## The Fuchsia Breeders Initiative

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Contributions for the next issue, which is scheduled for the end of July 2014, should be in the editor 's possession ultimately on 1 July 2014.

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

Photo on front page:
Triphylla type cultivar Fuchsia 'Wake The Harp' (De Cooker, 2013)


## It has been a peculiar fuchsia year

It has indeed been a rather peculiar fuchsia year. Speaking about The Netherlands: we had a long winter with a lot of frost. The spring has been the cold est in 50 years, delaying the development of many trees and garden plants, including our fuchsias, with several weeks or more.

In my own garden several fuchsias refused to set flow er until very late in the season. Some fuchsias even produced only few flow ers, especially several magellanic types. Whether the cold spring has to be blamed for this, or e.g. pest problems, is not really clear. From the UK a lot of damage by capsid bugs has been reported, hindering of course the flow ring of the fuchs ias. And also in several parts of The Netherlands, including my ow n garden, I have also observed a lot of plants harmed by capsid bugs this year.

And after the cold spring, a hot summer started, o ne of the best in several decades, how ever far from optimal for our fuchsias. And finally ... almost the wettest autumn season ever.

But let's not complain too much, and count our blessings!

Due to the long flow ering period in the cold spring I have never had so many and such ex-



Editor of The Fuchsia Breeders Initiative

Mario de Cooker
Great strideshave been made in the development of white triphyllas.
cellent walnuts. And due to the excellent summer I have never had so many, so big and such sw eet grapes.

And last but not least: 2013 has been a successful year for breeding new fuchsias, in particular for the development of new soft pink F. triphyllas. More of this on p. 12-13.

Also several interesting new fuchsias have been introduced in 2013. In particular Hans van Aspert's near white trip hylla hybrid Fuchsa 'Phileine' should be mentioned in this respect as a great step form ard.
Furthermore, in this issue a start will be made with an very informative series of artales on fuchsia pollen by Mr. Edw in Goulding.

Because of a lot of copy being available for this issue, the articles on germination of stored fuchsia seeds and the hardiness of F. hatschbachii have been postponed to next summer's issue. Advantage of the latter is, of course, that also the coming winter could provide some more valuable in formation.
I wish you all the best for 2014, and hope it will be an excellent year for you, your family and your fuchsias.


## New fuchsia from Burgi Klemm (A)



## Fuchsia 'Ferdinand Raimund'

Introduction 2013
Our new cultivar is a seedling from 2008, tested four years private and at a nursery too. The parents: female Edeltraud Glossner', male 'Tamerus Dream'.

The growth is upright and weeping, selfbranching and goes to a height of 2-3 feet, 60 to 90 cm . The foliage is medium size, mid green at the upper, lighter green on the lower surface.

The flower is large and double. The colour of the tube is whitew ith green veins. The sepals are light pink and in are in horizontal position. The colour of the corolla is a purple violet with red purpled and pink veins. The petaloides are
of identical colour.
'Ferdinand Raimund' likes overhead filtered light and a cool climate. It is good fuchsia for baskets or vats and window boxes. The flowers are heavy and big, they should be kept away from the ground.

Ferdinand Raimund, was an Austrian dramatist (1790 to 1836), who lived at Gutenstein at Low er Austria a lot of years. A summer theatre was started twenty years agow ith his name. In favour of the jubilee thestage-play "Der Verschw ender" ("The Spendthrift') was performed. At the theatre-start for this summer the young Isabella Gregor was the stage direction and was picket to give the new fuchsia her name.

## Previous introductions from Burgi Klemm



## Fuchsia 'Land Steiermark'

Introduction 2007, BFS 82
Created in 2003, parentage female 'Cliff's Own', male Delta's Parade'.

The growth is weeping upright, self branching $w$ ith a normal height of $1-3 \mathrm{Ft}(30-90 \mathrm{~cm})$, tested in eastern Austria at 700 m above sealevel over three years.
Flow ers are double, tubular light rosy-red, sepals light rosy-redw ith dark rosy veins, looking dow nw ith her recurred tips, some 25 mm long und 45 mm wide. Petaloids have the same col-
our as the corolla. The filaments are rose and extend 15 mm below the corollaw ith a light yellow stigma.

The foliage is mid green on the upper surface, lighter green on the low er surface.
'Land Steiemark' is a very early flowering hybrid and grows well in baskets, this plant likes filtered light.

During the 25 years celebrations of the society of AustrianFuchsia Friends, Land Steiermark' was named togetherw ith 8 other varieties after one of the nine Austrian federal states at an exhibition of fuchsias at Reichenau / Rax. The guest of honourw as Dr. Otto von Habsburg, the son of the last Austrian emperor.


## Fuchsia 'Prinz Eugen'

Introduction 2010, BFS 174
The cultivar 'Prinz Eugen' is a seedling of the year 2007, the parents are 'Alison E wart' female) and 'Paul Berry' (male). We tested the seedling for three years in Eastern Austria.

The hybrid grows upright lax, the type of flower is medium and single. The colour of the tube are red purple group 58 C , the petals red purple group 58B, position horizontal with recurved tips pointing upwards.
The colour of thecorolla is dark red (red purple group 59A), corolla shape half flared. The corolla changes colour as flower matures to red purple group 59 C .

The hybrids height is small by medium $30-90$ cm . The size of the lea ves is medium too, the
colour of upper surface green (group 137A), the lower surface green (group 137C). The leaveveins and the young twigs are red-brown und gives a good colour contrast.
'Prinz Eugen' suites as flower decoration of baskets or flower troughs and solo plant too.

Fucbsia 'Prinz Eugen' received the name at a garden and flower show at Schlosshof, a place near Vienna, where Prinz Eugen (1663-1736) stayed for years. He was a great commander-inchief of the old Austria, collector of plants and animals, holder of castles, and so on. The castle of Schlosshof and the large park became exhibited in 2010 with a flower show, an occasion to give a new fuchsia hybrid the name! So Schlosshof and his owner "come across" a Fuchsia, a plant, which was never able to meet them!

## On the fertility of fuchsia pollen

By Edwin Goulding

## Part I-a: Pollen preliminaries

It seems to me, as a hybridist, that descriptions of Fuchsia cultivars nearly always lack the most important details. This is especially obvious now that so much evidence is available on the Internet.

Of course, it is as true in the case of old introductions and many interspecific crosses. What become visible are obvious differences in the appearance of flowers. If they are singles, have they widely flared corollas? Alternatively, are they long tubed triphylla types with tiny petals?

F. lycioides

What we cannot know is, "Are these plants fertile"; and capable of reproducing some at least of their characteristics in the next generation. Can genetic material be made from a mixture of elements from two different Fuchsia parents?
The best hybridists seek to develop characteristics that they think are most desirable at the expense of other undesirable features. The current over-dependence on F.magellanica within hybridising programmes has led to serious problems.

Cultivars have become prone to Fuchsia rust in particular but also many other woes. Such weaknesses are seen
as drawbacks in plants grown by general gardeners. "Hybridists need to address both beauty and function in their work."

When I started breeding with the Genus, in the late 1970's, most of my w ork was based on trial and error. But, before any Fuchsia w as considered for introduction one golden rule was applied. 'Is it better and is it different?" If not, disposal was swift and non-negotiable. No true enthusiast will ask, " Isn't it beautiful?"
It soon became obvious to me that there were two ways of advancement, via seeds or via pollen. Crosses would sometimes succeed oneway but not the opposite way. Without technical aids I could not see if pollen was fertile. Trial and error were used.
It is easy to see if pods form as a result of fertilisation by hand. I can remember the year when 'Finn' succeeded in producing seedpods from everything placed on it. I found out much later that no berries had seeds. Time and effort had been (almost) wasted.

Producing seed from Fuchsias takes time and, as yet, I have found no way to shortcut the process of "trial and error". It is much easier if we improve our prospects by the certainty that all the male plants used produce, at least, partially fertile pollen. Time is foreshortened and success increased.

When I started trying to hybridise Triphyllas it took me two years before I found one that produced pollen. This, after all, was one of their main attractions. They were self-cleaning as

Mr. Edwin Goulding is a renowned British specialist in fuchsia hybridization. His former nursery 'Gouldings Fuchsias' has introduced many beautiful ownbred triphylla hybrid fuchsias, for example the famous near white triphylla hybrid Fuchsia 'Our Ted'.

This article is the first in a series of three on the fertility of fuchsia pollen. The next artides will be published in the 2014 July and December issues, respectively.
well as more heat and drought tolerant than other types. (Remember the greenhouse effect?) They also appeared less troubled by pests and diseases.
The exact naming of this one Fuchsia was of less concern than the fact that it worked as a parent in practice. Later, Reinholt Leuthardt confirmed my theory (based on practical results) that the plant I called "Thalia", was really Bonstedt's 'Koralle'.
In those early years I attempted about a thousand crosses each year. About $10 \%$ of these produced fertile seeds. Around a thousand seedlings were raised annually and between ten and thirty survived beyond their first year.

Perhaps, at this stage, it should be mentioned that fertility in a Fuchsia does not produce identical results when a plant like "Koralle" is used as a pollinator and as a seed parent, even though crossed with the same partner. In general terms, 'Pollen produces different results".

Now adays, my own pollen testing reduces effort and increases success ratios for me, thank goodness.

## Part I-b: Presenting pollen

Recent television programmes shown in the United Kingdom by Professor Brian Cox have been of immense interest.
Although a Physicist, he pointed out the importance of scientific methodology in learning. He named some of the scientists with the greatest minds and described their groundbreaking works.

These scientists often appeared to be obsessive about the subjects that interested them. The quantity and quality of their questioning played significant parts in their success.

have heard it said "You can have too much of Fuchsias". In reality, for all true enthusiasts, 'You can have too little of Fuchsias".
For the scientific mind, research in every field associated with the Genus Fuchsia is both exciting and challenging. Evidence can be based on verifiable and repeatable experiences.
Studying pollen adds one extra, important dimension to hybridising. Pictures and text can help us to clarify this in international communications such as this.

Pollen is much more complex and fascinating than it may seem at first. These articles seek to explain its implications to Fuchsia hybridists.

## Equipment used

Pollen can usually be seen by anyone with reasonable eyesight. Magnifying glasses give more certainty. But, these articles describe microscopic examination as the preferred option.
The instrument I use is an old but very stable one. It allows photographic attachments to be used and the pictures taken to be of a good, clear, quality.
One eyepiece is removed when the subject has been clearly identified and is in focus. The camera with its attachment is dropped into the vacant eyepiece space.


A microscope
The pictures seen here have been taken using a Canon EOS 550D. An extension lead eliminates camera shake. Photographs can be taken and viewed on the computer before being saved. Film expense has been eliminated.


Microscope to camera adapter, removed eyepiece and extension lead.

It should be mentioned that the special microscope attachment takes the place of the normal camera lens.

Specimens are viewed at a magnification of $10 \times 10=100$. The microscope's own Tungsten light gives predictable results.

Glass slides, $1.0 / 1.2 \mathrm{~mm}$ thick, are used and these are frosted at one end to enable identity marks to be made using a graphite pencil. These show each specimen's details and don't wash off during staining.

## Materials required

Slides are prepared in advance with a central, thin, smear of Glycerine Jelly. There should be just enough for the Cover Glass area ( $22 \times 22 \mathrm{~mm}$ ). These cover glasses are $0.13 / 0.17 \mathrm{~mm}$ thick.

Lactophenol Cotton Blue is used to stain each specimen. Sterile distilled water is applied carefully to rinse extracellular stain away. A cover slip is then applied.

It is worth remarking here that I have used other stains but prefer the materials and methods suggested. Cotton blue seems to provide the best photographic results. That is always assuming I haven't forgotten to adjust the White Balance to allow for artificial lighting.

Clear and helpful advice, together with materials, were provided by the staff at Brunel Microscopes. This also took account of everything like costs. Preliminary research was time w ell spent. Their details can be found at www.brunelmicroscopes.co.uk

## Preparation of specimens

Pollen is placed carefully and thinly onto the glutinous surface of the Glycerine Jelly. A pipette is then used to cover the specimen with Lactophenol Cotton Blue.

Rinsing with Sterile Distilled Water washes off all the extracellular stain; special care needs to be taken at this stage. A cover slip is then placed over the stained specimen, to delay the drying-out process.
Place the slides, singly, onto the microscope stage. With the integral light on, a preliminary examination is made of the whole specimen, using small and regular scanning movements, like bacon slicing.

F. decidua

## Consider each specimen

First, establish the location of each specimen and scan the whole area of the cover slip to estimate how many pollen grains there are in total.

A general impression is all that is required at this initial stage. It allows
the eyes and the microscope to be adjusted and specimens to be brought into fine focus.


A seedling:
F. splendens $\times F$. decidua

The magnification described is adequate to scan whole fields Higher enlargements occasionally help in the examination of unusually interesting cells or details.

Pollen grains are examined to see how many apertures, or nodes, each has. These might be likened to the two ends of a lemon. Tubules grow
from these once fertilisation progresses.
Uniformity, or lack of it, in size and shape can also be assessed in general terms. Remember, exact measurements are not needed as we are looking at pollen not chromosomes.
Dense colouration within the cell membrane signifies fertility. Infertile grains look hollow, like pale balloons. Multi-layered cells are almost impossible to assess with any certainty.

Many pollen grains have viscin threads attached to their surface. This probably means that they come from bird-pollinated plants and appears to have no other significance. I remark on them only.

## Methods of recording

Several different methods can be used to build a useful database of pollen results. A few are described here. It is as important to record negative as positive fertility results. How many times have we heard about other peoples' successes only to realise that


Pollen from the seedling F. splendens $\times F$. decidua

> Note the three aperture grain and the presence of viscin threads. Note also some apparently bollow, sterile, cells.
failures were not recorded? How can we learn?
Simple samples are taken from one anther, on one plant, at one time. Several factors including Air Temperature and Relative Air Humidity play important roles in the quantity and quality of pollen.
Longitudinal samples are collected from the same fuchsia's flowers over an extended period of time, perhaps the whole flowering season. Variations in results will be common. Comparative samples can be collected from different plants, grow ing under different conditions and at different
locations
It is also worth considering other possibilities eg. whether the external four anthers give different results from those located deeper within each flower's tube. Many possibilities exist.

A moderate temperature combined with high air humidity helps to produce fertile pollen. A drying wind seriously inhibits this.

Fuchsias grown in grass and sheltered from full sun are likely to produce more fertile pollen than those grown indoors in either a greenhouse or tunnel.

Light, like many seasonal variations, plays an important part in flower and pollen production and in the setting of seed. Species from section Hemslesella bloom naturally during the darker months.
Computers provide us with the advantage of information that can be presented and studied in several different but complimentary ways. For the keen hybridist attention to every detail becomes both fascinating and rewarding. Recording our efforts and results helps to increase the possibility of hybridising success.
Part II and part III of this series will be published in the 2014 July and December issues, respectively.

## Fascinating video on the Fuchsia Gall Mite

Although in some areas progress seems to be made, the Fuchsia Gall Mite is still not under control.

The Fuchsia Gall Mite (Aculops fuchsiae) invaded Europe in 2003. Since then, it has gradually expanded its habitat.
On the BFS website it is mentioned: "During the later parts of 2012 there have been a lot more cases of Fuchsia Gall Mite recorded and so we all need to be far more vigilant than previously. They are still in the South and West and close to the coast - however this might not always be the case ". On the BFS website also a very informative leaflet (pdf file) on the Fuchsia Gall Mite can be found: http:/ /www.thebfs.org.uk/ textfiles/ fuchsia-gallmite.pdf
In EuroFuchsia's Annual meeting, it
was reported on the situation in France:
"The progression seems to be under control with the many operations we have advocated since many years." Great strides have been made: the fuchsia collection in the Arboretum of Chèvreloup seems to be clean now.

In Belgium a couple of isolated infections have been reported in 2012. In other European countries as yet no infections seem to have occurred. We have however to remain vigilant.

In the US, the Fuchsia Gall Mite is still a big problem in many areas. But there is also some beauty in it! From Mr. Doug Clark from San Francisco I have got some photos and a fascinating video, which can be found on the web at http://youtu.be/X51Rnhg58jo

Many thanks for that!
Furthermore, Mr. Clark received an email from an entomologist friend which says: "I spent the first 8 years of my time at UF at the Citrus Experiment Station working on the citrus rust mite, a tiny eriophiid mite, about $180 \mu \mathrm{~m}$ in length. I have not looked it up, but your mite on fuchsias looks like it belongs to the same family. The mite, Pylocoptruta oleivora, often falls victim to a fungal pathogen, Hirsutella thompsonii, that wipes out localized populations, but not before they cause russeting of the fruit surface, reducing grade and causing volume loss as well.".
Mr. Clark wonders if anyone is looking for a biological control for the Fuchsia Gall Mite.

There might be an opportunity!
More of Mr. Cark's photos and videos can be found on: http://www.p aedia.com/Im ageStudies.html


## The mystery of the blue F. triphylla: has it finally been solved?

By Mario de Cooker

Has there ever been a F. triphylla with a blue corolla?

This question arises when we look at the picture in the Encyclopédie
Méthodique (1782, by m. le chevalier de Lamarck), which shows on plate 282 a picture of a blue $F$. triphylla by De Seve (*). To our best knowledge, a F. triphylla with a blue corolla does not exist, and has most probably never existed. An explication of the blue corolla in the picture could be, that details of the original picture, which was draw $n$ up in black and white by Charles Plumier in Nova Plantarum Americanum Genera (1703), was colored by De Seve according to the then (in 1782) existing knowledge of Fuchsia magellanica and Fuchsia coccinea, which both have a more or less blue corolla. This explanation seems indeed very plausible.

However, another possible explanation showed up this year. In the summer of 2013, the Southern part of The Netherlands suffered from two heat waves with temperatures up to almost $36{ }^{\circ} \mathrm{C}$. At these high temperatures, the corollas of several F. triphylla seedlings were severely damaged by these high temperatures. (for further details of the

F. triphylla in the Encyclopédie Methodique

Has the mystery finally been solved?

Is this a plausible explanation for the picture of a $F$. triphyllawith a blue corolla in the Encyclopédie
Méthodique? We could of course still have real doubts, because by carefully looking at the photos it clearly shows that the blue color is caused by damage of the corolla due to the high temperatures. But..., suppose that such flower was found in the original habitat, dried and put into a herbarium? It
seedlings see page 13). Within a day, part of the corolla turned from orange into blue, also if the plants were sheltered from direct sunlight or positioned in shady conditions. This observation was confirmed later in the season during another period with high temperatures well above $30{ }^{\circ} \mathrm{C}$.

This discoloration of $F$. triphylla's corolla is not observed in the orange/red F. triphylla, used for breeding the F. triphylla seedlings. It is most probably caused by the mix of genotypes of the different $F$. triphyllas which were used for making the crossings. Among these was the pale pink seedling F. triphylla 'Herrenhausen-HvdP",

F. triphylla seedling with blue corolla
which evidently makes the progeny more su sceptible to heat damage. Note that also several other fuchsia cultivars show the same kind of behavior at high temperatures.
could very well be that it served as an example for drawing up a picture of $F$. triphylla with a blue corolla. Nevertheless, the first explanation still seems by far the most
plausible. But shall we ever know for sure?

Is it possible to make triphyllas with an orange tube and purple or violet petals?

Still, with today's knowledge: would it be really impossible to create a triphylla hybrid fuchsia with an orange tube and purple or violet petals? Seedlings originating from the crossing 'Göttingen' $x$ 'Our Ted' often exhibit an interesting violet/purple haze upon ageing. This is


Dried F. triphylla flowers with a clear blue corolla
clearly shown in Fuchsia 'Strike The Viol' (De Cooker, 2012) as can be seen on the photo. Also
several other triphylla seedlings originating from the same kind of crossings show this behavior, especially at the edges of the petals.
Anyway, an interesting subject for further exploration.

## And we have also man-

 aged to make blue and white Christmas trees, ...... don't we?
## Note

(*)The information and photo in the first part of this article was obtained from www. NKvF.nl. Use the Link_Gelderse Fuchsia info-site.


Fuchsia 'Strike The Viol'

## New fucbsias from Jobn Allsop (UK)



## Fuchsia 'Claire Simone'

Fuchsia 'Claire Simone' (J. Allsop, 2013) is a medium sized single flow ering variety. The tube is a green/w hite. Sepals are white with green tips. The Corolla is white with a pink tinge. A strong grow ing upright, and self branching. Very free flow ering. The seed parent is 'Julie's Gem and the pollen parent is an unnamed Seedling. Named after my Daughter
in law, who is a professional singer, this is her stage name.

On the editor's request, Mr. Allsop has sent some additional information on the naming of this fuch sia. To leam more:find Claire Simone on the web via bttp:// moms.play.fm/ recording/ ketch avibe7720120 21776399


## Fuchsia 'Ellie's Charm'

Fuchsia Ellie's Charm' (J. Allsop, 2013) is a medium size single. The tube is pink. The sepals are pink, lighter near the tube. The corolla is white, with a pink stripe near the tube. The petals have a three quarter flare when mature. It is profuse flow ering with a good shape. Parentage is, seed parent 'Julie's

## Fuchsia 'Phyll Hendy'

Fuchsia Phyll Hendy' (J. Allsop, 2013) is a medium single. The tube is white/green. The sepals are pink tipped green. The colour stays the same when mature. The corolla is pink/purple. A very strong grow er with profuse flow ering. Natural trailer. Parentage is, seed parent "London in Bloom" and pollen parent is "Elaines Gem". This is named after a local well know $n$ historian who lives is my village.

Gem" and the pollen parent is an unnamed seedling. Named after one of my Great Granddaughters.


Mr. Jobn Allsop, working on bis fuch sias.


## Fuchsia ‘Tia's Treasure’

Fuchsia 'Tia's treasure' (J. Allsop, 2013) is a smallish single. The tube is pink. The sepals are pink, tipped green. The corolla is violet blue, fused pink at the base. There are violet blue petaloids with pink infused. These mature to red/purple. A free flow ering trailing variety. The seed parent is "La Campanella"
and the pollen parent is "Grandad Fred". Named after one of my Great Granddaughters.

## In the spotlight: Fucbsia Jade's Gem'



Fuchsia 'Jade's Gem (J. Allsop, 1999) is a medium double fuchsia. The parentage is: seed parent 'Pink Jade', pollen parent 'Annabel'. The tube is pale pink veined red. The sepals are pale pink, fused dark rose, fading to white near the tube. The corolla is pale pink, veined dark rose. The colour does not change when mature. Petaloids are the same colour as the corolla. The foliage is dark green, complementing the bloom colour. It is a self branching natural trailer. Prefers overhead filtered light in a warm climate w ith best bloom

Fuchsias in the spotlight: older fuchsias, which have proven their value over the years, but deserve to be put in the picture once again.
colour In bright light and is heat tolerant If shaded. Tested 3 years in Walthamstow, London, England UK. Distinguished by: bloom colour, corolla/p etaloid shape, and profuse blooms. My first success in hybridising, it was named after my eldest Granddaughter. AFS number 4159.

## In the spotlight: Fuchsia ' Yohannes Jan'


F. 'Johannes Jan': the deeply furrowed stem after 2 decades of growth.

Photos: Mario de Cooker

Fuchsia 'Johannes Jan' (De Cooker, 1997, AFS nr 7648) is a single, upright grow ing fuchsia with horizontal to upright positioned flow ers. It is named after the breeder's father-in-law ( $\dagger 2007$ ), and is one of the few original seedlings that have survived the years after introduction. Grow th
is rather slow, which makes it suitable also for small gardens. Fuchsia 'Johannes Jan' is self branching and can be grow $n$ as a small bush or a standard. Parentage is (('La Campanella' x unknown) x 'Machu Picchu') x 'Bon Accorde'. Tube and sepals are white, the corolla has a pale blue/ purple colour.

F. Johamnes Jan', July 2013. Original seedling.

Flow ering is profusely. Its deeply furrow ed stem adds to its appeal.
'Johannes Jan' is moderately fertile, both as the male and female. Over the years, crossings have how ever never resulted in seedlings considered worthw hile for introduction.

## New fuchsias from Mario de Cooker (NL)



## Fuchsia ‘All Summer Beauty'

Fucbsia 'All Summer Beauty' (De Cooker, 2013) originates from the crossing 'Remembering Chire' $\mathrm{x}\{$ ('Checkerboand' x 'Machu Picchu) x ('Checkerboard' $x$ 'Machu Picchu') $\}$. It is a vigorous seedling from 2008, which cannot deny its ancestry. Fuchsia 'All Summer Beauty' is a trailing fuchsia, making long branches, and performs at best as an older plant, 3-5 plants in a basket. In the first year, proper shaping of the young phant is ratherdifficult, so some patience is required. Overwinteringdoes not cause any problems and regrowth starts early. Without pinching, flowering starts already early to mid June; pinching once or twice adds however to a better shaped plant. The cultivar's name is derived from the fact that it flowers incessantly all summer through. Heat and


Fuchsia 'All Summer Beauty' mid June 2011.
sun are not a problem. Best performance however if not exposed to direct sunlight for the whole day long. This fuchsia has never disappointed me, whatever the weather.

## Fuchsia 'Her Majesty's Crown'



Fuchsia ‘Her Majesty’s Crown' (De Cooker, 2013) is a triphylla type seedling from 2010, originating from the crossing \{('Göttingen' x 'Our Ted') x Unknown $\} \times$ tetraploid F. fulgens. From the flower it appears that the tetraploid $F$. fulgenshas a very pronounced influence on the phenotype of the progeny, which is often far less the case when using diploid $F$. fulgens as the pollen provider. 'Her Majesty's Crown' is a vigorous grower, with an excellent root system. The flowers are produced in many big racemes. They have a shining bright orange colour, almost luminous in the garden. 'Her Majesty's Crown' can be grown as a bush, a standard or as a semi-trailing fuchsia. It has excellent heat resistance, however at temperatures above 30 ${ }^{\circ} \mathrm{C}$ the foliage could be slightly damaged if exposed to direct sunlight. Overwintering is without any problems. The name 'Her Majesty's Crown' was inspired by the Diamond Jubilee of Queen Eliza-


beth II of the UK in 2012. Turned upside down, the petals and sepals make a clear crown.

## Fuchsia 'Wake The Harp'

Fucbsia 'Wake The Harp' (De Cooker, 2013) is a triphylb type seedling from 2008, originating from the crossing 'Strike The Viol' x tetraploid F. splendens. Its tube and sepals have a bright red colour, its corolla is orange. The flowers are produced in many big racemes. The dark green foliage is intermediate to the parents. It can be grown as a bush or a standard. Overwintering is without any problems. It is best grown in a somewhat sheltered position, in any case in filtered light at high temperatures during summer. The cultivarproduces no pollen, but it is moderately fertile as the female. The name 'Wake The Ha甲p' is -as the second in a row, following 'Strike The Viol'- based on a patt of


Henry Purcell, 1659-1695
the British composer Henty Purcell's music piece Come, ye sons of art, an ode, written in 1694 in honor of Queen Mary II of England's birthday.


## Fuchsia 'Jaspers Impossible'

Fuch sia 'Jaspers Impossible' (Van Aspert, 2013) originates from the crossing 'Göttingen' $x$ 'White King'. It is a semi-trailing fuchsia with 66 mm long pensile triphylla type flowers at the end of the branches. It can also be grown as a standard.

Colour of the tube and petals is pink, the sepals are very light pink. Foliage is green. The plant is self branching, but pinching once or tw ice w ill produce a better shaped plant. Best colour is
obtained when grown in sunny conditions, however the pot should then be shielded from direct sunlight. Overw intering does not cause any problems.It is how ever advised to keep some of the foliage on the young plants in the first w inter.

The plantwas named 'Jaspers Impossible' because even several experienced fuchsia breeders would not have guessed that such well-shaped triphylla type flow er could be derived from this crossing.


## Fuchsia 'Jaspers Lightning'

Fuchsia Jaspers Lightning' (Van Aspert, 2013) originates from the crossing 'Göttingen' $x$ 'Ting-a-Ling'. It is an upw and grow ing fuchsia w ith pensile, 40 mm long triphylla type flow ers, profusely flowering in big racemes.
Colour of the tube is white, sepals are white with a green tip, the corolla is light pink and foliage is green. 'Jaspers Lightning' is an easy to grow fuchsia, which can be shaped as a bush or
standard. The plant is self branching, but pinching once or twice will produce a better shape.
Best colour is obtained when grow n in sunny conditions, however the pot should then be shielded from direct sunlight. Overw intering does not cause any problems. It is however advised to keep some of the foliage on the young plants in the first winter.


## Fuchsia 'Jaspers Pink Pipes'

Fuchsia Jaspers Pink Pipes' (Van Aspert, 2013) originates from the crossing F.triphylla x 'White King'. The name of this fuchsia is derived from its pink floral tube. It is a semitrailing fuchsiaw ith 50 mm long flowers in big racemes.
Colour of the tube and sepals is pink , the corolla is dark pink. The foliage is green. 'Jaspers Pink Pipes' is an easy to grow, strong grow ing fuchsia. Best choice is grow ing it as a trailing fuchsia in a basket, although grow ing it as a
standard with trailing branches should also be possible.
Best colour is obtained when grow n in sunny conditions, however the pot should then be shielded from direct sunlight. Overw intering does not cause any problems. It is however advised to keep some of the foliage on the young plants in the first winter.

## In search of the white $F$. triphylla

By Mario de Cooker

## Part 1: a breaktbrough has finally been achieved.

A couple of years ago, fresh
F. triphylla seeds were obtained from Prof. Paul Berry. These seeds were sown by Mr. Gerard Rosema from the NKvF. Seedlings were distributed amongst the members of the NKvF's Botanical Group. Especially the seedlings $F$. triphylla 'PB7760\#6' and $F$. triphylla 'PB7760\#7' proved to be vigorous plants. They differ appreciably from the $F$. triphylla 'Herrenhausen' which was until recently the only $F$. triphylla available in the Netherlands for fuchsia hybridization.

At this time not many white or near white triphylla hybrids and no registered white F. triphylla exist. The first near white $F$. triphylla created was F. 'Challenge' (Reimann, 1983), most probably a selfing of $F$. triphylla. This fuchsia, however, does not exist anymore. A couple of years ago, a soft pink F. triphylla
'HvdP', a selfing of $F$. triphylla 'Herrenhausen' has been created by the Dutch hybridizer Hans van der Post. This fuchsia has however as yet not been introduced, and has only been distributed to a limited number of people for hybridization purposes. The first near white triphylla hybrid fuchsia still available
is 'Our Ted' (Goulding, 1983), a selfing of
'Koralle’ (1). The Dutch hybridizer Hans van Aspert has introduced $F$. Jaspers Triphywhite' in 2007, a soft pink triphylla hybrid fuchsia, most probably a selfing of $F$. 'Göttingen' and recently in 2013 a near white triphylla hybrid fuchsia 'Phileine' (see page 11).

## Many triphylla hybrid fuchsias have poor hybridization properties



Orange F. triphylla seedling (1) 'Traditional' shape


Orange F. triphylla seedling (2) Sepals curved upwards
fuchsia hybridization, as is also a limited number of other triphylla hybrid fuchsias, among which several of my own seedlings originating from 'Göttingen' x 'Our Ted'. Fuchsia 'Jaspers Triphywhite' seems to be sterile from both sides. $F$. triphylla 'HvdP' is moderately fertile as the berry pro-
vider, but produces no pollen, and moreover, is a rather weak plant to grow. Also F. Phileine' produces no pollen, butcan possibly be used as a berry provider. $F$. 'Our Ted' is moderately fertile from both sides, however is a rather difficult fuchsia to grow, and fertilization often fails.

As is also mentioned in Mr. Edwin Goulding's paper on the fertility of fuchsia pollen, one of the main obstacles in triphylla hybridization is obtaining seedlings having fertile pollen. Examples of fertile specimens exist however. 'Göttingen' has fertile pollen, and is therefore often used in


Dichromatic F. triphylla seedling (1) Pink colored sepals and pink inside of the petals and tube


Dichromatic F. triphylla seedling (2) Pronounced knobstick shaped tube

From now on, making soft pink and near white F. triphyllas will not be difficult anymore as the underlying genetic information is firmly anchored in vigorous, fertile $F$. triphylla seedlings

This year, starting from $F$. triphylla 'HvdP' and $F$. triphylla PB7760\#7 (4) a breakthrough has been achieved by creating soft pink F. triphyllas which prove to be very fertile from both sides. The F. triphylla seedlings, with large variation in trait expression of colour, shape and size of flowers and foliage, can be
grouped roughly within 3 categories: orange, mixed orange/pink and soft pink to near white flowers $(2,3)$. The tube length varies from 20 to 45 mm . Most of the seedlings, including many of the pinks and near whites, are very vigorous plants, and several produce a large number of root shoots. They grow to a height of
$60-90 \mathrm{~cm}$, and could by their natural self-branching growth properties possibly develop into interesting show bench plants. But most important at the moment is of course their game changing breeding potential, which could be the start of a new generation of triphylla hybrid fuchsias.

In search of the white $F$. triphylla: the next steps

Next steps in further hybridization will be selfing and mutual crossing of the pink seedlings and backcrossing with F. triphylla

F. triphylla seedling, first season
'HvdP' for making a real white F. triphylla. Will this be successful? We will hopefully know at the end of next year.


Vigorous root system, first season

The first pink F. triphyllas will be released at the end of 2014 or in 2015.

## Notes

(1) Mr. Edwin Goulding, recentpersonal communication.
(2) The pink corolla is alsopart of the genotype of F. triphylla 'PB7760\#7' (Gerand Rasema, Fucbsiana, April 2013, p. 26).
(3) Also foliage and bery pigmentation vary appreciably, in particular between the pink and orange seedlings.
(4) Both these fucbsias, from different sources, were essential-indeed a sine qua non- in the breedingprogram. It underlines once more the value of exchange of materialand information betveen breeders.


Soft pink. F. triphylla seedling (1) 'Traditional' shape


Soft pink F. triphylla seedling (2) Sepals curved upwards

A full overview of the experimental set-up and results, and a plausible genotype of the F. triphylla flower will be published in next year's July and December issues, respectively.

## Marching with

The European Commission is preparing legislation which could make it mandatory for 'all plant reproductive material' to be officially registered and described. By having available a definitive description of each plant, the Commission wants to improve consumer protection. But only few plants have

Plant Breeders Rights, and therefore hardly any Fuchsia will have an Ordinary Recognised Description' (ORD). Cost for producing an ORD amounts probably to some 300 -500 euro. If this would be made mandatory not only for food crops, but also for all new ornamental plants such as
fuchsias, this w ould kill almost any initiative in Europe in hybridizing new fuchsias.
Several parties, including the RHS, are taking steps to put pressure on Brussels to remove ornamentals from the new legislation or to replace the ORD by existing 'commonly know n' criteria.

Source: The Garden, November and Decemb er 2013.
To read the proposed legislation visit: http:// tinyurl.com/cdnd2kc
Note from the editor:
By such legislation, data bases as the $N K \nu F$ 's Cultivar Inventory Lists (the CIL) and the AFS and BFS mgistration systems could thus become invaluable in an unforeseen manner.


Best choice for your dog's Christmas present: an old fichsia pot.


Second best choice for your dog's Christmas present: a cleaning brush. But make sure that the pot has been cleaned before giving the brush to your pet.

## Contents of the next issue

The next issue is scheduled for the end of July 2014.

## On the hardiness of Fuchsia hatschbachii.



Edwin Goulding: On the fertility of Fuchsia pollen. Part II: Pollen charting.
There are many different ways of pollen charting. An example is given of the form as used by the author.

## So stay connected!

The germination of fuchsia seeds after storage for a prolonged period of time.

Mario de Cooker: In search of the white F. triphylla. Part II: Experimental set-up and further results.

A broad variety of flow ers is obtained, indicating the riches of the genetic variability of the species F. triphylla.


Your contribution to the contents of The Fuchsia Breeders Initiative is highly appreciated. Contributions for the next issue should be made available at the latest on 1 July 2014.

## The Fuchsia Breeders Initiative

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