

Plant Raisers' Award

Ian Alexander Duncalf



Fig. 1 Ian Duncalf: 2019 RNZIH Plant Raisers' award recipient.
Photo: Sandra Simpson.

Horticultural background

Over a lifetime in horticulture, Ian Duncalf (Fig. 1) has worked in many diverse areas, from research to propagation, plant production, mail-order marketing, and consultancy.

Ian Duncalf was born in 1952 in the South Taranaki town of Patea, notable for its freezing works (which closed in 1982) and the Patea Māori Club (which rose to fame in 1984 for their hit music album and single "Poi E"). Ian's father was the town's only dentist.

According to Ian, "It was a wonderful place to be brought up in. We knew everybody. We shifted when I was nine just up the road to Hawera, then when I was about 13, we moved to New Plymouth which at that time had two sets of traffic lights, something I recall we were in fear of when we lived in Patea!"

The family had a 17-acre (7 ha) farmlet near New Plymouth where they raised a few sheep and cattle, and Ian tended his own vegetable garden, fostering his interest in animals and plants.

Ian's secondary education was at Spotswood College in New Plymouth. When he reached the seventh form (Year 13), he thought a career in marine biology would suit him, reflecting his interests in the outdoors and sailing. However, following a visit to the school's career advisor he instead looked towards either forestry or horticulture.

In 1970 he decided to enrol at Massey University to undertake the Horticultural Science degree. Four years later he achieved his Bachelor

of Horticultural Science and carried on to complete Honours. As part of his degree Ian worked on the propagation of trembling aspen (*Populus tremuloides*). He was also required to do a year's practical work and had placements in notable nurseries such as Australasian Nurseries, Duncan and Davies, and Zealandia.

Ian's time at Massey was during a period when horticulture was becoming fashionable and various government incentives were offered.

Several career paths were available – fruit production, amenity horticulture, vegetable production, and nursery management. Ian was taught by some prominent lecturers of the day, including John P. Salinger, Mike Nichols, Murray Richards, Professor Ken Milne, and Tubby Wenham. Like Ian himself, some of his classmates went on to establish well-known nurseries, including Peter Tayler of Rainbow Park Nurseries and Peter Cave of Cave's Tree Nursery.

In 1974 Ian was granted a scholarship with the then Ministry of Works Plant Material Centre at Aokautere near Palmerston North. Following the routine of dispatching trees all around the North Island for erosion control (in those days willows and poplars were the plants of choice), Ian took a year's leave in 1978 to travel overseas with his wife Barbara ('Barb' – they married in 1975).

After travelling through Australia and South America they based themselves in England where Ian found work in a container nursery in Bagshot, Surrey (Waterers Nurseries, now part of the Notcutts Garden Centre chain). Ian enjoyed the change of scene immensely.

Upon the couple's return to Palmerston North, Ian spent another year or so at the Ministry of Works before taking a position as a research officer at the Nursery Research Centre at Massey. Here, Ian was involved in practical research on many facets of plant propagation and growing, and found the work new and absorbing.

The horticulture and nursery industry were booming and in 1981 he jumped on the 'express train' of expansion, moving back to New Plymouth to take a lead role in research and development at Duncan and Davies. Duties included managing an apprenticeship scheme and establishing blocks of *Leucadendron* 'Safari Sunset' cut flowers and kiwifruit. At that time Duncan and Davies was selling kiwifruit plants to South Korea and Ian spent some time there as the nursery's kiwifruit advisor. Ian found it "absolutely fascinating even though you were pushed out of your comfort zone a bit". Moving from research to production, Ian was promoted to production manager in 1984 but Duncan and Davies changed soon afterwards when corporates bought into the company, resulting in workplace volatility and turmoil.

Despite his family obligations increasing with newly arrived twin boys (Nicholas and Andrew), a cat, a dog, and a pregnant donkey, in 1987 he accepted a job as production manager in the booming cut-flower industry at the former Greenhouse Park orchid production nursery in the Bay of Plenty.

This large cut-flower business was associated with a smaller business, Parva Plants, operating on the nursery site. Just after the share-market crash, Greenhouse Park decided to sell Parva Plants and Ian and Barb accepted the challenge of taking on the mail-order business.

Their first challenge was to find a site from which to run Parva Plants as a family business. They eventually purchased a 2-acre (0.8 ha) former nursery site in Te Puna, near Tauranga, and released their first catalogue in 1989.

Ian's background had been mainly in trees and shrubs but now he was handling mostly perennials and orchids. This was a huge learning curve and in the same year they bought the business, Finn, their third son, was born.

Ian recalls that, “Parva Plants was very interesting and a big contrast with D&D where we grew thousands of one kind of plant for three months then another variety for the next three months. At Parva we were growing lots of varieties, but in small numbers.”

“Parva’s customers were very keen and discerning gardeners and we had a lot of correspondence. Anything rare and unusual in the catalogues and they’d swoop on it so fast it wasn’t funny!”

While building up Parva Plants, Ian was instrumental in the formation of InPlants, and in 1991 became a New Zealand grower for Australia-based Anthony Tesselaar Plants. These three companies have been responsible for importing and distributing a wide range of plant selections new to New Zealand, including the Flower Carpet white rose from Tesselaars.

Ian remains active in the nursery industry following the sale of Parva Plants in 2008, having owned the business for almost 20 years. Until recently, he was head licensee for Anthony Tesselaar Plants, and under his new business, Plant Struck, organised the PVR work for Tesselaars. Ian still serves on various committees and actively continues in the development of new plants.

Ian first joined the International Plant Propagators’ Society (IPPS) in 1981, the same year as his Massey colleague Eddie Welsh. After serving on the IPPS–NZ committee, Ian became President in 1998, and International Director during 2000–2001 and 2011–2012.

In 2014 Ian received the IPPS New Zealand Region Award of Merit, the highest award for all-round meritorious service to IPPS New Zealand and to New Zealand horticulture.

In 2019 the Royal New Zealand Institute of Horticulture is recognising Ian Duncalf’s talents in plant breeding by awarding him the RNZIH Plant Raisers’ Award. Ian is best known for his breeding work in *Agapanthus*, *Alstroemeria*, *Clivia*, and *Eucomis*.

Agapanthus

Ian has been an independent assessor for the outdoor agapanthus performance and fertility trials at Auckland Botanic Gardens. He is also part of the Agapanthus Working Group, established to co-ordinate activities of Auckland Council Biosecurity, Auckland Botanic Gardens, Manaaki Whenua – Landcare Research, Plant & Food Research, New Zealand Plant Producers Incorporated, and the nursery production industry. Ian’s agapanthus selections have been bred to meet market demands for low seed set, compact growth and, for some, variegated foliage. *Agapanthus* selections raised by Ian Duncalf include:

- *Agapanthus* ‘Finnline’ (Fig. 2), a variegated leaved ‘sport’ (spontaneous mutation) of a dwarf white *Agapanthus* seedling. It has very low seed set and was discovered by Ian around 1999.
- *Agapanthus* ‘Finn’ PVR (Fig. 3), a green leaved reversion of A. ‘Finnline’ that carried across the characteristics of low seed set with it. Both cultivars are named after Ian’s youngest son Finn, and are semi-dwarf with narrow leaves and white flowers. Ian probably started to bulk A. ‘Finn’ up around 2002 and made the PVR application for this selection in 2006.
- *Agapanthus* ‘Thunder Storm’ PVR (Fig. 4), a semi-dwarf selection with relatively broad green leaves that are variegated cream, with soft blue flowers, and very low seed set. It arose as a variegated sport found amongst growing-on lines of A. ‘Gayles Lilac’². Ian discovered A. ‘Thunder Storm’ around 2007 and the PVR application was made for it in 2012. This selection is part of the *Agapanthus* Storm™ series of cultivars marketed by Anthony Tesselaar Plants.

Alstroemeria

Alstroemeria ‘Rock & Roll’ PVR (Fig. 5A–C), is another variegated mutation found at Parva Plants by Ian. It arose as a sport of *Alstroemeria* ‘Red Baron’ which Ian found around 2002 amongst a batch of tissue

culture produced plants. After eight years of further development the PVR application for this selection was submitted in 2010.

There is no denying that this selection is one of the most dramatic combinations of foliage (green, yellow, pink, and white) and flower colours (red and orange) to be found anywhere.

Leaves have a jagged outer margin of green, variegated centrally with yellow that fades to white as the leaves age – some leaves are also pink flushed. Flowers are bright red with orange throats. This bold selection received the Silver Medallion at the Plantarium international trade fair in 2011.

Clivia

One of Ian’s favourite plants is clivia (Fig. 6). He has been a member of the New Zealand Clivia Club since February 2003, shortly after its inception in October 2002. For several years Ian hosted the Tauranga Clivia Show on his property and he still helps organise this annual event.

Ian sows some 10,000 seeds of his own crosses each year. He is seeking interesting new colours and shorter times to first flowering (clivias normally produce their first flowers four to five years from seed). Some of Ian’s releases include:

- *Clivia* ‘Barbara’ (Fig. 7A–B), named for his wife and described by visiting American botanist and plantsman Harold Koopowitz as the best coloured clivia he’d ever seen.
- *Clivia* ‘Deanna’ (Fig. 8), named for his niece Deanna Borren. This cultivar is a cross of Ian’s selection *Clivia* ‘Sharon’ (*C. miniata* × *C. × cyrtanthiflora*) with *Clivia* × *kewensis* ‘Vico Yellow’, selected in 2014.
- *Clivia* ‘Enid’ (Fig. 9), named for his mother.
- *Clivia* ‘Leigh’ (Fig. 10), named for Jude “Leigh” Coenan.
- *Clivia* ‘Lizzie’ (Fig. 11), named for Elizabeth “Lizzie” Smith.
- *Clivia* ‘Lydia’ (Fig. 12), named in 2016 in honour of champion Kiwi golfer Lydia Ko. Its flowers open yellow and age to orange.

² A. ‘Gayles Lilac’ came from Gael Blaymires and was introduced to the market through Parva Plants. Although her name was misspelt in the cultivar name, technically the cultivar spelling should probably stand as first published.



Fig. 2 *Agapanthus* 'Finnline', named after Ian Duncalf's son Finn who is kneeling beside a planted block of this variegated leaved selection. Photo: Ian Duncalf.



Fig. 3 *Agapanthus* 'Finn', also named after Ian Duncalf's son. Photo: Lyndale Nurseries.



Fig. 4 *Agapanthus* 'Thunder Storm'™, raised by Ian Duncalf and one of the *Agapanthus* Storm™ series of cultivars. Photo: Anthony Tesselaar Plants.



Fig. 5 *Alstroemeria* Rock & Roll®, an international award winner raised by Ian Duncalf. **A**, flowers and foliage. **B**, close-up of foliage. **C**, close-up of flowers. Photos: Anthony Tesselaar Plants.



Fig. 6 Ian Duncalf manning a display stand with some of the *Clivia* selections he has grown. Photo: Sandra Simpson.



Fig. 7 *Clivia* 'Barbara'. **A**, flowers and foliage. **B**, close-up of flowers. Photos: Ian Duncalf.

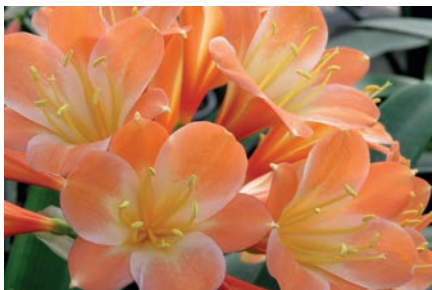


Fig. 8 *Clivia* 'Deanna'. Photo: Sandra Simpson.



Fig. 9 *Clivia* 'Enid'. Photo: Ian Duncalf.



Fig. 10 *Clivia* 'Leigh'. Photo: Sandra Simpson.



Fig. 11 *Clivia* 'Lizzie'. Photo: Sandra Simpson.



Fig. 12 *Clivia* 'Lydia'. Photo: Sandra Simpson.



Fig. 13 *Clivia* 'Sandra'. Photo: Sandra Simpson.

- *Clivia* 'Sandra' (Fig. 13), named after Sandra Simpson. As the yellow flowers age, the petals develop a darker blush.

Eucomis

Eucomis have the unlikely common name of 'pineapple lilies'. This name reflects an unusual combination of lily-like rosette leaves and a flower spike that superficially resembles a pineapple.

Realising the novelty and potential of this native African genus, Ian Duncalf and his colleague Eddie Walsh (of Starter Plants) hybridised species and selections of *Eucomis* for more than 20 years (Fig. 14–15). They succeeded in combining the interesting characteristics of *E. vandermerwei* with a more compact growth form. Their miniatures, intended for the Northern Hemisphere pot plant market, include:

- *Eucomis* 'Tiny Piny Coral'
- *Eucomis* 'Tiny Piny Opal'
- *Eucomis* 'Tiny Piny Pearl'
- *Eucomis* 'Tiny Piny Ruby'.

"It was a good idea that simply didn't work," Ian says. "The plant world is littered with them. We got some traction in the US but ran out of steam because we couldn't crack Europe." With no regrets they have moved on from this breeding programme.

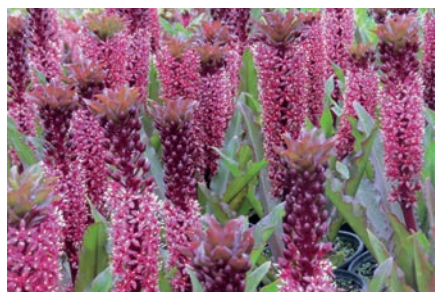


Fig. 14 *Eucomis* 'Blackberry Stout'.
Photo: Ian Duncalf.



Fig. 15 Miniature selection of *Eucomis*.
Photo: Ian Duncalf.

Other plants

In addition to new selections from the preceding genera, Ian Duncalf should be recognised for introductions of other notable plants.

Bergenia 'Marshmallow'. A strong growing variety with flowers that open white and then age to a soft pink, hence the name 'Marshmallow'. This selection was made around 2010 with a PVR application in 2015. It is believed to be a hybrid involving *Bergenia ciliata*.

Galtonia 'Moonbeam'. A fully double-flowered form of the bulb *G. candicans*. Discovered in a private garden at Masterton in 1982 and commercialised by Ian Duncalf and Ken White, who put it into tissue culture, grew it on and distributed it worldwide. *G. 'Moonbeam'* was a major success at the time and is grown as a cut-flower both in New Zealand and overseas. Keith Hammett and Brian Murray confirmed it to be a tetraploid.

Gazania rigens 'Takatu Red'. This cultivar has become a standard 'go-to' for treasure flowers in the New Zealand market. The original selection came from John Davies of Tumbleweed Nurseries in Matakana and jointly with Ian Duncalf decided to offer it through Parva Plants.

Potato Tom™. This novelty created quite a stir when it was first released by Tharfield Nursery in 2013. Ian Duncalf was the "mystery Bay of Plenty nurseryman" referred to by media at the time, who developed the technique over five years and worked with Andrew Bolan in the production. Andrew and Fiona Bolan did the growing on and marketing. It was simply a tomato variety grafted onto a potato rootstock, producing both tomatoes and potatoes on the one plant. Although it was not a new idea (and had been done many times before) the scale of commercialisation was new for New Zealand. Ian was also successful with both capsicum and eggplants grafted on to potato rootstock but they were never put on the market.

Many other ornamental plants were brought into the country or worked on with other breeders in New Zealand for release through Parva Plants. Probably the most notable of these would include:

- *Hemerocallis* 'Stella Bella'
- *Heuchera* (coral bells): the first of the now popular coloured leaf forms
- *Liriope muscari* (lily turf) cultivars: *L. 'Monroe's White'*, *L. 'Royal Purple'*, *L. 'Samantha'*
- *Ophiopogon japonicus* 'Nana' (dwarf mondo grass)
- Wylde Green Cottage violets: Kerry Carmen's selections.

Outstanding selections

The RNZIH Plant Raisers' Award is granted to a nominated individual (or organisation) who has raised in New Zealand a cultivar (or cultivars) considered to be sufficiently meritorious.

From the many selections raised and released by Ian over the years, *Agapanthus* 'Thunder Storm', *Alstroemeria* 'Rock and Roll', and *Clivia* 'Barbara' are considered outstanding for the purposes of this award.

References

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