

Nz CLIVIA CLUB INC NEWZLETTER

Volume 2.1 Autumn 2004



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CHAIRMAN'S PIECE

As you will all appreciate our Secretary Di is a hard task mistress and has been pushing me for a few words for days. We are lucky to have both her energy and organisational skills. She and Stuart will leave shortly for the USA to look at some of their Clivias and will no doubt fly the Kiwi flag at the same time. I am reliably informed that she has been organising the Yanks as well as us.

On the home front I am pleased to report that Lisa Mannion survived a car crash this week and is now threatening to replace her vehicle with something that will be able to transport even more Clivias to our shows.

Most of us in the North Island seem to have suffered a mighty storm overnight. This morning I was greeted by the sight of the largest and deadest tree on my property lying on top of my most extensive planting of yellow parent Clivias. It will be a major job to clean up and the consequences will be long lasting as a number of other trees have been destroyed and the canopy lost.

From experience Clivias are tough enough to survive direct sun for quite a long period and although they will scorch, they can recover when the overhead shade is restored. It is important to take events like this in our stride. If we are going to grow Clivias under trees, we must remember that they blow down periodically. Now if anyone needs some firewood...."

Keith Hammett
Chairman
Auckland

COMING EVENTS

1. OPEN FORUM/MEETING FOR MEMBERS

"CLIVIA BREEDING" – Doug Grant & Terry Hatch

Are you having problems deciding which features of your Clivia to enhance for future generations? Let the experts explain, a great opportunity to learn and ask questions. As you know, Doug is a renown hort man and rose breeder and Terry a wonderful bulb and plantsman.

"RECORD KEEPING" – Cindy Barnes
Cindy will explain how to record your pollinations the easy way. How many of us forget what pollen we have put on our gorgeous Clivia because we did not record the details? Cindy will have handy hints and practical record keeping examples for you.

*Horticultural Council Rooms
990 Great North Road Western Springs
(opp the Zoo)
Sunday 7th March 2pm – 5pm*

2. GARDENII SHOW

An opportunity to view Gardenii during the height of the flowering season. Plants will also be on sale. A chance to join a guided tour around Keith's estate and view the hundreds of thousands of planted Clivia.

**SATURDAY 29TH MAY 1PM – 4PM
AT DR KEITH HAMMETTS PROPERTY
488C Don Buck Road Massey
(Park on the grass verge)**



*"Yellow Clivia" bred and grown by Ken Schischka (New Plymouth)
Photo courtesy of Ken Schischka*



Jim Elley (Rotorua) has sent in a photo of his Clivia that he purchased from Parva Plants 5 years ago.



Clivias grown by Rita Watson (Red Beach) Photo by S Watson



CONTEMPLATIONS FROM THE LONG DROP

- *Overheard by our very own 'Madam Snoopiata' at a dinner party of Clivia enthusiasts - "I am sure the grape that produces the delicious Shiraz, is DNA identical to Clivia, why else would they go together so well?"*

Dream On !! - Ed

- *Our Secretary wrote to the Auckland Int Airport re the care (lack of care?) of their Clivias in January - still no reply! thought you would like to see a photo of "how not to plant your Clivias"*



Letters to the Editor :

We had a huge response to the mail-out re the DoC article. Here are a few excerpts from emails received in our mail box - keep them rolling in.

...I will have to abandon painting the house soon to slash all this rampant Clivia growth away from the front door to stop them from getting inside...

H Sanders - Whangarei

Winning Letter of the Month - Helen wins 2 pkts of K Hammett seed J

What are they smoking at DoC ?

P Trounson - Wanganui

Not sure Paul ? dried crushed clivia berries ? - Ed

...well done to the team with their response to the newspaper article.

E Edie - Auckland

If in fact Clivias are growing in streams, I will be first to remove it....

A Roberts - New Plymouth

A note from the Editor - if anyone sees Clivia (esp gardenii) growing in waterways, culverts etc in the Rangitikei area, they belong to the Secretary's daughter, she lost all her Clivias in the flood.. L

From Brian Rathbone (Whangarei)
'Chubbs Peach' and 'Vico Yellow'

Clivia

**Dr. Keith Hammett
Auckland, New Zealand**

The growing of ornamental plants is subject to fashion as are other forms of aesthetic activity. Undoubtedly such changes reflect broader collective ideas and conditions within a society.

Until relatively recently fashions might vary widely between cultures, whether it be with regard to the types of clothing worn or plants grown. However, we live in an era that has been termed the communication revolution. This is certainly having as much influence on the decorative plants that we cultivate, as did the industrial revolution of the eighteenth and nineteenth centuries.

The Internet enables rapid exchange of information, ideas and images worldwide and today there is a plethora of special interest groups discussing a bewildering range of topics. Judging by the ever-increasing flow of messages in the group devoted to the genus *Clivia*, it looks set to become a fashionable plant of the twenty first century.

The genus *Clivia* is a relatively small genus found only in Southern Africa and although it is not strictly a bulbous plant it is normally treated as such for literary purposes. The first species to be described was *C. nobilis* in 1828. This was followed in 1854 by *C. miniata* originally named *Imantophyllum miniatum*, but changed 10 years later. *Clivia gardenii* came shortly afterwards in 1856. Eighty-seven years elapsed before *C. caulescens* was named in 1943 and at the time of writing, May 2002, the discovery of a remarkable new species *C. mirabilis* has just been published. (Rourke 2002). With the exception of *C. miniata*, which has upright flowers, the other four named species have pendulous flowers and have often been confused in cultivation.

Today wild populations of species occur in relatively small pockets often widely separated from each other and in reality the genus appears to be in retreat. As all previously known species of *Clivia* are unable to tolerate full sunlight, its current distribution reflects the progressive destruction of forest vegetation which was formerly much more extensive than it is today.

Clivia caulescens is found in the North East of South Africa from approximately Nelspruit northwards to the Zimbabwe border. *C. nobilis* occurs in a coastal strip from Port Elizabeth in Eastern Cape reaching into Transkei. *C. miniata* is distributed from Transkei through Natal and into Kwa Zulu. *C. gardenii* has an apparently similar distribution, although it exploits different ecological niches. Just discovered *C. mirabilis* is remarkable, as its name suggests, in being found 800 km to the west of *C. nobilis* its nearest neighbour in an arid, Mediterranean type climate and apparently able to withstand full sun.

Traditionally botanical classification has been based on the morphology or shape of plants with particular emphasis on the flowers.

It is important to remember that a great deal of taxonomic work (classifying) has been carried out on dried specimens mounted on sheets of paper (herbarium specimens) and that for many species the botanist will not have had the opportunity to see living plants. This came about because our ideas on botanical classification are European or Western in origin and much of the work was carried out at one or other of the great botanical institutes in Europe after specimens had been collected from around the world. Only *C. caulescens* and *C. mirabilis* have been named in their country of origin.

It has to be said that until recently it was difficult to identify the pendulous species from the inadequate descriptions that were available in horticultural texts. This has been remedied by enthusiasts working with living plants both in collections and in the wild. Such work has been encouraged by the formation of a *Clivia* Club, lately Society, in South Africa.

Clivias are slow growing plants, especially *C. nobilis*, which in cultivation takes many years before it will flower when raised from seed. In general fruits of *C. miniata*, the most commonly cultivated species, take nine months to mature

following pollination. Within populations raised from seed there can be considerable variation in how old a plant may be before it will flower. Some individuals may flower within two to two and a half years from sowing, while others may take ten or more years.

It is important to remember that some characteristics are not fully expressed until a plant has achieved some maturity. First blooms are often poorer than those produced in second and third seasons of flowering. With *C. caulescens* the caulescent stems which can reach several meters in length in the wild are seldom seen in cultivation simply because the species has not been widely cultivated for any length of time. It is a matter of conjecture how old plants with very long trailing stems seen in the wild might be. Individual *Clivia* plants are long lived and some specimens of *C. miniata* have been maintained within a family for several generations. It is therefore feasible that individual plants of *C. caulescens* with very long stems could be a hundred or more years old.



Photo Courtesy of Keith Hammett

C. miniata is the *Clivia* most commonly encountered in cultivation. Its large upright flowers are showier than the other species and from the time of its introduction to Europe in the 1850s it has been the subject of "improvement" both with regard to flowers and leaves.

Its upright flowers alone are normally sufficient for identification. Leaf shape has been greatly modified in cultivation. German and Belgium breeders started to develop broader leaved forms in the late nineteenth century and this trend has been further developed in the Far East. In Japan the squat broad-leaved Daruma forms have been developed. Much emphasis has been placed on a strict distichous habit, broad downward curving leaves and perfect precise interlacing of the leaf bases. These characteristics have been further developed in China following the introduction of this form of Clivia during the 1930s.

The city of Changchun despite an unlikely climate has become the center of development of Clivia in China. This occurred historically because the Japanese installed the last Emperor of China as a token leader following their invasion of Manchuria. Changchun was the seat of power for the Emperor and the Japanese Emperor presented the Chinese Emperor with plants of Clivia for use by his court.

After the Second World War the plant slowly became available to more people and in the early 1960s an enthusiasts' organization was established. The plant has, however retained its position as a status symbol. Good quality plants are still considered to be an investment despite a period of grossly inflated prices during the 1980s.

There is a strong body of Clivia breeders in China and competitive shows are held. Detailed criteria of perceived excellence have been developed and interestingly 99% of points are allocated to plant and leaf characteristics with only 1% for flowers. Leaf width, shape and surface features are important in determining the value of a plant. This reflects the fact that the plants are always grown in pots and are treated like individual works of art. While the Japanese favour a downward curving leaf, the Chinese prefer them to be more upright.

Almost without exception, whenever a plant has developed a "following" and enthusiasts have formed organizations, the plant has been exotic, and this is the case with the Chinese Clivia Association. Although not formalized until 1992 it is significant that the now international Clivia Society was formed in South Africa where the plant is indigenous and the people concerned had little knowledge at the time of any developments outside Western Culture.

When a plant develops a following an interest is taken in tracing the history of the development of the plant in cultivation as well as the botany of the genus. Inevitably such histories can only be as good as the fragments of information that were recorded. In Britain, Australia and New Zealand a narrow leaved form of *C. miniata* has been referred to as "species" *miniata*. This is widely distributed in frost-free areas of Australasia. It seems likely that this is a single accession, probably from Natal, with moderate sized mid-orange flowers.

It is easy to fall into the trap of assuming that the broader leaved forms have been developed from this form, possibly initially unconsciously as larger flowers were sought. However, since the advent of the Clivia Club much interest has been taken in viewing the plant in the wild, especially in previously inaccessible regions such as the Transkei. Unlike many cultivated plants, some of these new "wild" accessions have been more spectacular than many plants already in cultivation.

As broader leaved forms of *C. miniata* occur in the wild it is entirely likely that quite a number of unrecorded distinct accessions found their way to Europe and formed the basis of European breeding. In fact coloured illustrations from horticultural publications from the 1880s clearly suggest that breeders were using accessions distinct from the common form. These were often given names such as *Maxima*, *Robusta*, *Splendens* and *Grandiflora*.

At this time, more work is required to distinguish between the early work of breeders in Germany and Belgium. However, large flowered broad-leaved forms were developed which became known as "Belgian Hybrids" [albeit intra-specific hybrids]. Often the flowers of these had stronger red colouration and tulip shaped flowers. Such plants were grown as houseplants like aspidistras and could become very large and take many years to flower when raised from seed.

After the Second World War the emphasis of European commercial breeding changed to produce a plant with the ability to flower within 2- 2.5 years from seed. Such plants are sold in relatively large numbers as a commodity and are shipped before the flowers are fully open. Such plants are smaller, may have narrower leaves and flower form can be variable.

It is enthusiasts, primarily hobbyists, who have explored the possibilities of different flower shapes and colourings. Often they have worked in relative isolation from each other, even if located in the same area. Today considerable variation exists with regard to flower-shape, colour combinations, leaf form and leaf variegation, but it is only since the advent of the Clivia Club and its offshoot the Clivia Net Group that there has been an explosion in the exchange of information and plant material. With the bringing together of ideas and material developed separately in Europe, USA, Australasia, Japan and China the next few years will be very exciting.

Much mystique has been associated with yellow or cream flowered forms of *C. miniata*. The "wild type" orange colour results from water-soluble anthocyanin pigments superimposed over a yellow background of carotenoid pigment contained in discrete plastids. Mutations occur where the formation of the anthocyanins is blocked, resulting in cream or yellow flowers.

Such plants have been found both in the wild and in cultivation. Plants found in the wild have sometimes been maintained in cultivation by several generations of the same family as a living heirloom.

MEET ANOTHER COMMITTEE MEMBER

Introducing : John Meyer Clivia enthusiast and retired School Principal from Auckland

Until relatively recently little breeding has been carried out on the yellows and they were most commonly propagated vegetatively. As this is a slow process, yellow Clivias remained rare and if they became available for sale they often fetched high prices, especially in the USA and Japan.

While there is the suggestion that two distinct forms of yellow Clivia exist, with different breeding systems, the most commonly available yellows will produce 100% yellow offspring if crossed together. If crossed with an orange or red the offspring are 100% orange or salmon. If individuals in the F₁ population are sib-crossed approximately 25% of the F₂ population will be yellow/cream. If individuals are backcrossed to a yellow approximately 50% will be yellow. This all clearly points to a single or the same mutation. As forms with broader leaves and larger flowers have resulted from one and a half centuries of breeding orange and red forms there is a lot of merit in following this route of development.

Variation of the leaves occurs in some seed lines and superior clones with stable aesthetically pleasing variegation have been established, although these remain rare. In addition to longitudinal variegation the Akebono form where variegation is horizontal has been developed in Japan. The development of this form of variegation appears to be temperature related.

Clivia gardenii



Photo Courtesy of Keith Hammett

The pendulous species of *Clivia* are not widely grown in comparison with *C. miniata*. *C. gardenii* is grown in frost-free areas where it can be naturalized under trees. It is a relatively variable species in nature and only a few accessions have been widely introduced to cultivation. The species is most easily recognized by the fact that it flowers during the winter, whereas the other species flower in succession from early spring to early summer. The most commonly encountered form of *C. gardenii* has lax leaves with a pronounced central groove and sharply pointed leaf tips. Good diagnostic features are that the undersides of the leaves tend to be a pale whitish green and both the stigma and stamens protrude well clear of the flower tubes unlike the other pendulous species. The flowers are somewhat curved, and are pale orange, sometimes near yellow, tipped with green.

To be Continued in the next NewZLetter....



My interest in Clivia developed through being a member of the Camellia Society. At that time the late John Lesnie, well known Auckland photographer, member of the Camellia Society and a Clivia enthusiast introduced me to the genus, about 20 years ago. At that time there were not that many clivias on offer.

My interest in "yellow" Clivias was first sparked by many years ago attending a lecture by Keith at what is now Unitec. A few years later I was able to buy a plant from Keith and through his generosity able to take it to stud regularly, starting about 6 years ago. The first offspring came into flower in 2002. I gave away most of the seedlings which I hybridised, the most interesting being one raised by Rita Watson (see photos attached, taken by Shelley Watson).

I enjoy a wide range of plants. My wife says I am a plantaholic. Sometimes I feel the searching for a "particular" plant is the most interesting part of the process! (My wife says - certainly not gardening!)

My wife and I are sustaining members of the NZ Camellia Society, both having been on their committee for several years. I am also a long-time member of Pukeiti and NZRA and am an NZRA Council member as Auckland rep. Both my wife and I are active in the Rhododendron Auckland Group. She was secretary and treasurer until relinquishing the latter this year, and I have been president for a number of years.

I was a founder member of the Auckland Botanic Garden Friends' Propagation Group, along with Mary Colquhoun and Bev Wade. I belonged for two years, being in charge of it for one year. I was also a Friend's committee member for one year.

I went with Os Blumhardt to North Vietnam on his last overseas trip when he was seed collecting there and have been to China twice on Pukeiti tours, the first being to Yunnan. Another member of that tour was Jack Hobbs, who has subsequently guided his own tours to China. The second trip was to Sichuan. The degree of knowledge that some of our tour members and the Kunming Botanical Garden liaising people shared about the native flora was very profound.

It is good to see the quality and range and enthusiasm shown by NZ Clivia growers.



CLUB LIBRARY

You are encouraged to borrow literature from the Club Library..

- q 'Clivias' by Harold Koopowitz
- q Clivia Society Year Books 1 – 5
- q Chinese Clivias (with English translation)
- q Further books will be available soon

Loan fees are \$10.00 per consignment (courier costs to lender included in fee)

Loan Period 2 weeks or by prior arrangement

Email nzclivia@clear.net.nz for more information

From the Editor's Desk

The Committee has been hard at work planning the year ahead (plus most of 2005) We have 3 lectures/meetings coming up. We encourage you to attend if you can. A great opportunity to increase your knowledge, ask questions. Always feel free to bring along a clivia plant if you either want to "show it off" or you have a problem with it.

As you can see it's a shortened NewZLetter this month. It's not that we are short of information (but we can always do with more), just that Di and I are off in March to LA for the Inaugural North American Clivia Society Clivia Exhibition. We are staying with Clivia friends in LA. After the Show we are off on a tour of Clivia Breeders/Growers in the CA State. I promise you photos and a full report in the next NewZLetter

Thanks to those who have sent in photos, letters, snippets for the 'Compost Heap', articles etc and allowed us to take a peak at your Clivias. Please send in more. Remember this is your NewZLetter... If you are in the Tauranga, Whangarei or New Plymouth areas, don't forget that a Clivia Show will be in your area in October. 2004 is going to be a huge but exciting year.

Coming up in the next NewZLetter – Finding out more about Sir John Thouron, Report from the NACS LA Clivia Show, Viruses, Prevention of Frost Damage, Meet another Clivia Personality, More on the Clivia Species.....

Happy Clivia Growing Stuart Hill - Editor

AND FINALLY....

- Ø The Clivia Society Year Book 6 is due to be published in a few months. If you would like to order one of these invaluable, informative publications, please email the Secretary (cost approx \$26)
- Ø **While on the subject of the Clivia Society (South Africa), check out their website. There is a ton of great information, including membership forms should you wish to join.**
www.cliviasociety.com
- Ø Colour Charts – a few Colour Charts are still available at \$15.00 each plus .40 p&p. Send your chq to the Club address.
- Ø **Packets of notecards still available for \$5 per set (4 cards & env per set)**
- Ø Only a few people left who have not renewed their subs for 2004. If that's you, would you please send in your \$15 membership fees – thanks. Final Reminder notices will be sent out in April.

NZCC SEED BANK

Donated Seeds available for sale.

Code	Description	
103-01	Ex Keith Hammett Miniata – Orange open pollinated. Range includes 'wild collection' and 'hybridised'. Finer flowers to larger chunkier forms can be expected, with all possible shades of orange.	1 pkt @ \$5.00 per packet of 10 seeds
103-02	Ex Keith Hammett Miniata – Yellow, open pollinated. Possibility of being yellow, if Orange flowers occur they will be Orange X Yellow	1 pkts @ \$5.00 per packet of 5 seeds

If you would like to purchase seed, please send your chq made payable to "NZ Clivia Club" to the Secretary

We appreciate the ongoing support of members in donating seed to the Seed Bank, especially 'non-ordinary' varieties. So far, funds raised have been used to purchase library books. All new members are sent a small packet of seeds. Remember : once you have the Clivia addiction, there is no known cure

Yes, very true - Ed

Contact the Editor or the Secretary At

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CHECK OUT THE WEBSITE www.nzclivia.org.nz

