous enough growth and side shoots; it is not easy to propagate or to finish as a saleable product in bloom.



F. 'Bon Accord' (Crousse, 1861)



E 'Pink Bon Accord' (Thorne, 1959)



E 'Estelle Marie' (Newton, 1973)



E 'Look East' (Heavens, 1987)

A curious feature of the upward and outward flowering Fuchsias is that the best and most symmetrical ones at present carry flowers that are cup- or tulip-shaped rather than having widely spreading corollas. Of course, we can see that species in the wild might be handicapped if their blooms were rained on. At its best this would increase the possibility of self-fertilisation. At its worst rotting and fungal disorders might increase and damage whole plants. So far the best upward and outward pointing flowers are to be found in hybrids that have semi-closed blooms.

During annual surveys carried out in Norfolk, England, over a three year period, F. 'WALZ Jubelteen' was consistently rated the number one favourite by the general public out of every fuchsia ever displayed there. Some of the attraction seemed to rest on its upward pointing blooms and their subtle hues and yet more on its versatility. Flowering plants of this cultivar requiring fork lift trucks to move their palleted weight have been grown. Fully bloomed specimens have also been produced in 10cm pots. Its principal failing where sleeving is concerned is the spikey nature of each flowering stem.

Supplementary lines.

Other avenues have been explored occasionally, notably among the triphylla hybrids. Most experiments showed developments that had not been the main aim of the hybridist concerned. For this reason alone such alterations in appearance seem to have been limited in number and in impact. Sometimes, as with *F.* 'Timothy Titus' hybrids are diminutive in stature and, as in this instance, carry their racemose blooms unevenly around and above the plant's periphery



F. 'Linda Goulding' (Gouldings Fuchsias, 1981)



E 'Tom Knights'
(Gouldings Fuchsias, 1983)



F. 'Knight Errant' (Gubler, 1985)



F. 'WALZ Jubelteen' (Waldenmaier, 1990)

Triphylla hybrids might not seem to be the ideal shape for flowers facing the sky. Nonetheless, the second of our next two pictures shows just how perfectly they can fill this role. The main drawback with marketing plants like *F*. 'Sparky' comes from the very dark colours in both flowers and foliage. The overall impact looks muted so that plants themselves can look almost indecisive; such qualities are extremely difficult to define but are certainly reflected in sales turnovers.

Paniculates offer quantity rather than individual size in the flowers they produce. The fact is that for the general public they look rather more reminiscent of plants like mimosa or buddleia than Fuchsias as they have come to know them. There is a gap between awareness and appreciation when it comes to purchasing things with such mixed associations. Nevertheless, flowers are now being produced in greater numbers and in an expanding range of



E 'Wapenveld's Bloei' (Kamphuis, 1991)



F. 'Timothy Titus' (Gouldings Fuchsias, 1998)



E 'Straat Final' (De Boer, 2017)

colours. So far, as with the triphyllas, no bi-colours have appeared on the market but this should only be a matter of time. Strength of



E 'Sparky' (Webb, 1994)

flowering panicles and their supporting branches has sometimes been a problem in the past but this feature is improving steadily. At the moment it seems as if the enormous vigour and perhaps the very large size of recent introductions like *F*. 'Straat Final' are the greatest hindrance to their success in the sleeved pot-plant market.

The best so far for sleeving.

Perhaps it is true to say that at the moment no cultivar lends itself perfectly to this system of marketing. Sales are certainly inhibited overall by a lack of choice. The two plants that currently appear to fit the niche best are *F*. 'Rose Fantasia' and *F*. 'Pink Fantasia'. They are of neat appearance and moderate size. Their angle of branching is acute enough to allow close packing without damage to foliage or flowers. Flowers are carried

evenly over their peripheries and there is no requirement for nipping; blooms appear predictably and in a relatively short time compared with many other cultivars. They are both long day-length plants. Interestingly, the parents of F. 'Pink Fantasia' are said to be F. 'Estelle Marie' \mathcal{P} and F. 'Linda Goulding' \mathcal{T} both of which have been illustrated and discussed earlier in this article. *Fuchsia* 'Rose Fantasia' appears to be a sport that was found on F. 'Pink Fantasia'.

Conclusion

Recently an article in TFBI dealt with *F. lycioides* that was restricted to a single narrow slice of land and to a single pollinating bird species; some niche. Subsequently a further article dealt with the cluster of species found in *Section Hemsleyella* each inhabiting its own isolated niche in the Andes. A different form of niche is the focus of this month's article; marketing sleeved plants; their distribution and sales.

To be truthful the majority of hybridists know little about fuchsia sales. Their focus is on providing something beautiful, hopefully original and better than those already in existence that other people will like. Very few specialist nurseries monitor the exact amounts of each cultivar propagated and sold every season. There is little published evidence as to which plants the public prefer.

One facet of note is the flower colour or colours. Pastel shades like lavender blue and pink are always popular. White also appeals, as does orange. In general, bi-coloured blooms are slightly more popular than self-coloured ones. It is also true that sales are always restricted to those available. Wholesale choices are extremely limited, in part so that different cultivars produce similarly sized and







E 'Pink Fantasia' (Webb, 1988)

shaped cuttings or plants in bloom.

The neglect of any real interest in what markets might require usually means a gradually reducing output. Ground is lost to alternative and more appealing genera. It remains true that opinions are cheap, but that money talks; the market place rules. In the quest for new seedlings it is a wise hybridist that can predict what the public will like and pay for. This can vary radically from one location to another even within a single country. Yet, anything less is doomed to failure especially in the world's sleeved pot plant marketing niche.

What we call "the market" is in reality a whole collection of niche markets. Customers wishing to purchase plants for hanging baskets are unlikely to want stiffly upright plants. Those seeking garden hardies don't want to buy Fuchsias that succumb to winter frosts. Skilled producers know such things and target specific market needs. Sometimes new markets are created when an outstanding breakthrough in plant breeding becomes available. Hybridists would be wise to know what has already been created, what suppliers will produce and what buyers will pay good money to purchase. Then, their progeny stand a reasonable chance of living long and happy

SUCCESSFUL PLANTS FULFIL A DEFINED PURPOSE AND FILL A DISTINCT NEED

New Fuchsias from Hans van Aspert (NL)

Photographs by Hans van Aspert





'Jaspers Purple Pipes'

Fuchsia 'Jaspers Purple
Pipes' (Van Aspert, 2019)
originates from the crossing
('Gruss aus dem Bodethal' x
'Rohees Alrami') x 'Stad
Elburg'.

Best grown as a semitrailing bush or pillar. Tolerates some sun, but at high temperatures it prefers to be grown in dappled shade.

'Jaspers Purple Pipes'





'Jaspers Indestructible'

Fuchsia 'Jaspers Indestructible' (Van Aspert, 2019) originates from the crossing 'Papy René' x 'Papy René'.

It can be grown in full sun (tested for several years), even at extremely high temperatures of over 35 °C as we have experienced this summer. Because of this valuable trait it has obviously obtained its name. Furthermore, it has good winter hardiness up to at least -8°C.

'Jaspers Indestructible'





'Jaspers Big Boy'

Fuchsia 'Jaspers Big Boy' (Van Aspert, 2019) originates from the crossing *F. boliviana* 'Alba' x unknown.

Best grown as a bush in filtered light. Its name has been derived from its leaves, which often grow to a size of over 30 cm. Unlike *F. boliviana* 'Alba', the leaves of *F. boliviana* 'Big Boy' have only little tendency for yellowing.

'Jaspers Big Boy'





One of Hans van Aspert's previous successes: triphylla 'Janske Vermeulen' (2006)

Developing a yellow fuchsia

By Henk Waldenmaier

Photographs by Henk Waldenmaier

Introduction

One possible lead to get a yellow/green coloured fuchsia hybrid is the F1-cross between *F. splendens* (green sepals and corolla) and *F. procumbens* (yellow tube). In the F2-generation (selfing of F1) the possibility of the combination yellow/green in both tube, sepal and petals follows the laws of Mendel.

The F1-cross has been made in the past by fuchsia hybridist John Wright, resulting in the hybrid 'Lechlade Chinaman'.

Both parents are diploid specimens, resulting in a diploid F1. The parents stem from different not closely related *Fuchsia* sections, which is the main reason why 'Lechlade Chinaman' is not fertile (at least when crossed with itself). In fact, there is only one successful cross known: 'Lechlade Chinaman' x *F. splendens*, made by Dutch hybridist Jan de Boer for creating the cultivars 'Straat Cook' and 'Jasper Marnix'.

Overcoming infertility

The problem of infertility may be overcome by using tetraploid starting material.

Fuchsia splendens

In the past Dutch fuchsia enthusiast and *Fuchsia* species grower Mr. Gerard Rosema produced a polyploid *F. splendens* using colchicine and/or oryzalin. The phenotype of this plant gave reasonable doubt if it was really a true tetraploid specimen. Reason to check the ploidy by flowcytometry. This was done at ILVO (Belgium) ⁽¹⁾, with as the result the seedling having unfortunately mixed ploidy (diploid 2C nuclear DNA content =3.13 pg and corresponding tetraploid of twice this value), some branches being even fully diploid. A need for a true tetraploid *F. splendens* therefore remains, but until then we will have to do with the mixed ploidy *F. splendens* for making the intended crossings.

Fuchsia procumbens

Mr. Gerard Rosema has produced a polyploid *F. procumbens* as well by using colchicine/oryzalin for obtaining the chromosome doubling. The phenotype of this seedling was in agreement with a tetraploid specimen. Unfortunately, the seedling



'Lechlade Chinaman' (Wright, 1983)

Terminology in plant breeding: the F1 and F2 generations.

The F1 generation in plant breeding (as well as in breeding in general) refers to the first set of offspring produced by a set of parents (the parental generation P). The F in F1 stands for 'filial.' So in short, F1 means 'first filial generation'.

The F1 generation can reproduce to create the F2 generation, and so forth.

was infertile, both as the male and female parent. This necessitates the creation of a new pure tetraploid *F. procumbens* using colchicine/oryzalin.

Creation of a tetraploid F. procumbens

Starting material

The species *F. procumbens* has quite a lot of variations. This concerns among others the intensity of flower color, flower size, branch thickness and also fertility. The plants in my possession produced some berries, but the seeds did not germinate. From Mr. Jan de Boer via Mr. Mario de Cooker I have obtained a very fertile diploid *F. procumbens* plant as well as a couple of berries. For this plant, by flow cytometry a 2C nuclear DNA content of 1.36 pg was measured.

Seeds were sown directly in the winter season by Mr. De Cooker under fluorescent lighting and in early spring by myself. Together we have grown several hundreds of seedlings.

Procedure

After transplanting, the young seedlings were grown until the first true leaves were visible (many of the seedlings already had more than 2 leaves; in that case also offshoot was treated). After putting a piece of cotton wool on the leaves, a mix of colchicine (0.05%) and oryzalin (0.003%) drops was put onto the wool and the plants were placed in a moist environment. This was repeated three times a day during 2 days (6 treatments in total). After these treatments the plants were rinsed with water.



Phenotypic criteria for first selection: see the large and thick leaves and stems.



Treated *F. procumbens* seedlings (early June 2019)

Subsequently, the seedlings were grown for about another month.

The majority of deaths (about 50% as a result of the near lethal dose of colchicine/oryzalin) occurred during this period. The remainder was potted in 9x9 cm pots and were numbered. In total 134 seedlings were potted (see photo above).

Results

From the 134 potted seedlings 38 died after potting, and 11 did not flower yet, leaving 65 seedlings with possible doubling of the number of chromosomes.

These 65 seedlings were classified using a number of criteria:

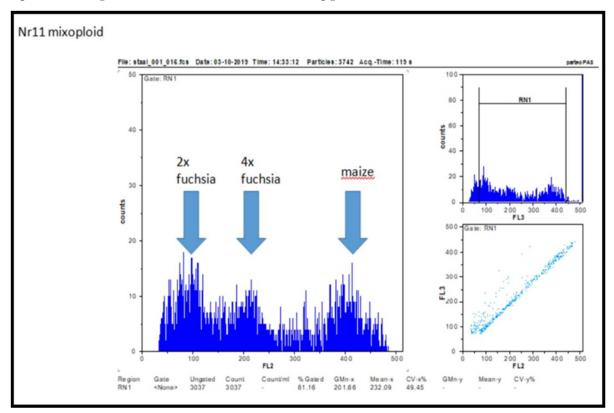
- phenotype
 - . large leaves
 - . thick leaves
 - . thick stems
 - . large flowers
- microscopical examination
 - . presence of pollen
 - . cell size and stomata size
 - . number of pores and size of pollen
- flowcytometry (ILVO, Belgium)
- . seedlings for this examination were selected based on the criteria as mentioned above.

Table 1: Overview of *F. procumbens* treatment results

Microscopical examination		Number	Flowcytometry
No pollen, rudimentary anther		20	-
Diploid: 100% two pores, pollen of normal size	а	51	-
100% two pores, 50% of the pollen is large and round instead of elliptical		10	1 x 44, 3 x 22+44, 6 x 22 b
25% three pores, 25% two pores, pollen large + round, 50% two pores, pollen of normal size	С	4	2 x 44, 1 x 22+44 d 1 x no flowcytometry

Legends

- a Some of the seedlings have very fertile pollen, some have low pollen fertility.
- \mathbf{b} The number of mixed polyploids (22 + 44) increases when the number of leaves during treatment is greater than the first two.
- **c** One seedling was microscopically examined after flow cytometry had already been finished; 50% two pores large round pollen, 50% three pore pollen, some pollen with four pores; presumably tetraploid seedling. To be examined next year by flow cytometry.
- **d** Tetraploid seedlings: 2C nuclear DNA content =2.81 pg.



Example of flow cytometry histogram of a mixed polyploid seedling.

Conclusion

At least three, but most probably four tetraploid *F. procumbens* seedlings have been obtained by colchicine/oryzalin treatment. To be sure of getting rid of possible small amounts of diploid cells still present in these tetraploid seedlings, another cross (tetraploid seedling x self) has to be carried out. In the meantime the present ones may be used for performing crossing experiments.



Notes

- Flow cytometry measurements on PI stained nuclei have been carried out by Mrs. Dr. ir Leen Leus from ILVO, the Belgian Institute for Agricultural and Fisheries Research, Caritasstraat 21, 9090 Melle (Belgium), www.ilvo.vlaanderen.be.
 - Because of the relatively small *F. procumbens* genome size, *Zea mays* (2C nuclear DNA content =3.13 pg) was used as the (suboptimal) internal standard for these measurements.
- 2. See The Fuchsia Breeders Initiative, Issue 5 (July 2015), p. 7-9 for information on Flow Cytometry and 2C DNA value.

Tetraploid (left) and diploid (right) flowers of *F. procumbens*.



Diploid (upper) and tetraploid (lower) flower of *F. procumbens*.

New Fuchsias from Mario de Cooker (NL)

Photographs by Mario de Cooker



Pictures have been taken on 15 July 201

Fuchsia 'Purcellian Grace'

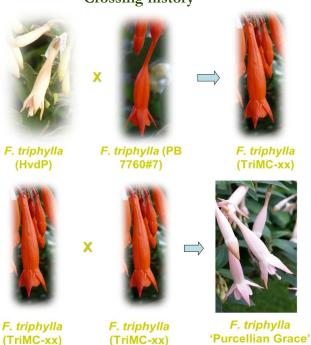
Fuchsia triphylla 'Purcellian Grace' (De Cooker, 2020) originates from the crossing (F. triphylla 'HvdP' x F. triphylla 'PB7760 #7) x self. It stems from the same series of crossings in 2013 from which F. triphylla 'Purcellian Elegancy' (De Cooker, 2016) also originated (for the crossing see pictures below). Although not being a true species, it still has the original F. triphylla species genome with a measured 2C nuclear DNA content = 4.05 pg.

It has been tested now for six years. Differentiation from 'Purcellian Elegancy' consists primarily of somewhat differently shaped flowers and foliage and superior winter hardiness.

'Purcellian Grace' is able producing flowers all year round, depending on time of pinching and growth temperature. It has excellent fertility both as the male and female parent.

It tolerates sun and high temperatures, but prefers filtered light during part of the day. It can be grown as a bush, a small standard or bonsai fuchsia.

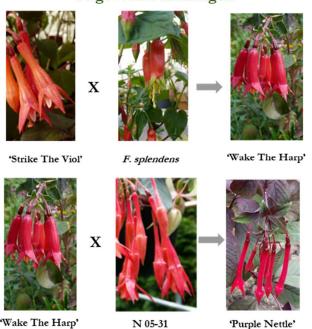
Crossing history







Uitgevoerde kruisingen



Fuchsia 'Purple Nettle'

Triphylla Fuchsia 'Purple Nettle' (De Cooker, 2020) has a long red tube and an orange corolla. From the crossing in 2010 'Strike The Viol' x F. splendens (as part of the 'Göttingen' x 'Our Ted' series) the cultivar 'Wake The Harp' has been obtained. The follow-up crossing 'Wake The Harp' x seedling N 05-31 has produced seedling N 11-34 in 2011. This seedling has attractive, nettle-like foliage, exhibiting a dark purple colour at the upper side of the leaves also during a large part of the summer season. The colour of the (slightly twisted) tube has been inherited from F. splendens and contrasts beautifully with the purple foliage.

Seedling N 11-34 will be released in 2020 as *Fuchsia* 'Purple Nettle'. At the extreme temperature conditions of the 2019 summer season it had excellent performance, even if grown at a sunny spot during part of the day.

It can best be grown as a bush fuchsia, preferably at least 3 cuttings in a pot. Overwintering in the cold greenhouse does not cause any problems.





F. 'Claire Marie McManus' raised from an unpinched autumn cutting



F. 'Claire Marie McManus' grown as an unpinched three year old standard

Fuchsia 'Claire Marie McManus'

Triphylla *Fuchsia* 'Claire Marie McManus' (De Cooker, 2020) originates from the crossing N 02-16 (= 'Göttingen' x 'Our Ted') x *F. fulgens* 'Grandiflora'. It stems from the same series of crossings in 2014 from which the mini-triphyllas 'Silence Is Golden' and 'Skyward Dwarf' also originated.

Fuchsia 'Claire Marie McManus' has been named after British fuchsia enthusiast Mr. Keith McManus' youngest daughter, who sadly passed away in 2002 only a few months after Keith also lost his wife.

Fuchsia 'Claire Marie McManus' is a healthy, strong cultivar with interesting dark green foliage and a wealth of pink triphylla flowers all summer through. It tolerates sun and high temperatures, but prefers filtered light during part of the day. It can best be grown as a bush fuchsia or (although not being a real minitriphylla) relatively small standard.

If left unpinched after proper shaping of the plant for a couple of years, it will flower from early June till the end of the season with large racemes. Overwintering in the cold greenhouse does not cause any problems.



X

F. fulgens

'Claire Marie
Grandiflora'

McManus'







Fuchsia 'Hard And Crispy'

Triphylla *Fuchsia* **'Hard And Crispy'** (De Cooker, 2020) originates from the 2013 crossing N 02-14 x N 05-31 = ('Göttingen' x 'Our Ted') x (('Göttingen' x 'Our Ted')).

This cultivar takes its name from its thick and hard, dark green leaves and crispy flowers. Its rather unusual appearance could be caused by having a hexaploid (and possibly aneuploid?) genome.

Its value is primarily in its attractive foliage which mixes well with other fuchsia types. Flowering is late, often only from September onwards. If left unpinched, also at the end of July/early August flowers will be produced.

Fuchsia 'Hard and Crispy' is a strong healthy plant which tolerates high temperatures and sun, but prefers to be grown in filtered light during part of the day. It can best be grown as a bush fuchsia, preferably unpinched from autumn cuttings if flowers are required by August.

It can be overwintered in the cold greenhouse without any problems.

Crossing history





Fuchsia 'Fancy Dress'

Bicolour triphylla *Fuchsia* 'Fancy Dress' (De Cooker, 2020) originates from the crossing in 2013 'Pangea' x 'Purcellian Grace'.

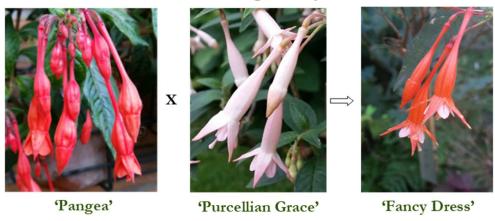
It can be grown as a bush or a relatively small standard. Its bicolour blooms have a bright orange tube and pale pink corolla. The clear stripe on the corolla adds to its attractiveness.

Flowers are produced all summer through. It tolerates sun and high temperatures, and even during this year's severe heat waves it had excellent performance. Overwintering in the cold greenhouse does not cause any problems.





Crossing history





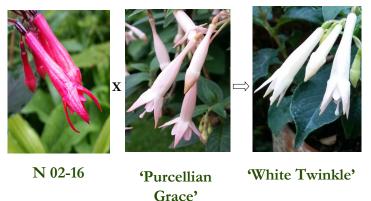
Fuchsia 'White Twinkle'

Triphylla *Fuchsia* 'White Twinkle' (De Cooker, 2020) originates from the crossing N 02-16 (='Göttingen' x 'Our Ted') x 'Purcellian Grace'. It has small, near pure white triphylla blooms and dark green foliage.

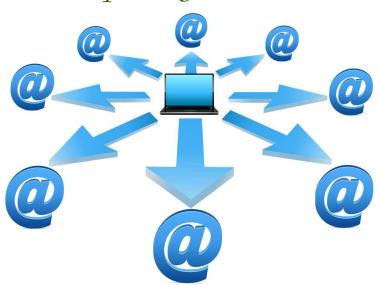
'White Twinkle' is a compact, real dwarf fuchsia. It's a slow grower and because of its exceptionally small size at least three cuttings are required for filling even a small pot.

Flowers are produced all summer through. It tolerates sun and high temperatures, but it prefers to be grown in filtered light. Overwintering in the cold greenhouse does not cause any problems.

Crossing history



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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.

Testing triphyllas in the polytunnel.

During this year's heatwaves, many of the new triphyllas have been grown in the polytunnel, which is made of green plastic for providing some shelter from direct sunlight. Temperatures in the polytunnel have been well above 40 °C. Large differences are observed as regards heat tolerance of different seedlings. Some flowers are hardly affected, or have not been damaged at all, while others have severely suffered. Let's hope such conditions will not be a recurring part of the test in the coming years. On the other hand, it has provided a unique opportunity for finding behavioral differences between different seedlings at extreme temperatures.



Contents of the next issue

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

Striking Gold (by Edwin Goulding)
In our next article we will examine foliage sports. Spontaneous changes may be chimeric or appear in stages. Either way, they are rarely the result of carefully planned hybridising programmes. Observation and knowledge are the keys to using such significant developments.

Making bi-colour triphylla fuchsias. (by Mario de Cooker).

The number of bi-colour triphylla fuchsias is rather limited. Recent developments for making a range of new bi-colour triphyllas look promising. Examples of a couple of possible routes will be given.

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 July 2020.

The Fuchsia Breeders Initiative

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