



Magnolia 'Black Tulip' in flower in the UK, where it shows good colour, although it is deeper red in New Zealand

All photographs by Vaughan Gallavan unless stated otherwise

Red-flowered magnolias

VAUGHAN GALLAVAN assesses the range of cultivars usually defined as red and examines how their flower colour varies depending on growing conditions

WITH ITS MILD climate and iron-rich volcanic soils, North Island in New Zealand is perfectly suited to the cultivation of magnolias. It is perhaps no coincidence that it is also home to some great plant breeders. Those with an interest in magnolias will be familiar with names such as Felix Jury, Mark Jury, Oswald Blumhardt, Vance Hooper, Peter Cave and Ian Baldick. These pioneering plantsmen have made a huge contribution to the range of colour and form of magnolias grown all over the world.

The colour of 'Vulcan'

In the early 1980s there was a breakthrough in the quest for a 'red' *Magnolia* in the form of *M.* 'Vulcan'. Prior to this, most magnolias with names alluding to red were actually shades of pink and purple. Without wishing to get bogged down in defining colours or resorting to colour charts, reference to red magnolias in this article may also refer to shades of pink, but where blue pigment is less apparent.

Magnolia 'Vulcan' was bred by the late Felix Jury, a plant breeder with a considerable legacy of fine magnolia

hybrids created over a period of more than 30 years. He crossed *M. liliiflora* 'Nigra' with *M. campbellii mollicomata* 'Lanarth'. This resulted in a magnolia that, in the warm climate and iron-rich volcanic soils of North Island, produced large red flowers of a significantly different shade to other temperate magnolias previously grown. I acknowledge that *M.* 'Darjeeling', *M.* 'Betty Jessel' and some cultivars of *M. sprengeri* and *M. dawsoniana* may also appear red on opening.

Excitement over the introduction of 'Vulcan' to the UK has been tempered by its relatively poor performance here. Growers have reported that the flowers are small and pale in colour. The flowers bear so little resemblance to those seen in New Zealand that a 'rogue clone' had been suspected. Mark Jury, son of Felix Jury, in an address to an international symposium on magnolias, said that was not the case but he did say that 'Vulcan' might show 'certain weaknesses' (Jury 1998). These were its tendency to flower too precociously and sometimes produce undersized, pale flowers, especially in poor growing conditions. He further expressed his concerns over how 'Vulcan' might perform in colder conditions, such as those in the UK. This may be old news to those who have already been disappointed by this cultivar.

Fortunately, the story does not end there as 'Vulcan' arrived just as Mark Jury began to take an interest in hybridizing. He continues to diligently explore, develop and improve subsequent generations of red magnolias with an eye on how they may perform in colder climates. He has raised about a thousand magnolia hybrids but has named only three red cultivars so far. Other breeders, professional and amateur, have made hybrids from 'Vulcan'

with mixed results. Shirazz ('Vulden') (*M. denudata* × 'Vulcan'), although not outstanding in New Zealand, does very well in the UK. In contrast, 'Ian's Red' is relatively disappointing in the UK.

Colour comparisons

In August 2013, having received an RHS Coke Trust bursary, I was able to conduct a magnolia study tour of the North Island of New Zealand. My objectives were to meet magnolia hybridizers in their gardens and nurseries and to see their plants *in situ*. This was an opportunity for me to make colour comparisons and to look at the question of why some New Zealand hybrids perform well in the UK while others do not.

I have subsequently asked magnolia growers in the UK, Belgium and Holland for their observations on the red hybrids that have been available for several years. I include some of their responses in the following plant descriptions. Of 18 responses, most have been based on personal taste and observations on colour and rate of growth, but with some other interesting points raised too.

Magnolia 'Black Tulip'

This cultivar was released for sale in New Zealand by Mark Jury in 1997. It is a 'Vulcan' seedling with an unknown pollen parent. The goblet-shaped flowers have translucent, deep red tepals which hardly let light through, and so appear almost black. It is reasonably slow-growing and ideal for smaller gardens.

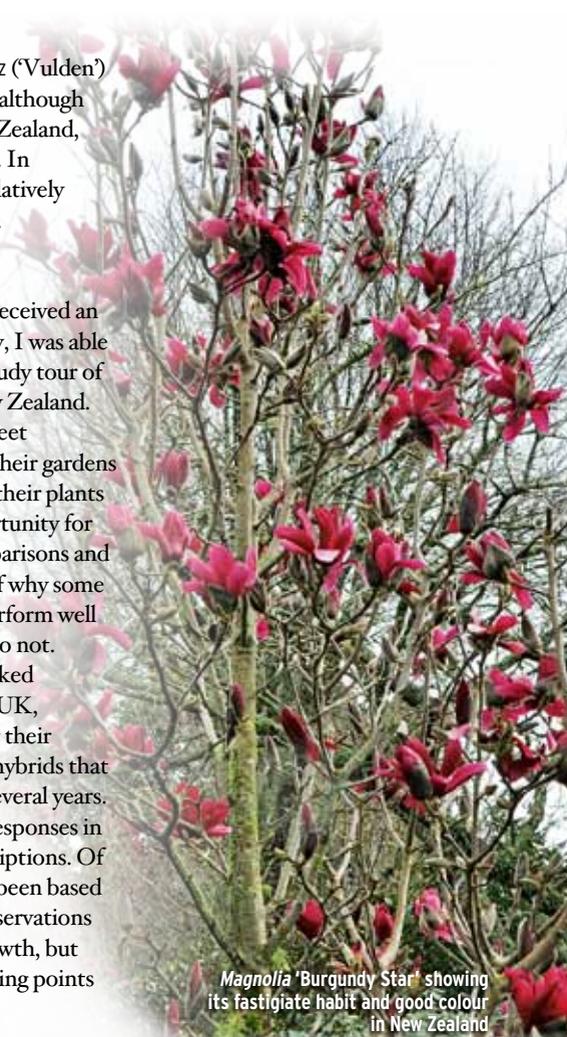
It has been growing at Sherwood, Devon, the garden I manage, since 2002 and I have been very happy with its form and appearance in bloom. It was noticeably more red in New Zealand but does produce flowers of good substance and colour in the UK. Most of the respondents

to my survey were also happy with its performance. It is susceptible to frost damage in extreme winters and subsequent flowers may be stunted and discoloured, but that is not unusual for similar cultivars either.

'Black Tulip' was performing well in most of the UK gardens I visited in spring 2015.

Magnolia 'Burgundy Star'

When I arrived at Tikorangi, the garden and home of Mark and Abbie Jury in New Zealand, I found 'Vulcan' in full bloom, despite the ground beneath being clothed in ➤



Magnolia 'Burgundy Star' showing its fastigate habit and good colour in New Zealand



Magnolia 'Burgundy Star' (left) and *Magnolia* 'Genie' (right)

spent tepals. This indicated that 'Vulcan' flowers very early in the season. In contrast, 'Burgundy Star' growing nearby was only just starting to break bud. This came as something of a revelation to me as 'Vulcan' at Sherwood is by no means the first magnolia to bloom.

'Burgundy Star' has not yet been tested in the UK but it is available. As it is three parts *M. liliiflora* (*M. liliiflora* 'Nigra' × 'Vulcan') it would seem likely that it will flower later in the season when the ground is warmer and more minerals are available. It is a spectacular cultivar with heavily textured, claret-red tepals on flowers that open to a star shape. These are borne in succession on a notably fastigate, small tree.

It did not reach full bloom during my stay but it looked exciting and I

particularly enjoyed seeing its spired shape against the pink of *Prunus campanulatus*. If it does well in the UK it will have enormous garden potential because of its narrow growth habit.

***Magnolia* 'Felix Jury'**

In the UK, 'Felix Jury' has been the most successful 'Vulcan' hybrid to date (the pollen parent is a sibling of 'Iolanthe'). It has large, deep pink flowers which seem to improve every year. The buds are a good red on opening and this colour is retained at the base of the tepals. The blooms may fade in full sun and perhaps some dappled shade would help prevent this.

'Felix Jury' was outstanding in

every garden in the UK that I visited in 2015. At Sherwood, despite severe gales at Easter, the blooms held up.

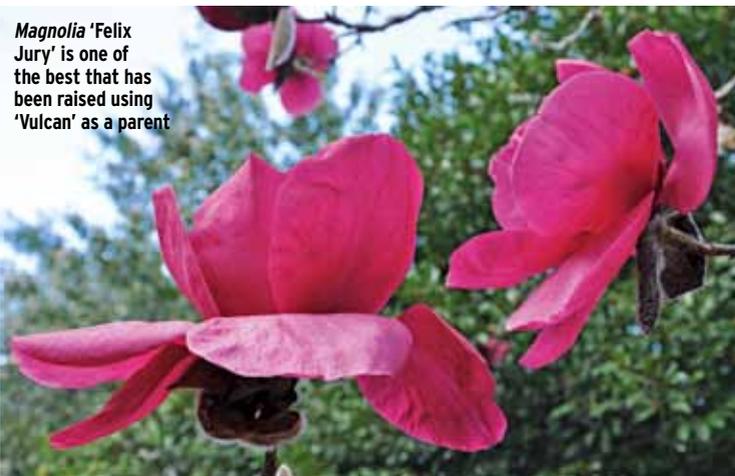
***Magnolia* 'Genie'**

I do not have experience of growing 'Genie' at Sherwood, but other gardeners report that it is slow-growing with small, dark red flowers. This agrees with the few plants that I have seen in the UK. The colours were very good in New Zealand but it is probably too early to make a fair assessment of UK potential yet.

Raised by Vance Hooper in New Zealand, its parentage is ('Sweet Simplicity' × 'Black Tulip') × ('Sweet Simplicity' × *liliiflora* 'Nigra'). Hooper states that 'Genie' has the potential to upgrade any cross that was originally done with *M. liliiflora* 'Nigra'. Some of its offspring display an attractive frosting effect on the inner tepals. One hybrid particularly caught my eye at Magnolia Grove, Vance and Kathryn Hooper's garden and nursery, but its name has not been released yet. It is a very good red, with frosting on the inner tepal surface, on a neat, small tree. It is currently being trialled in the Netherlands and may be released for sale in two years.

About eight of Hooper's cultivars

Magnolia 'Felix Jury' is one of the best that has been raised using 'Vulcan' as a parent





Although it produces a long succession of blooms, the colour of *Magnolia* 'Ian's Red' seems unstable. These flowers were all seen on one tree at the same time.



An as-yet unnamed Hooper hybrid with frosting on the tepals is being trialled in the Netherlands

are currently available in the UK, but more recent ones such as 'Cameo' and 'Cleopatra' will be well worth trying when they arrive.

***Magnolia* 'Ian's Red'**

At Sherwood this cultivar failed to flower at all following one cold winter. After a mild winter it produced many flower buds and its first blooms looked promising in the first week of March. Although it produced a long succession of flowers the quality diminished.

Raised by Ian Baldick, an energetic amateur breeder in New Zealand, it is a hybrid between 'Vulcan' and *M. x soulangeana* 'Burgundy'. It shares some qualities with 'Vulcan' but seems to be even

more bud-tender. I did not think it compared well to 'Vulcan' in New Zealand either, as it appears to have inherited unstable bloom colours which can be seen when comparing different flowers on the same tree.

Baldick has raised some very good cultivars and has circulated propagating material so that many are readily available in the UK. In New Zealand I particularly liked cerise-flowered 'Grant David' which caught my eye in three different gardens. 'Ian's Giant Red' was good, but in my view not as good as 'Felix Jury'. 'Red as Red' was not outstanding in New Zealand but I did notice it colour well at the Sir Harold Hillier Gardens in 2015. Feedback from UK growers on his cultivars has been favourable, especially on his purple ones, 'Purple Sensation' and 'Ruth'.

***Magnolia* 'Margaret Helen'**

This cultivar does well at Sherwood and is subsequently sought after by our garden visitors. Raised by Hooper, its parentage (*M. liliiflora* 'Nigra' × *M. campbellii* 'Bernie Hollard') is similar to that of 'Vulcan'. It has large, reddish purple flowers and the buds are reminiscent of *M. liliiflora* 'Nigra', from which it inherits a long succession of blooms.

***Magnolia* Shirazz ('Vulden')**

Also raised by Hooper, and a hybrid between *M. denudata* and 'Vulcan', this is more of a purple-red and performs well in the UK.

***Magnolia* 'Strawberry Fields'**

A vibrant strawberry red, this Ian Baldick cultivar was outstanding wherever I saw it in New Zealand.



GENUS PROFILE

It is not yet available in the UK but I imagine that it will be soon. I am fortunate to have a small grafted plant and look forward to seeing whether it will colour well here.

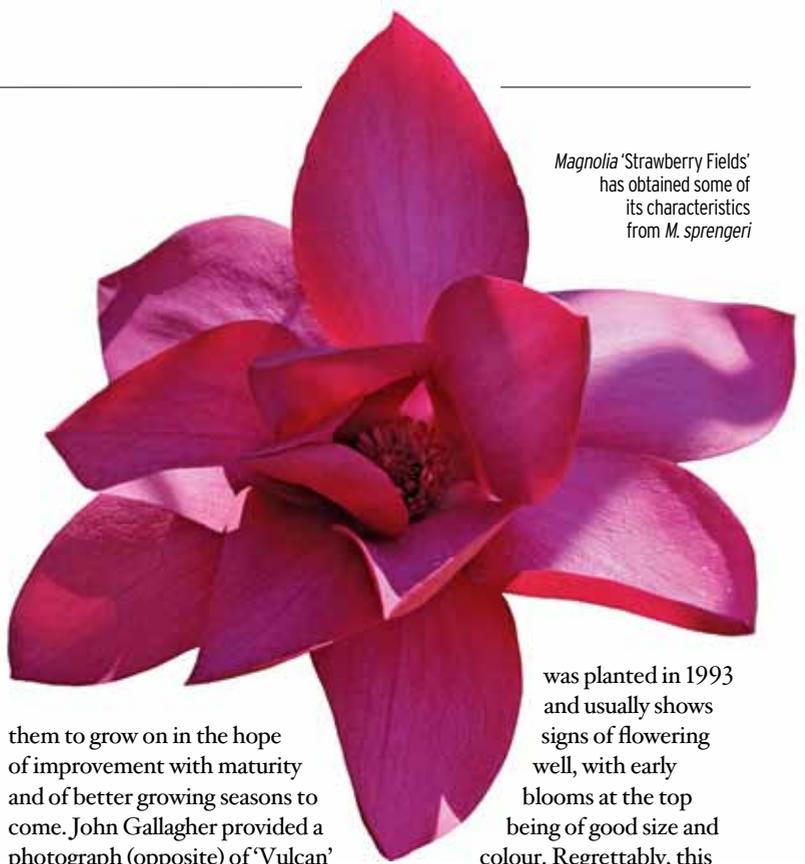
Unlike any of the above cultivars, this has *M. sprengeri* genes gained through one of its parents, 'Spectrum', and the other parent is 'Vulcan'. The flowers are reminiscent of *M. sprengeri* 'Marwood Spring' but a deeper tone. However, enthusiasm must remain curbed until more mature plants are seen in the UK. It will probably have a relatively short flowering season as it sets flowers on its terminal shoots.

***Magnolia* 'Vulcan'**

Seeing this cultivar in New Zealand exceeded my expectations as the colour was magnificent. However, I have had no reports of good colour in the UK. Some UK growers do not seem to mind that our plants are not colouring as well, and find its paler colour here pleasing. Those that have been disappointed have either removed their plants, or are leaving

them to grow on in the hope of improvement with maturity and of better growing seasons to come. John Gallagher provided a photograph (opposite) of 'Vulcan' flowering well at Villa Taranto in Italy, so it appears that good flowering is not exclusive to New Zealand.

The oldest 'Vulcan' at Sherwood



Magnolia 'Strawberry Fields' has obtained some of its characteristics from *M. sprengeri*

was planted in 1993 and usually shows signs of flowering well, with early blooms at the top being of good size and colour. Regrettably, this show is short-lived and flowers become progressively smaller and paler. As Mark Jury (1998) has said, 'Vulcan' has a characteristic of putting out a flower regardless of size and undersized flowers lack the intensity of colour.'

I am committed to keeping this plant at Sherwood although I have some doubts over its site. It was planted near the base of a north-facing valley where I believe the ground takes longer to warm in the spring. While it tries to bloom very early in the season it is possible that certain minerals, which may effect flower colour, are not available from the cold soil.

One parent, *M. campbellii* subsp. *mollicomata* 'Lanarth', rarely flowers well at Sherwood, owing to tenderness in bud, although it was spectacular in the mild conditions of spring 2015. The other parent, *M. liliiflora* 'Nigra', flowers late and for a prolonged period.



Magnolia Shirazz ('Vulden') has *M. denudata* as one parent



Magnolia 'Vulcan' showing good colour at Villa Taranto in Italy

John Salter

Conclusion

I saw a wide range of magnolias raised in New Zealand on the first day of my trip at Auckland Botanic Gardens, with most of the red-flowered hybrids discussed in this article in full bloom. I returned on the last day of my trip when they were largely over, but I was struck by a spectacular display of *M. liliiflora* 'Nigra' which appeared redder than I have previously noticed. *Magnolia liliiflora* is the single thread that connects all the New Zealand red hybrids. Indeed, it is at the heart of many hybrids, as Gardiner (2000)

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states, '*Magnolia liliiflora* is an extremely important parent and probably the most influential species in *Magnolia* breeding programmes.'

On the question of why colours are generally so much better in New Zealand, more specifically in the warmer regions of the islands, there are a number of possibilities. The climate overall is warmer, daylight hours are longer and the soils are iron-rich and fertile. Added to this, rainfall is evenly distributed throughout the year and droughts are rare.

Most of the growers I met do not regard the choice of rootstock as a factor governing flower colour. However, they do favour the idea that colour is influenced by the

uptake of minerals from the soil, these only being available when the ground is warm. Observations on flower timing do seem to support this idea. The earliest flowering magnolias in the UK may struggle to absorb sufficient minerals and nutrients. Bearing this point in mind, it may be worth carefully siting new plants in fertile, free-draining soil with a capacity to warm quickly in the spring.

The question does remain open, however, and perhaps all the conditions above play a role in flower colour.

Most of the cultivars I have discussed are already well-known, but I did see lots more that are being assessed by their breeders. It is also important to continue to assess the cultivars that we already grow, to inform our future choices.

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