# **Plant Raisers' Award**

# John Alexander Hunter



Fig. 1 RNZIH President Keith Hammett (left) congratulating John Hunter (right) for receiving the 2021 Plant Raisers' Award. Photo: Jack Hobbs.

The growing of daffodils (Narcissus) has been in John Hunter's (Fig. 1) family since the late eighteen hundreds. In the 1800s his greatgrandfather George Cook grew daffodils on his farm in Riwaka for Henry Budden, one of the first commercial growers of the flower in New Zealand. In the mid-1920s his uncle R.P. Cook, also of Riwaka, began exhibiting daffodils and it was gifts of daffodils from his collection that started John off on his hybridising career. John exhibited his first daffodil as a 9-year-old in 1945, gaining 2nd prize in the open section of the Nelson Horticultural Society Spring Show. Then, in 1949 at the age of 13, with more help from his uncle, he made his first eleven pedigree crosses. Unlike his uncle though, he was determined to keep accurate records of the crosses he performed as he foresaw even at this young age how knowledge of the daffodil's lineage could facilitate more reliable introduction of superior traits into the flower. He has kept meticulous records of his hybridising right up to present day, a total of 71 years, resulting in some of his flowers having nine generations of his breeding with them documented.

John joined the National Daffodil Society of New Zealand (NDSNZ) in 1956 with his main interest in exhibiting at their shows in Class 2. which was for 12 distinct daffodils raised by an exhibitor. Over the years he has won this class many times and in September 2020, at the age of 85, he was yet again awarded first prize at the NDSNZ South Island Show.

John has accumulated an extensive library on daffodils, and knowledge gained from this collection led him to being asked to be Historian for the NDSNZ. His library includes John Parkinson's book of 16291, and the complete collection of Royal Horticultural Society's (RHS) Year Books from their first publication in 1913. He considers the information written by the world's leading raisers of the flower in these books, as having helped him with his breeding programme. In one article John learned that in the 1930s Guy L. Wilson of Northern Ireland noted an observation that he later observed himself, that some traits in seedlings from a cross resemble the grandparents more so than the direct parents. He thinks it rather neat that seventy years on from Wilson's article, a book by Richard Dawkins on genetics and evolution stated the same finding and explained why this was so. This is why John considers accurate recording of pedigrees to be critical in a plant breeding programme, as you need to go back more than one generation to get a reasonable idea of what to expect from a cross. With daffodils it is a five year wait from seed to flowering, so patience is a must, and the breeder needs to use as much information as possible to have the best chance of achieving the desired traits. To John, what makes the daffodil a fascinating flower to cross is the large variation in the species, which has resulted in many new hybrids being produced from the late 1840s to the present day. He also thinks the daffodil has huge potential for advancement and in the future new colours and types will undoubtedly be obtained, and he expresses frustration that his lifetime is not long enough to achieve what he has always wanted to - an all-red flowered daffodil.

John has registered more than 160 of his daffodil selections with the Royal Horticultural Society, London (all recorded in the RHS International Daffodil Register and Classified List), and has First Class Certificates (FCC), awarded for 18 blooms of exhibition quality, for the following:

- 'Flight Path' (class: 6 Y-W; year registered: 2007)
- 'Polar Convention' (3 W-W; 1999)
- 'Polar Sky' (2 W-WWP; 1992)
- 'Tranquil Image' (2 W-P; 2004; Fig. 2).



Fig. 2 John Hunter, alongside 18 blooms (only 16 are visible in this photo) of 'Tranquil Image' that had been unanimously awarded a First Class Certificate (FCC NZ) at the 2008 South Island National Show in Nelson. Photo: © John McLennan, via DaffSeek - the Daffodil Database.

He has an Award of Merit (9 blooms of exhibition quality) for:

- 'Moon River' (1 Y-Y; 1970)
- 'Sulphur Monarch' (1 Y-Y; 1995).

He has raised several Champion Blooms (best in show) at the NDSNZ shows:

- 'Aspire' (2 Y-O; 2016)
- 'Cosmic Ice' (1 W-W; 2010)
- 'Luminosity' (2 YYW-W; 2010)
- 'Pacific Phoenix' (2 Y-YOO; 2010), on two occasions
- 'Polar Sky' (2 W-WWP; 1992), on two occasions.

John has produced many Premier Blooms (best in division) at the NDSNZ shows covering all divisions and subdivisions, except division 8 Tazetta and 10 Bulbocodium hybrids.

<sup>1</sup> Paradisi in Sole: Paradisus Terrestris: A Garden of all Sorts of Pleasant Flowers which oure English ayre will permitt to be noursed up, etc.

# An explanation of the Royal **Horticultural Society (RHS)** classification of daffodil cultivars

Growers register their new daffodil selections by cultivar name and horticultural classification. They use division numbers and a colour code. Division numbers are typically 1-12 (with letters 'a' or 'b' for Division 11), with an additional Division 13 reserved for daffodils distinguished solely by botanical section name (Fig. 3).

Letters are used to abbreviate the flower colour(s):

W: White or Whitish

G: Green

Y: Yellow

P: Pink

O: Orange

R: Red.

The colour classification lists the perianth (petals and sepals) colour(s) followed by the corona ("cup") colour(s) separated by a hyphen. Up to three colours can be stated for each, describing colours of the outer, middle and inner zones of the perianth and corona (or a forward slash '/' is used for non-concentric colouration).

For example, the cultivar Narcissus 'Green Topaz' raised by John Hunter has an RHS Daffodil Classification 3 W-GWY, meaning that it is a small-cupped daffodil, with a white perianth and a corona coloured green, white, and vellow.

For more information, see https://en.wikipedia.org/ wiki/List of Narcissus horticultural\_divisions.

One, Narcissus 'Moonwalker' (3 Y-Y) took seven generations of hybridising to produce, has been exhibited only three times at the NDSNZ shows, and was awarded best of its division each time. He considers it the best yellow short cup type he has raised.

The RNZIH Plant Raisers' Award recognises John Hunter for five of his cultivars: Narcissus 'Cosmic Image' (Fig. 4), 'Emerald Sea' (Fig. 5), 'Floris Selina' (Fig. 6), 'Green Topaz' (Fig. 7), and 'Moonwalker' (Fig. 8).

John has received other prestigious awards, nationally and internationally, for his advancements in daffodil breeding. These include the David Bell Gold Medal in 1997 from the NDSNZ, the American Daffodil Society Gold Medal in 2011, and the Royal Horticultural Society's Peter Barr Cup in 2012. These are all the highest awards possible for daffodil breeding from the respective organisations. The RHS Peter Barr Cup was first awarded in 1912 and, one hundred years later, John became the fifth New Zealander to receive this prestigious trophy. He felt so honoured that his family flew with him to London to receive the award.

The Peter Barr Cup was awarded for John's achievements in increasing fertility in the Jonquilla group and extending the flowering season of modern hybrids from March through to October in the Northern Hemisphere. He achieved this using a small, spikey green petaloid, autumn flowering species from southern Spain and northern Morocco (Narcissus viridiflorus; Fig. 9) and crossing it with a modern spring-flowering cultivar raised in Wellington by the late Jim O'More called 'Sea Dream'. The resulting cultivar, 'Emerald Sea' (7 W-G; 1999), is a multi-headed green crowned daffodil with a white perianth. It was hugely sought after, at one time fetching \$NZ500 for a single bulb. 'Emerald Sea' has now been used as a parent in many crosses in America and Germany by world notable breeders, with startling results.

John says he must acknowledge past daffodil hybridisers worldwide for their flowers and for accurately recording their breeding programmes which has contributed to the success he has had. Without their dedication John's new selections would have been unattainable.

John also has several selections being grown commercially, with one of the largest bulb growers in Holland, Pennings, taking out plant variety rights for some of John's crosses. Last year he was informed that they have 1 1/3 km long 2-metre-wide beds of one of his selections and a bed nearly 1 km long for another selection. These are Jonquilla and Triandrus selections. A frilled selection of John's, 'Bridal Brocade' (2 W-W), is also being sold by several firms in Holland.

John is a Life Member of the National Daffodil Society of New Zealand, has served on their executive and has been their historian for many years. He is a NDSNZ Senior Judge and Life Member of both the Nelson and Brightwater Horticultural Societies.

While John spent most of his life breeding and growing daffodils, he also worked in the family business for 35 years as a 5th generation watchmaker and jeweller and, in his younger days, played rugby, indoor basketball and competed in athletics. It was at table tennis where he met his wife-to-be Marie (they have been married now for more than 60 years). John says "Marie knows where everything is and keeps meticulous records. I could not have achieved what I have done without her".

This meticulous record of crosses spanning more than seven decades, having more than 160 cultivars registered (Table 1), and the numerous other awards received are impressive achievements demonstrating that John Alexander Hunter is at the forefront of daffodil breeding on the world stage. He is most worthy of recognition by the Royal New Zealand Institute of Horticulture.

# DIVISION 1:

TRUMPET DAFFODIL CULTIVARS



One flower to a stem; corona ("trumpet") as long as, or longer than the perianth segments ("petals")

# DIVISION 2:

LARGE-CUPPED DAFFODIL CULTIVARS



One flower to a stem; corona ("cup") more than one-third, but less than equal to the length of the perianth segments ("petals")

### DIVISION 3:

SMALL-CUPPED DAFFODIL CULTIVARS



One flower to a stem; corona ("cup") not more than one-third the length of the perianth segments ("petals")

## DIVISION 4:

DOUBLE DAFFODIL CULTIVARS



One or more flowers to a stem, with doubling of the perianth segments or the corona or

#### DIVISION 5:

TRIANDRUS DAFFODIL CULTIVARS



Usually two or more pendent flowers to a stem; perianth segments reflexed

#### DIVISION 6:

CYCLAMINEUS DAFFODIL CULTIVARS



One flower to a stem; perianth segments significantly reflexed; flower at an acute angle to the stem, with a very short pedicel ("neck")

## DIVISION 7:

JONQUILLA AND APODANTHUS DAFFODIL CULTIVARS



One to five (rarely eight) flowers to a stem: perianth segments spreading or reflexed; corona cup-shaped, funnel-shaped or flared, usually wider than long; flowers usually fragrant

# DIVISION 8:

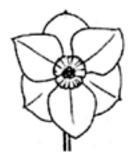
TAZETTA DAFFODIL CULTIVARS



Usually three to twenty flowers to a stout stem; perianth segments spreading not reflexed; flowers usually fragrant

## DIVISION 9:

POETICUS DAFFODIL CULTIVARS



Perianth segments pure white; corona very short or disc-shaped, not more than one-fifth the length of the perianth segments; corona usually with a green and/or yellow centre and red rim, but sometimes wholly or partly of other colours; anthers usually set at two distinct levels; flowers fragrant

## DIVISION 10:

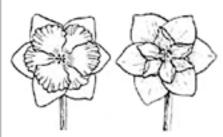
BULBOCODIUM DAFFODIL CULTIVARS



Usually one flower to a stem; perianth segments insignificant compared with the dominant corona; anthers dorsifixed (i.e., attached more or less centrally to the filament); filament and style usually curved

## DIVISION 11:

SPLIT-CORONA DAFFODIL CULTIVARS



a) Collar Daffodils

b) Papillon Daffodils

Corona split, usually more than half its length

#### DIVISION 12:

OTHER DAFFODIL CULTIVARS

Daffodil cultivars which do not fit the definition of any other division

## DIVISION 13:

DAFFODIL SECTIONS DISTINGUISHED SOLELY BY BOTANICAL NAME

APODANTHI AURELIA BULBOCODIUM GANYMEDES JONQUILLA

NARCISSUS PSEUDONARCISSUS

SEROTINI TAZETTAE TAPEINANTHUS

Fig. 3 RHS Divisions for classifying daffodils. Adapted from www.rhs.org.uk/plants/pdfs/plant-registration-forms/daffhortclass.pdf.



Fig. 4 Narcissus 'Cosmic Image' (registered 2016) produces very good symmetrical double white flowers with cerise red centres. It is part of John Hunter's "Cosmic Series" of selections. Photo: DaffSeek - the Daffodil Database.



Fig. 5 Narcissus 'Emerald Sea' (registered 1999) is an important daffodil raised by John Hunter. It is a cross between an autumn flowering species from Morocco (Narcissus viridiflorus) and a very good spring flowering cultivar (Narcissus 'Sea Dream'). This provided the great fertility in the Jonquilla group of cultivars. Photo: © John McLennan. via DaffSeek - the Daffodil Database.



Fig. 6 Narcissus 'Floris Selina' (registered 1963) was the first daffodil John received an award for - it received a Certificate of Preliminary Commendation (PC) from the NDSNZ in 1962. John named it in the memory of his mother who had passed away the previous year. The white flowers measured 5 inches (12.7 cm) in diameter. B&W photo supplied by Marie Hunter.



Fig. 7 Narcissus 'Green Topaz' (registered 2010) received a Certificate of Preliminary Commendation (PC) in 2019 by the RHS in England. The English growers that gave this award thought it was one of the best green cups daffodils they had seen. Photo: © John McLennan, via DaffSeek - the Daffodil Database.



Fig. 8 Narcissus 'Moonwalker' (registered 2017) is a cultivar that took John Hunter seven generations of hybridising to produce. It is recognised as one of the best of its division to date. Photo: © John McLennan, via DaffSeek - the Daffodil Database.



Fig. 9 Narcissus viridiflorus, an important parent species used in John Hunter's breeding work. Photo: © Ori Fragman-Sapir, Head Scientist at Jerusalem Botanical Gardens.

**Table 1** List of daffodil cultivars raised by John Hunter, Royal Horticultural Society classification, and year of registration with the RHS. Source: DaffSeek – the Daffodil Database (https://daffseek.org/).

Narcissus cv.	RHS Class	Year
'Absolute'	2 W-YYP	1999
'Achernar'	1 W-W	1968
'Alpine Express'	1 Y-Y	1995
'Arvid'	1 W-Y	2013
'Arvid's Guard'	1 W-Y	2017
'Aspire'	2 Y-O	2016
'Autumn Beauty'	3 W-GYY	2007
'Autumn Charm'	6 W-GYO	2007
'Autumn Dell'	7 W-WWP	2007
'Autumn Grace'	3 W-YOY	2007
'Autumn Jewel'	7 W-GWW	2007
'Autumn Splendour'	7 W-YOO	2007
'Braveheart'	1 Y-Y	2017
'Bridal Brocade'	2 W-W	1997
'Cape Campbell'	2 YYW-W	2019
'Cape Farewell'	4 W-WYR	2013
'Centaurus'	2 W-Y	1972
'Cindy's Choice'	2 W-YYO	2013
'Cosmic Dawn'	4 W-WYR	2013
'Cosmic Dream'	1 YYW-WWY	1999
'Cosmic Glow'	2 W-P	2004
'Cosmic Ice'	1 W-W	2010
'Cosmic Image'	4 W-YRR	2016
'Cosmic Ocean'	2 W-WWP	2010
'Cream Cone'	4 W-Y	1997
'Crisis Point'	2 W-R	2016
'Cronkite'	9 W-GYR	2010
'Culfind'	2 Y-Y00	1995
'Dawn Frost'	2 W-WPP	1995
'Dewfall'	7 W-GYY	2019
'Divergent'	3 Y-Y	2019
'Double Impact'	4 W-Y	2010
'Dramatic'	2 YYW-P	2017
'Dreamchaser'	1 W-Y	2019
'Flfin Dell'	2 W-P	2007
'Elfin Glen'	1 Y-P	2016
'Elfin Moon'	2 W-W	1995
'Embrace' 'Emerald Monarch'	2 W-P 8 W-G	2019
'Emerald Sea'	7 W-G 2 W-P	1999
'Emotion'		2019
'Enforcer'	11a Y-P	2019
'Eridanus'	2 W-W	1992
'Ethereal Dawn'	2 W-P	2010
'Excalibur'	2 Y-O	1982
'Flash Dance'	3 Y-O	2004
'Flight Path'	6 Y-W	2007
'Floris Selina'	2 W-W	1963
'Forever'	2 W-P	2019
'Frosted Gold'	2 W-GYY	2004
'Galactic Image'	2 W-P	2016
'Ghost Rider'	1 W-W	2017
'Glenmore Meadow'	2 Y-Y	2020
'Gold Lake'	11a Y-O	2010
'Golden Orb'	2 Y-Y	1982

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Narcissus cv.	RHS Class	Year
'Golden Ridge'	2 Y-Y	2019
'Green Topaz'	3 W-GWY	2010
'Hunters Gold'	1 Y-Y	1997
'Hunterston'	3 W-GYR	2010
'Ice Master'	3 W-W	2004
'Ice Shelf'	1 W-W	1999
'Icebound'	2 W-W	1997
'Icescape'	2 W-W	2017
'Illusion'	2 Y-PPY	1992
'Imagine'	3 W-YYR	1997
'Insight'	1 Y-P	2016
'Intense'	2 YYW-WWP	2013
'Interview'	2 W-P	2016
'Josephine Bruce'	1 W-W	2019
'Kanierie Gold'	1 Y-Y	1973
'Karen Stade'	2 W-P	2019
'Kim Gee'	1 W-P	2019
'Last Sunset'	11a Y-P	2019
'Lemon Hunter'	5 GGW-W	2019
'Love Affair'	1 W-Y	1989
'Luminosity'	2 YYW-W	2010
'Magic Frost'	2 W-YYW	2004
'Maitai'	2 W-WWP	1989
'Match Point'	3 W-Y	2007
'Maverrion'	9 W-YYR	2016
'Melting Point'	2 0-0	2010
'Moon Dream'	1 Y-Y	1973
'Moon River'	1 Y-Y	1970
'Moonwalker'	3 Y-Y	2017
'Mottles'	7 YYW-Y	2016
'Mount Campbell'	1 YYW-WWY	2017
'Muttzee'	7 Y-WYY	2019
'Navigator'	2 Y-O	1999
'Otira'	2 W-Y	1966
'Pacific Dream'	2 W-P	2012*
'Pacific Fire'	2 Y-YOO	1999
'Pacific Flash'	2 Y-YOO	2016
'Pacific Glow'	2 Y-YOO	1992
'Pacific Hope'	2 Y-YOO	2016
'Pacific Joy'	7 W-WWY	2017
'Pacific Phoenix'	2 Y-YOO	2010
'Pacific Star'	2 W-Y	1982
'Pacific Topaz'	3 Y-Y	2010
'Pink Cosmos'	1 W-WPP	2010
'Pink Platter'	2 W-WPP	1997
'Pink Quartz'	2 W-PPW	1989
'Pink Sapphire'	2 W-P	1992
'Pink Topaz'	1 W-P	1999
'Placid Sea'	3 W-YWY	1997
'Plutonic'	4 Y-O	1999
'Polar Convention'	3 W-W	1999
'Polar Dawn'	2 W-WWY	1982
'Polar Express'	1 W-W	1999
'Polar Fire'	3 W-O	1999
'Polar Flame'	3 W-YOO	1900
1 Olai i laille	3 44-100	1331

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Narcissus cv.	RHS Class	Year
'Polar Gift'	3 W-YYO	2004
'Polar Glow'	2 W-PPW	1995
'Polar Island'	2 W-W	1995
'Polar Light'	2 W-YYW	1966
'Polar Mist'	1 W-W	2000
(syn. 'Polar Ice')		
'Polar Monarch'	1 W-W	1992
'Polar Morn'	3 W-YWW	1992
'Polar Princess'	2 W-W	1990
'Polar Sky'	2 W-WWP	1992
'Polar Snow'	2 W-W	1982
'Polar Sunset'	2 W-YYP	1997
'Polar Venture'	2 W-W	1989
'Procyon'	1 Y-Y	1989
'Profound'	2 W-P	2016
'Proposal'	2 Y-P	2019
'Quickfire'	2 Y-YOO	1990
'Rainbow's End'	2 W-YWP	1995
'Samantha Gee'	1 W-Y	2019
'Sea Flare'	3 W-GYR	2010
'Silver Monarch'	2 W-W	1997
'Snowclad'	2 W-W	1999
'Solar Flare'	2 Y-YYO	1973
'Solar Wind'	4 W-Y	1995
'Southern Moon'	1 W-Y	2010
'Space Light'	4 W-P	2010
'Spring Lustre'	3 W-YYO	1997
'Star Cloud'	7 YYW-YWW	2016
'Star Cluster'	7 YYW-W	2010
'Star Flight'	2 Y-O	1982
'Sulphur Monarch'	1 Y-Y	1995
'Swordsman'	2 Y-O	1967
'Tasman Sea'	1 W-Y	2016
'Taurus'	2 W-W	1990
'Tenderness'	2 W-P	2017
'Topaz Dawn'	3 W-Y	1999
'Tranquil Dawn'	2 W-WPP	1992
'Tranquil Dream'	2 W-P	2010
'Tranquil Image'	2 W-P	2004
'Transcend'	2 W-WWO	1997
'Triple Peel'	7 W-W	2016
'Try Line'	3 W-YYR	2010
'Tucana'	1 W-W	1990
'Ultimate'	2 Y-P	2019
'Vantage Point'	2 W-P	2017
'Venator'	3 W-GWY	2013
'Viewpoint'	4 Y-Y/P	2013
'Wakamarina'	2 Y-Y	2010
'White Sapphire'	2 W-W	1995
'Wishing Star'	7 YYW-Y	2016
'Wishmaster'	3 W-GYW	2004
'Zilch'	1 W-P	2010

\*Narcissus 'Pacific Dream' was not registered but introduced in 2012.

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