

CLIVIAS – PART TWO

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In the first part of this article (The Gardener's Journal, May Issue 2) we looked at the history of *Clivia* in New Zealand, and how these beautiful South African plants were relatively unknown and unappreciated. We continue the story at a time when their beauty and easy care qualities are becoming recognised, and generating a worldwide resurgence of interest and demand.

Yellow clivias were first offered commercially in quantity by Bruntwood Nurseries, who were supplied with plants by Ian Duncalf, formerly of Parva Plants. These were 'Solomone' yellows. They hit the market in 2001. Around the same time Dr Keith Hammett began marketing his 'Moonglow', 'Fireglow' and 'Sunset Glow' strains, launching an ambitious growing and marketing strategy to ensure a plentiful supply to meet the rising demand. Terry Hatch of Joy Plants had clivias available, and I was selling a few hundred reds and Australian yellows from my Taranaki garden, Ngamamaku.

Suddenly clivias were the 'in' plant, gaining good media exposure, and the gardening public was scrambling to obtain them.

Dr Keith Hammett, a plant breeder from Auckland, has probably done more than anyone else to promote clivias in New Zealand. In 1973, the year Keith moved to his present property, his appetite was whetted by an article about clivias written by Kevin Walters, and two years later Keith obtained two seeds and an offset of yellows from Kevin. These took five years to flower and were true yellow.

One of Keith's guiding principles in breeding plants is, "If you acquire cultivars from one breeder, cross them with the plants of another breeder," i.e. use separate gene pools. In line with this, Keith has gone to great trouble to gather a very wide gene pool diversity from around the world, and to know its source, so that now his collection would be among the best in the world.

A foundation member of the South African Clivia Society, he travelled there in 1994, taking with him photos of 'Solomone' yellows, which

created great interest. Keith had met Joe Solomone via Eddie Walsh in New Zealand the same year, and visited him on the way to the Clivia Conference in Pretoria. Seed was gathered from habitat populations and many other collectors and breeders, including Yoshikazu Nakamura, the world's leading *Clivia* hybridist. Keith has been involved with the chromosome study of *Clivia* species, and the naming of *C. robusta*.

With Alick McLeman, Terry Hatch, Lisa Mannion and Cindy Barnes, Keith organised a *Clivia* display at the Auckland Botanic Gardens, and from there the New Zealand Clivia Club (NZCC) was formed, with Keith as Chairman. He has initiated and helped club funded research into flower pigment. His property in Auckland grows many thousand clivias, both wild accessions and hybrids, and has been used on several occasions for club events. Keith has always given freely of his experience and knowledge of clivias, and is at present Club Patron and Technical Advisor.

Terry and Lindsay Hatch, of Joy Plants in Pukekohe, are two of our country's most respected plantmen, and as plant collectors have been selling clivias for many years. Terry's original plants were from nurseries growing seeds sourced from Dows (originally Belgian and Californian) and Topline (Japanese). The Hatches' garden is built around a remnant of native rimu, kahikatea and totara forest, and underplanted with great sweeps of established clivias, which thrive in perfect conditions. Terry is convinced that these native trees, related to South African trees, produce a soil mycorrhizum (a fungus) that is symbiotic and beneficial to clivias.

In 1984 Terry swapped a bulb of the very rare blue 'Worsleya' for an offset of a yellow *Clivia* belonging to Lord Aberconway. This wide-leafed plant took three years to flower, and when it did it was crossed with pollen obtained from Jim Holmes and also with one of Keith Hammett's early yellows. The progeny were flowers with notched petals, and a plant of the next generation has flowered with keeled petals.

Terry has been selling mostly red and yellow flowered plants, and more recently a pastel range, the result of red/yellow crosses. He has made various interspecific crosses, and also has an interesting plant found at the home of the Archbishop of New Zealand, in Parnell, Auckland. This flowers pale orange, very different to our usual common form of *C. miniata*. Apparently in the early part of last century there was a South African Bishop of Auckland, and he may well have brought this plant with him.

Ian Duncalf, a consummate plantsman, was until recently owner of Parva Plants, one of New Zealand's oldest and most respected plant mail order businesses. Ian met Joe Solomone at an International Plant Propagators Conference in New Zealand in 1994. Joe was promoting his yellow clivias, and Ian, always on the lookout for something rare or new, imported 100 flowering sized plants for \$46.00 each (\$US 35) and one hundred offsets for \$US 6.50 each. They left the U.S.A on 7th Nov 1995 and were released from New Zealand quarantine in May 1996, having flowered and been pollinated while in quarantine. This seed was grown on to flowering size with confidence that the progeny would be true yellow. They all were. The original plan was to produce saleable plants by division, but as there was considerable variation, it was decided this was not feasible. Ian gave some of the big ones to Keith Hammett, Peter Goodwin, and Eddie Walsh of Massey University. The rest were kept as stockplants for a further few years, then sold in 2001, only fifteen of the best being kept.

One of these was a relatively compact, broad-leafed plant that consistently produced striped seed berries. Seed of this was kept separate, but offspring did not have the stripe. However, the most compact, broadest leafed of these seedlings were kept and intercrossed, and this was the nucleus of Ian's 'Yellow Tiger' strain. Ian also imported yellows from South Africa, which flowered the year after his 'Solomone' stock, but they were not as good.

Ian's overall plan was to develop seed strains, going with the obvious differences in plants he had, and developing these. This he has done, now selling 'Solomone Yellows', 'Yellow Tiger', and 'Yellow Spider' strains. These names are not registered, as they are for his own reference. He still has hopes for a good red strain, and a true breeding wide-petalled peach.

In return for a favour, Ian was sent seed from Japan of a 'Fuyaki' strain, which he was told was very good. It is very compact, fairly wide-leafed, and flowers a deep orange/red. He suspects it to be of Belgian origin.

'Diane', 'Jude' and 'Sharon' are the best three of a *C. cyrtanthiflora* x *miniata*, the cross being done about ten years ago. None of them has been dispersed, but they have since been crossed onto yellows and good orange/reds, and seedlings sold. 'Delilah' is a good deep red, semi-pendulous *C. miniata* x *caulescens* cross. Ian has sold seed to Diggers Nurseries and Green Hill Liner Nurseries in Australia, and also Lyndale Nurseries in Auckland.

I planted my first clivias at Ngamamaku in 1986, which were plants sold by Topline and North Shore Nurseries, ex Japanese seed. I obtained an Australian yellow via Bill Dyk in 1995, and for the following few years I imported seed of cream, and cream crossed with orange, from Lois Hurley in Australia, and also some seed from Bill Morris via Peter Goodwin. I was also fortunate to be encouraged and given plants of orange/red by Alan Gray, an orchid breeder who had made some crosses and selections from plants bought at local Taranaki garden centres.

I have been crossing my darkest coloured plants to obtain a deep red, and in the opposite direction the softest pastels, which are crossed again with yellow, to lighten them still further. Of course a large portion of seedlings are non-pigmented yellows, which are sold, and only the pigmented seedlings kept and flowered. Stem pigment on the reds is quite a deep purple, and now into the third generation, the pastels are generally showing only light pigmentation. My health has been indifferent for the last few years, and many of my recent seed crops were not harvested or sown. However, things are looking brighter now, and I am planning to be right back into clivias and my garden soon.

Lisa Mannion's affair with clivias began in 1985, when she was given seed by John Lesnie, who grew Belgian seeds imported from Germany by Dow Seeds, and made some selections of his own. In 1995 Lisa met Keith Hammett, and did pollinating for him, in return being generously given twenty-five per cent of the yellow/orange split seed. She also imported Walters' 'Yellow' and 'Twins' strain seed from Ken Smith, as well as other material from South Africa and Japan. But it was the wide-leafed plants of the Belgian hybrids that really caught her eye, and she has transferred this wide-leafed characteristic over to her yellows, and continues to breed for that. Her 'Great Wide Yellow' strain was very imaginatively promoted at the Ellerslie Flower Show, and these now consistently come true with leaves 100 - 120mm wide. She sells her wide-leafed reds and yellows mostly to Auckland landscapers.

David Brundell of Auckland is a plant nutrition scientist who has worked for many years in food and crop research, mostly with cut flowers. He has gathered a wonderful collection of rare and exotic bulbs and plants, and was fortunate to meet Sir Peter Smithers in 1986, and be given a piece of the original 'Vico Yellow' plant. This has formed the basis of his

breeding programme, which aims to produce commercially viable strains in orange and yellow shades which would be the best in the marketplace, with blooms that are bigger, bolder, brighter and better in all ways.

David grows all his plants under cover on a fertigation system, (liquid feed incorporated with water), and believe me, they are bigger and better! He believes that the average temperature in northern New Zealand induces flowering in clivia, and that by removing the extremes of hot and cold, wet and dry, and providing ample nutrients, he has found that many of his plants will produce a flower every five or six months. He has not formally registered any varieties, but has named five selections; 'Heaven Scent', 'Honeymoon', 'Happy Sun', 'Apricot Sun' and 'Mighty Sun'.

Peter Goodwin, of Waikanae, assures us that clivias are the most therapeutic plant he knows, and that many young students were saved from his wrath during the 18 years he was a secondary school headmaster, because he de-stressed while tending his clivias! Obtaining plants from Topline in the early 1980s, Peter also imported 3000 seeds from Miyaki in Japan, and being a compulsive pollinator, crossed them onto the common apricot form to increase vigour and deepen flower colour. This was a rather hit and miss affair, as there was no literature available at the time. However, he joined the South African Clivia Society, to whom he feels eternally in debt as the early bulletins were a huge help. He would love to meet Nick Primich, the founder of the South African Clivia Society.

Peter obtained seed of yellows and variegated *C. daruma* from Nakamura in the early 1990s, and Ken Smith and Bill Morris in Australia, who were very helpful, and also Lois Hurley in Australia in 1997. The last seed lot of Belgian strain from the Cape Bulb and Foliage Co. in South Africa has yet to flower. Peter hopes he has enough time left to see this happen! Using the 'broad-brush' approach to pollinating, and selling broad strains, Peter feels a little guilty for being so "sordidly commercial". However, the fact that he also grows variegates redeems him, and proves that he does in fact love the plant, and is not entirely capitalistic! Selling mostly direct to landscapers in Auckland, as well as liner plants (young plants) to commercial nurseries, finances his racehorse interests. Peter sends a message, that if there are any rich suckers in this audience, he always has a place for you in one of his race horse syndicates.

Di Smith, first Secretary of the NZCC, worked tirelessly to spread knowledge, increase membership, raise funds, make overseas contacts to import seed, organise club events and activities, and generally encourage members to grow, cross and show. She resigned her position in 2006.

Rex Williams, originally an orchid and palm man, obtained his first *Clivia* about 15 years ago at an orchid show, and was seriously smitten with "clivaitis" six years ago. He is still gathering a large diverse range of plants from China, South Africa and the U.S.A., to assess for future breeding. While loving everything, he is particularly interested in variegates and dwarf forms, and wants to breed good quality pinks and interspecifics (a hybrid between different species). He is very organised and methodical, and along with his wife Dee, is creating a wonderful large bush garden in the Waikato foothills. Watch this man. He will become one of the leading *Clivia* breeders of New Zealand in the future.

Peggy Pike sold her tissue culture lab in South Africa in 1999 and came to New Zealand to live, having previously spent a couple of years here. Peggy received a considerable quantity of seed of 'Holmes Yellow', having noted a shortage of clivias in the New Zealand market during her earlier visit. Although she grows mostly *Disa* orchids, the *Clivia* seed was grown to flowering size, and sold in the Auckland and Waikato areas. Peggy will concentrate on disas now, and when all her clivias are sold, she does not plan to continue with them.

Around 1990 Craig Benson traded *Sandersonia* tubers for 1000 *Clivia* seeds of F1, F2 and F3 crosses done by Jim Holmes from South Africa. The F1 were mainly light shades of orange and red, while the others were early yellow crosses, done before Jim had really made his better selections. Craig grew these to flowering size, and also invited Jim to visit New Zealand, but unfortunately this trip did not eventuate, and Craig also had to sell and disperse his entire collection of plants.

In 1987 Barry Ferguson, a New Zealander living in New York, visited Sir John Thouron's home in Pennsylvania, and was given an offset of his yellow *Clivia* by the Head Gardener. When it flowered a few years later, it was self pollinated by Barry, who sent seeds to his friend, Murray Gow, in New Zealand. Murray has used these to cross with various other plants he had,

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and has also imported large numbers of seed from South African breeders. Keith Hammett also imported an offset of Sir John's original plant.

Cynthia Giddy, one of South Africa's early *Clivia* enthusiasts, visited the Jury Family of Taranaki in mid 1985 on cycad business, and on the way called on Keith Boyer of Auckland, another adventurous gardener who works with lots of unusual plants. She had brought with her a plant of her yellow *Clivia*, originally intended for an Australian friend. However, it was given to Keith, along with some seed, which was grown on. Plants of these were given to Bruce Hookum in Taranaki, and also David Brundell and Eric Walton. Keith has never sold any of his 'Giddy's Yellow' on the open market, and still has the original, now an extremely large clump.

Gordon Julian, a New Zealander, who for many years lived in Toowoomba, Australia, had gathered a considerable number of clivias when he decided in 1992 to return to New Zealand. The plants, all yellows from Kevin Walters' stock, were sent on before him to Bill Dyk, a specialist bulb grower in Tauranga. Gordon and his wife Bev changed their minds and went to Tasmania instead, getting more plants from Kevin before they left, and leaving the original ones with Bill Dyk. Bill sold a small number of plants via his mail order business, and it was one of these that I obtained in 1995. These plants were the 'Flowerdale' strain named 'Aurea' in Australia, and generally thought to have been brought from England to Rippon Lea, the garden of Sir Benjamin Nathan in Victoria, Australia, in the early 1920s.

Eric Walton, a plant scientist working for HortResearch in Auckland, is a keen plantsman and avid collector of the rare and unusual. Between 1984 and 1990 Eric imported yellow seed from Les Hannibal, an amaryllid collector in California, and Gordon Julian in Toowoomba. He was also given a plant of Cynthia Giddy's yellow, from Keith Boyer.

Ian Duncalf bought all Eric's spare yellows, to corner the market until his own plants were released via Parva Plants and Bruntwood.

The third and final part of this article will appear in the November issue of *The Gardener's Journal*, and will include a short description of the different species.

The Editor

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