

Volume 10 Number 1 Autumn 2001

CLIVIA SOCIETY NEWSLETTER

Clivia Society, PO Box 53219, Kenilworth 7745, South Africa



Membership: R.S.A. R80-00 p.a.; Overseas US\$20 (or equivalent) p.a.

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Views expressed in the newsletter are not necessarily those of the committee and the Clivia Club.

While autumn approaches in the southern hemisphere our northern hemisphere clivia enthusiasts will be enjoying the flowering of their clivia. The Clivia Conference in Pasadena, California will be a high point in the year. The two-day programme at the Huntington Botanical Gardens starts with a welcome by the Director, Jim Folsom. Included in the programme will be topics on hybridization, Japanese and Chinese clivias, colours in clivias and a 3-D slide show. We hope it is well attended and encourages more overseas members to join the Clivia Club.

We have reverted to a plain cover to save costs. The design for the cover of this newsletter has been drawn by one of our club members in Mpumalanga, Erica du Toit. Thank you very much, Erica. Perhaps some time in the future when funds permit we will revert to a colour cover. In the meantime we will have to wait for the yearbook for colour photographs of clivias.

The Annual General Meeting took place in Pietermaritzburg on 2 December 2000 and some of the reports are included in this newsletter. The Treasurer's report will be published once this has been audited. In the present issue of the newsletter we visit once again our recurring genetic theme with two contributions from Bill Morris in Australia. His articles should clarify how yellow Belgian Hybrid type clivias and peach or pastel clivias originate. Both local and overseas club members have contributed to the subject of clivia cultivation and allied topics.

Craig Honiball has completed his MSc (Agric) degree and a summary of his findings are in this newsletter. Braam Opperman is the personality for this issue and although a relatively new Clivia Club member has a wonderfully well organised nursery.

Branch activities have been omitted in favour of letters and articles although there have been meetings and get-togethers. The 2001 AGM, tour dates and shows are announced so that plans can be made timeously.

Meg Hart

Clivia Club AGM 2 December 2000

CHAIRMAN'S REPORT

It is just over a year since the administration of Club affairs moved down to the Cape. Naturally it has been a year of settling in, but hopefully the teething problems are now behind us.

We began the year with three main objectives, to increase Club membership, to upgrade the newsletter and to implement a new Constitution.

At this time of annual review, we can once again happily say that our membership has grown considerably. It has also spread over a wider area. We now have Interest Groups in George, Port Elizabeth and East London and more recently in Newcastle under the leadership of Dries Olivier. It is hoped that in time these groups will become fully fledged branches. It is also hoped that other members who live distant from the present branches will be inspired to start interest groups in their area.

The Eastern Cape Interest Group began in Port Elizabeth in November 1999. In just one year the membership of this group has grown to 102. They staged their first show on 30 September and 1 October 2000 and had 68 entrants. A most commendable effort.

Membership overseas has also increased and we are very grateful for the efforts of Ken Smith who acts as the Clivia Club representative in Australia. Membership in Australia is now at 59. We are also grateful to Michael Jeans who coordinates Club matters in the United Kingdom where membership is 14. It appears that the Yearbook has inspired international interest.

The Central Committee have attempted to move the Club towards a more federal method of operation. The Central Committee sets policy and guidelines, makes decisions in the interest of the Club as a whole and is responsible for the production of publications. It also promotes the club at a national and international level. Each branch however operates autonomously under its separate constitution and the administration of branch affairs and the servicing of members is now the total responsibility of each branch. This has greatly relieved the pressure placed on the Central Committee.

The Newsletter now has a very attractive cover and is well set out. Thanks are due to Meg Hart, assisted by Chris Vlok, for the fantastic new look! The Editorial Sub-Committee now consists of a representative from each branch. Please keep contributing to the newsletter. It is the voice of all members - an opportunity for all to share experiences, observations and knowledge with fellow members. Unfortunately the colour cover comes at a cost and we will have to consider whether we should continue with it. We have also experienced problems in the distribution of the newsletter, particularly to overseas members, but hopefully these have all been resolved.

On the positive side, we are very happy that we have been able to maintain the annual levy at R80 per member. The Central Committee feel it is not only important to broaden the geographic ambit of the Club, but also to keep it within the reach of all. The levy covers the costs of producing the Yearbook and Newsletters, including postage to members as well as administration costs. No annual report is complete without an expression of appreciation to the treasurer. Ian, a very special thanks to you for the work you have done. We are very grateful for your competence and level of commitment.

Thanks also to Chris Vlok who has continued to publicise the Club wherever possible and is looking into the feasibility of having a web page to help promote the Club.

The new constitution remains an unresolved item. Two different constitutions were proposed in 1998 but it was difficult to get all branches to a point of agreement. It was therefore agreed to seek the help of an advocate. We end this year fervently hoping that it will not be long before we have a constitution that is acceptable to all. When this happens, we will call a special meeting to adopt the constitution and elect a new committee.

I think the highlight of the year was the publication of yet another beautifully illustrated Yearbook. Credit must be given to the Editors, particularly Mick Dower who throughout the year is ferreting out interesting articles and engendering enthusiasm for this publication. Well done!

And thanks to Chris Vlok who has produced "Hints for Growing Clivia", an informative booklet that hopefully will prove useful to members and enthusiasts.

In keeping with the Club's goals, financial support has been given to Craig Honiball, a postgraduate student at

the University of Pretoria, for research into aspects of the commercial development of Clivia.

The need to register new cultivars of Clivia has been addressed and Nick Primich is to be thanked for taking the initiative in coordinating this process. The success of this ongoing project depends largely on the support of branches.

To conclude, I think the Club is in a healthy state. All branches are flourishing and have produced very successful shows. Our mission, as the Clivia Club, to promote and conserve Clivia, has been met. We move forward into another year hopefully developing strong and meaningful relationships within our Club as we further our love of the magnificent Clivia.

My thanks to all committee members, Joy Woodward and others who have given a great deal of time, support and effort to help our Club.

John Winter

PUBLIC RELATIONS OFFICER'S REPORT

Dear Members,

I would never have dreamt the day would come that the Natalians would agree to a meeting on which flowers are to be discussed whilst the national rugby team is on the field playing England. Perhaps it has something to do with the result of the Currie Cup final played some weeks ago. On the other hand it is probably yet another proof of the popularity which Clivia have attained in recent years.

As regards public relations, I feel it was quite a successful year. There were one or two hiccups with the marketing of the shows at National level, but the end result was that thousands more people became aware and interested in Clivia.

Thank you and congratulations to all the branches and interest groups for their dedicated effort at organising shows, meetings and trips to the Clivia locations in the wild. One of the aims I set myself was to publish a booklet which the Club and branches could offer when people ask 'how to' questions related to Clivia. Thanks to contributions of members of the calibre of Gert Wiese, Bing Wiese, Christo Lötter, Nick Primich, Mark Laing and Frikkie Marais this objective has materialised in the form of the booklet "Hints on growing Clivia" which the club could offer to branches at a give away price of R3,00 per copy.

I am not sure whether National Clivia Day on 1 September was a success. Little feedback was received from branches. The private initiative of two members contributed enormously in globalising the interest in clivia and exchanging cultivation practices. I am referring to the electronic chat group initiated by Rudo Lötter and the clivia web site which is the brainchild of Ken Fargher. I had discussions with Ken regarding the possibility of announcing services and activities of the Clivia Club on the web site. Not only is this a strong possibility, but it appears that it will have little or no financial implications for the Clivia Club. To my mind it is an opportunity not to be missed.

Chris Vlok

EDITOR'S REPORT

A newsletter of 24-28 pages is produced quarterly and is identified by season: Autumn (February), Winter (May), Spring (August) and Summer (November). It is then posted in March, June, September and December. Anyone wishing to contribute to the Newsletter must have their contributions in the hands of the editor at the beginning of February, May, August and November. The Branches and Interest Groups are responsible for submitting their contributions. Items may be used from the e-mail chat group. Information from other sources is acknowledged and if necessary permission is obtained from the editor or the publisher of the source (journal, book or personal communication).

The contents commonly consist of:

- ✂ An editorial
- ✂ Comments from the Central Committee
- ✂ Correspondence
- ✂ A scientific, research or published article
- ✂ A personality
- ✂ News from the Branches and Interest Groups
- ✂ Items for sale
- ✂ Beginner's Luck - tips on Clivia cultivation
- ✂ On the Compost Heap - some comment from the editor.

Contributions are received by letter, fax or e-mail or dictated over the phone. The editor does the necessary typing and correspondence. Adri Haxton and others have helped to proofread the newsletter. In the past the Editor was also responsible for production. It was printed, photostatted, collated and stapled and the finished item was distributed by the Membership Secretary.

Since the election of the new committee in 1998 this function has been performed by the Membership Secretary or the Public Relations Officer. They have been responsible for the new format with coloured covers and a new layout, which came into effect in 2000. While the Newsletter is more attractive and easier to read, it has become more expensive and the production process has been lengthened.

The Clivia Club computer which is used to produce the Newsletter was bought some years ago and additional programmes such as Internet facilities, Microsoft Word and Antiviral software have been added. It has almost reached its full capacity and will have to be serviced and upgraded shortly. The Editor's expenses are those normally found in a publication office and include such items as telephone bills, faxes, postage, e-mails and stationery.

Meg Hart

REPORT FROM AUSTRALIA

This year has seen a major increase in the membership of Australian Clivia enthusiasts.

At the end of 1999, 33 renewal notices were sent out and 29 members renewed. I am waiting on 1 more renewal at this stage. During February this year, 39 memberships were recorded. By mid year the number had grown to around 55. As at December 1st, 80 members are on file. New membership has been steadily growing, with several enquiries per week being received. Several factors account for this, namely garden magazines profiling Clivia at flowering time, the Internet, and word of mouth. One member in Victoria, David Bearlin, is also actively encouraging membership by sending out subscription forms and offering a

discount to members who purchase plants from his nursery.

The first half of the year was very quiet as far as newsletters were concerned. This changed at flowering season when the Yearbook #2 was posted to members. Then came the newsletter #1 and #2. I received a batch of photocopied #1 and complete #2, including the colour cover. These were sent to members. Newsletter #3 was sent to me as a batch of colour covers, and after printing and collating, these were posted to members. I am hoping that the newsletter #4 will be with us by the end of the year. After all the discontent at the start of the year, I have received many comments about the great value of the Yearbook and the newsletters.

Many Australian members have taken advantage of the seed offerings put out by the Club this year, and I sense a greater "collector" situation within our ranks. Many members are enthusiastically awaiting the flowering of their promising seedlings. A lot of correspondence and discussion is being carried out regarding the seed sowing and cultivation. This is always a learning curve for everyone involved. It makes the hobby most enjoyable.

Membership in Victoria (25), NSW (24) and Queensland (18) is strongest. South Australia (7) is slowly picking up. The other states are Western Australia (3), Tasmania (2) and ACT (1). There are no members from the Northern Territory.

I remind members that they can contact me regarding anything to do with the Clivia Club at any time. If it has anything to do with Clivia, then I can probably help out.

Ken Smith

Correspondence

COMMENTS AND SUGGESTIONS ABOUT THE COLOUR COVER

I would like to say a very sincere thank you for the newsletter - especially the colour covers. What a treat to open the envelope and see the beautiful photographs of clivia in colour. I am sure it is a lot more work but it is truly worth it. I hope there is enough money available for the extra cost.

Toy Jennings

7 December 2000

We would like to thank you very much for the lovely newsletter in its new form. Please don't stop the colour cover. We have so little colour in our lives with all the crime in our country. It would be very boring to go back to black and white and we want to see the clivia in its real beauty in colour. We also do not own a computer being "Old Toppies" as well as being unable to go to the website to view the clivia in colour.

We would also like to take this opportunity to thank Mr. Ken Smith of Australia very much for the wonderful gift of 10 seeds he sent us as a gift.

Hendry and Jenny Benadie

8 January 2001

Thank you for all the time and effort you put into the make up of the newsletter. I think the new format is

first class and a pleasure to read. I always show my friends the latest copy of the newsletter as there is always a picture or two to brag about with what must be the most beautiful indigenous flower from SA. They always pass some positive comments about the newsletter in its present form. I have seen a lot of newsletters in my life and consider ours to be the best of all.

Len Stratford
10 January 2001

Hello Meg, let me congratulate you on the excellent job you are doing. The 'New' Newsletter is a great improvement over the old. You may recall that in the past I have advocated starting a 'Color Fund'. The Cymbidium Society of America has such a fund for its newsletter. This allows members, strictly on a voluntary basis, to make contributions which translate into more colored pictures even in the text and not only on the covers.

Best regards and keep up the excellent work.

Maris Andersons, Santa Barbara, California
12 January 2001

YELLOW BELGIAN HYBRID TYPE CLIVIA

The letter about yellow Belgian type clivia and your reply, in the last newsletter [Spring 1999 Vol. 8 No. 3], and the small comment in the previous newsletter, were of interest to me, as I have experienced something similar. We have in Australia a strain of broad leafed compact growing Clivias which although only labelled *C. miniata* seem to be "Belgian Hybrids". The seed is imported from Belgium which seems to support my identification. The flowers are variable but of good quality and are generally a good orange red in colour. For a few years now I have been intercrossing these plants to increase my numbers of this strain.

This year, quite unexpectedly, I obtained about twelve totally green seedlings from about 120 seeds. As there were a number of plants involved in obtaining the seed I have no idea which plants were the parents, as the seed was pooled before planting. This is very interesting as the green seedlings are most likely yellows. I have grown sufficient yellows and picked out enough yellow seedlings at an early stage to be reasonably sure that these are yellows. It suggests that yellow genes are present in some plants of the Belgian strains. I suspect it could be similar to the situation I described under the title of "Wild Clivia Populations as a source of 'new' mutations" in the November 1998 Newsletter. Probably a yellow flowered plant was crossed with a red many years ago and one or more of the orange seedlings was used in breeding the Belgian strain.

The question is why, if yellow genes are present, don't they turn up as yellow flowered plants more often?

I suggest the following explanation. The plants carrying the yellow gene are usually paler than the original orange parent. This is often observed when an orange and yellow plant are crossed. The paleness is variable, some being very pale and salmon rather than orange in colour. However, some are not much paler than the orange parent. As the Belgian strain usually has good reddish orange to orange flowers, I suggest that any paler flowers (containing the yellow gene) are eliminated when parents are being selected for the next

generation of plants to produce more, and to improve the strain. Therefore, only the rarer plants that contain the yellow gene, but are a reasonable colour, have a chance of being selected for seed producing stock. So continuous selection for deep colour, keeps the yellow gene concentration low. Next, to produce yellow plants, both parent plants must contain the yellow gene, and as such, a chance crossing will be very rare, so yellow seedlings will be very rare.

Well now, how did I get 12 green seedlings from about 120 seeds? I noticed this flowering, that from my experience, with paler orange-yellow hybrids, that quite a few of my Belgian strain plants were paler than reddish-orange. My hypothesis is that although the seed is imported from Belgium, perhaps the raiser in Australia (a very large nursery) is also getting some seed from his own earlier raised plants, and he is not being so particular about the colour of his parent plants. This would raise the number of yellow carrying parents and would explain why some of my plants appear paler. So perhaps 2 out of my 15 or so plants carry the yellow gene. In previous years, perhaps only one of them flowered, or if both did, they were crossed with plants (the majority) which did not carry the yellow gene. Anyway, by chance, last year two yellow gene carriers were crossed and these should produce 25% green seedlings. The 10-12% I obtained is due to dilution of the 25% by other seed which came from crosses other than carrier x carrier. Although I have about 15 plants I don't use all of them as parents as I select for flower quality (but not colour), and of those I cross, not all mature their seed. So it is quite by luck that the right cross occurred and that the percentage is so high.

What I now want to do is to identify which of my Belgium strain plants actually carry the yellow gene. I could carry out a very involved programme of crossing each of them with all the others, keep all the seeds separate and raise all the seedlings, but that seems much too complicated. What I have done is number the plants that appear paler than the best coloured ones, and I have put yellow pollen on to them. This is not Belgium strain pollen and the offspring will not be Belgian strain plants but by planting about 7 separate batches of seed, any that contain green seedlings will identify the yellow gene carrying parents. If none show up it will eliminate those plants and I will test the rest next year, particularly any non-flowerers from this year. If any South African growers want to try to obtain yellow Belgian strain plants I suggest they do the same, namely, select the paler flowers, and put Group 1 yellow pollen on them. Any yellow carrying parents should produce about 50% green seedlings. Once the yellow carriers are identified they can be crossed amongst themselves to produce 25% yellow Belgian strain seedlings.

A question remains as to why yellow Belgian strain plants are so rare when so many Belgian strain seeds are sold. If a yellow gene is rare, say 1 in 100 plants, to 1 in 500 plants, then the chance of crossing two yellow gene carriers would be between 1:10 000 and 1: 250 000. However, what is more likely is that all plants are commercially pollinated by pooled best red or red-orange pollen. Under these conditions all carriers will be pollinated by non yellow carrying pollen. If this is the case no yellows can arise but the gene will still carry into the next generation in the recessive carriers. Then yellow Belgian strain plants will only occur when amateurs cross carrier with carrier, and then only as rarely as the figures above. If the occurrence is more frequent than these sorts of figure, it means that the gene frequency is generally higher than 1 in 100.

Bill Morris
PO Box 17, Medowie, NSW 2318, Australia
12 October 1999

I wish to apologise for not producing this article sooner. It was filed with Bill Morris's letters to me and I forgot that I had it until Bill enquired about it. He has answered an often asked question, "Are there any Yellow Belgian hybrid clivias?"

The second paragraph of Christo Lötter's article, *Clivia breeding programmes*, in the booklet "Hints on growing clivia" page 16, also discusses how to obtain Broad-leafed Yellows. Editor.

PEACH AND PASTEL CLIVIAS AND THEIR ORIGINS

I am interested in the variety of peach and pastel clivia flowers and their origin. I believe they may be of various types and origins. The following is an outline of my interpretation.

The normal orange clivia in the wild is a variable plant in most of its characteristics. These characteristics are under the control of numerous genes. Generally, each individual gene is part of a set called a metabolic pathway. This produces certain chemicals by step-wise chemical transformation from simple chemicals to more complex ones. These pathways are interconnected in many ways as a chemical produced by one maybe used by another at different times. It is sometimes in competition for the chemical at the same time. Such interrelationships are the reason many genes are said to be multifunctional. Not that the gene can do many things, but that the gene's chemical product can be part of many pathways. In the case of colour in clivia flowers (and other plants) the pigments of various different pathways of which chlorophyll, carotenoids (mainly yellow) and flavonoids (white, red, blue and purple) are the main groups. In the wild *Clivia miniata* colour can vary from red to various shades of orange, then salmon, to even paler pastels, peach and yellow. All of these can then have white, yellow or green throats or background colours. Thus, at least three metabolic pathways are involved. This spectrum of colours (ignoring the throat or background colours) from red to yellow can be due to inefficient genes in the metabolic pathway. So at each step less than the usual amount of chemical is turned into the next chemical. Each step therefore acts as a partial bottleneck along the manufacturing process. These multiple bottlenecks mean that at the end of the line varying lesser amounts of the final product (anthocyanin pigment) are produced.

Thus the whole series of colours from red to yellow can occur in what are really normal (orange) *miniata*s. These inefficient genes are probably the product of different minor mutations, giving rise to various alleles (or forms) of each gene which are present in the wild population of *Clivia miniata*. It is the random or chance recombinations of these modified genes that gives rise to the various colours. Because of these interconnections between all the metabolic pathways and the "multiple functions" of the genes, the plants with very little colour in the flowers (peach and yellow) are very rare because most of them have other "problems" in other pathways, due to the cumulative effects of inefficient genes. This makes them less vigorous or less fertile or their seeds less viable so they compete less well with other plants and only occasional ones are found.

Most of the yellow and peach variants that are known are not members of the continuous 'orange' spectrum caused by multiple ineffective genes. They are due to single gene mutation.

In these plants a single gene has undergone a mutation which has made it totally ineffective, and this causes a total block of anthocyanin production giving a yellow flower. This is called a null mutation. In the case of peach flowers this null mutation can be described as "leaky". That is just enough chemical is produced by the gene to give a trace of colour. It seems likely that some pastels could also be produced by a leaky "null mutation". The important difference, however, is that one type of yellow, peach, pastel, etc. is produced by the cumulative effect of a number of genes, whereas the other type is produced by a major mutation (change) in just one gene.

Now, the question is, how can you differentiate between the two types? This is done by their different breeding behaviour.

In the case of the multiple gene type, the plants when selfed or when two of the same type are crossed give varying results. Plants are obtained which can vary giving a wide spectrum of colours similar to the normal orange range but paler and there is no particular numerical relationship amongst the colours.

In the case of single gene mutations, crossing between the colours is predictable. That is, yellow x yellow gives yellow offspring, peach x peach gives peach, and so on. Also, in crossing these mutations with normal orange plants, the mutations are recessive, and in the second generation the mutations reappear in Mendelian ratios.

In cases where yellow x yellow or peach x peach give normal orange offspring, this is because the single gene, mutant plants are of two types (Group 1 and Group 2). These differ because a single gene null mutation has affected two different genes but each plant only has one affected gene (but present in a double dose).

The end result of this interpretation is that when a new yellow, peach, pastel, pink etc. occurs, it may be a multiple gene type which will breed as an orange or it may be a single gene mutation which will breed according to Mendel.

There is one other source of pastel, peach or pink flowers and this comes from crossing an orange (multiple gene control) with a single gene mutant yellow. When a normal orange is used, most of the offspring are paler than the orange parent. When a paler orange is used the same result occurs and even paler flowers can be obtained. Pastels or peach flowers can occur. These plants will again breed differently but will give Mendelian ratios when crossed with appropriate single gene yellows.

Bill Morris
PO Box 17, Medowie, NSW 2318, Australia
13 November 2000

Thank you, Bill. Now I can understand why I have odd peaches cropping up in my garden. Editor.

POORMAN'S PEACH

Is there a better way to start a new day in a New Year, in a New Century, in a New Millennium than to tell you about a New development in clivia colours. The new development may be stretching a point a bit, but it seems I have traced the evolvement of a "peach" from its parents. My orange plant which produced a yellow from a selfing of otherwise oranges is known to me as 'Wild Type One'. It usually appears in my documentation as 'Type One'. It is one of the first clivias I acquired, about '86 or so. It is a smallish plant with slender leaves and a fairly open flower of a medium orange. At the time I knew little about clivias, which was just as well, for I was not impressed with this plant. It was a strong grower and usually produces an umbel of 12-18 florets.

It selfs superbly. I can clearly remember the first umbel was of 12 florets which produced 144 seeds. Now I only had a few clivias at this stage, and I soon changed my mind about "type 1". In 1988 this one little seedling appeared amongst the others and Lo! it had a green base. What Joy and excitement! It was a tremendous long

wait until it eventually flowered. What a disappointment. It was the most unprepossessing yellow I have ever seen. It did not improve on any of its subsequent flowerings. I did however, breed with it, or at least attempted to do so. Some 60+ seeds from the first lot which was a selfing. I might add that I have always selfed the first flowering of my yellows to see if it would produce only yellows, or if a few oranges would sneak in. Then I planted these seeds and soon had my next surprise. Every one had a dark base. This was in 1996. I kept quite a few, slung out some real runts, and gave a few nice ones away. I still have about 20. Some of these look far lustier than their slight parent, and may possibly flower this coming season. They will of course be selfed and "sibbled" etc, and perhaps even crossed back to mother if there are enough flowering. This will tell us a bit more of the information we would like to know about this interesting line of plants.

In 1995, I put some 'Aurea' pollen on 'Type 1'. About 25% of the seedlings showed green bases, and I thought I had bred myself a nice little batch of yellows which were bound to be improved by the great 'Aurea' flower. I was growing these seedlings on in my glasshouse, and one day I had picked up one of the coke bottles that I grew them in when I got another surprise. The so-called green base was showing distinct signs of pigment. A clearly pinkish-brown tone had taken over the base.

So there were about 15-16 of these putative yellows. I immediately put them on a top bench so it would be easier to give them a regular examination. Over the years nearly all had darkened bases. Eventually one with a green base flowered. A Yellow! Quite a nice looking one at that. Still more surprises! I keep a lot of my flowers on the table at the back stoep (porch to non-SA's). I walked out the next morning to start pollination and this flower had taken on a peach haze. It deepened over a few days.

Still one more surprise. The oranges that always had dark bases from the 'Aurea' cross, were all exactly the same colour as the parent 'Type 1'. As you know, it is usual for the oranges to take on a paler colour after a crossing with a yellow. This is perhaps the biggest surprise, and the key to the origin of the so-called "peach". There are more crosses on the way, and we will find out if all yellows have this effect when crossed with 'Type 1'. Lots of exciting things to see. And before I forget, I have another strange yellow, but I will tell about that at another time.

Greetings one and all, may we all have a Great Clivia Year.

Nick Primich
PO Box 6240, Westgate 1734
e-mail mwnicpri@mweb.co.za

This information was taken from the Clivia Chat group, but ties in with Bill Morris's article on the origins of Peach clivias, so is pertinent to this newsletter. Editor.

ELLA VAN ZIJL CULTIVARS

Will you please write an article or just a few lines on Ella van Zijl's plants. The only true Ella van Zijl clivias are the ones that originate from me. Ella was a friend who passed away in 1986. Three months before her death, she gave me her Ella van Zijl clivias. Unfortunately I forgot to ask her where they originally came from. Over the years several suckers have been distributed. There is a junior member in Pretoria who claims that he has hundreds of Ella van Zijl plants. This is however not correct even if they do resemble the original.

Toy Jennings
PO Box 37742, Vallyland 7978
7 December 2000

A STORY OF SOME CYNTHIA GIDDY YELLOW CLIVIAS



Clivia lovers have all heard of Cynthia Giddy. What they are not all aware of, is that Clivia were a sideline for her. She was a world authority on Cycads, having an excellent collection at her farm, and going lecturing on them overseas. However, she had a good few Clivias, and Pietermaritzburg people will remember her at the show grounds every year displaying her 'Natal Yellows', which were at that stage very rare indeed. Most people are also aware that there is a problem producing more of these plants from seed. Yet these plants were exceedingly vigorous and made many offsets, far more than the average Clivia.

Now Mr. & Mrs. Höll who lived in the area, were all packed up in their car and ready to depart to their new home in Swellendam. They were old friends of Cynthia, and on this Spring morning in 1978, they headed for the Show grounds to say goodbye to Cynthia. They duly had their chat and as Lettie Höll turned to walk away she spotted this yellow clivia and said to Cynthia "I am not leaving without this plant!". There was a bit of a conference and it ended with Lettie paying R35.00, and marching off with the plant. Mr. Höll said to his wife that he did not know where she was going to put the plant as the car was so full. She replied that if need be, she would ride all the way with the plant on her lap. As it turned out this is indeed what happened.

The Hölls settled happily in Swellendam and so did the clivia plant in her garden. There were soon many suckers, and Lettie gave some away and traded others. In 1995 her son-in-law, Nico Frick, took the plants over from her and established them in his own property. He maintained that the Clivia community were taking advantage of her, and getting the plants for nothing. He refused point blank to sell any, although he did trade a few here and there.

On the 19th of May 2000, he was unfortunately killed in a motor accident. I had been acquainted with the family for some years, and his widow Jackie approached me and said she was not able to manage this large stand of plants, and could I advise her what to do with them. I told her I would be interested in buying them, and we came to an agreement on the price and I took the plants over from her.

I was in the process of selling my property in Somerset West and moving to Pretoria. I moved the plants up to my new home in Pretoria in cardboard containers, and planted them out under a rapidly constructed shade house. They then gave thanks by responding with a magnificent floral display. Many of the experienced clivia growers who saw them said that these were indeed the best examples of Natal Yellows that they had yet seen. I had some 280 plants that had all come from that one original plant!

I have set aside a small number of these plants for sale, and the body of the collection will be preserved. I am making these plants available to Dirk Swanevelder, who is studying for his Masters degree at Pretoria University. Under the mentorship of Professors A.M. Oberholser and P.J. Robbertse, he will be examining the intricate puzzles of self-sterility, orange progeny and all the rest of the problems associated with these plants. He will also examine the current crop of seeds and seedlings from this cultivar, which is I believe, Natal B as mentioned by Wessel Lötter in his article a while back in the Club Newsletter.

Fred J. van Niekerk
61 Wenning Street, PO Box 2445,
Brooklyn Square 0075
17 December 2000

Comment by Chris Vlok: At the first show of the Clivia Club held in 1994 in Pretoria, Mr Fred Gibello exhibited a magnificent yellow flowering Clivia. In literature and in personal conversations among members there was quite often referred to this plant as Gibello yellow. Suckers of the plant were exchanged with several breeders, amongst others Dr Bing Wiese and Mr Ammie Grobler of Pretoria. As interest in clivias grew and members' knowledge increased, it was noted that there was a striking similarity between the so called Giddy yellow and Gibello yellow in terms of appearance and breeding characteristics. This should not come as a surprise since Fred Gibello obtained his original mother plant from .. Guess who? - Mrs Lettie Höll of Swellendam! A colour picture of the Natal Yellow appears on page 10 of Yearbook number 2.

PRONUNCIATION - COMMENTS

Thank you for an(other) excellent newsletter. As a new member of the Cape branch, I need all the expert information I can get!

I would like to comment on the letter from Eileen Rose. Her argument for her manner of pronunciation of "Clivia" is valid as applied to English.

However I understand that botanical plant names are in Latin. After all these years I can still hear my Latin teachers stressing the fact that all the syllables in Latin words were to be pronounced. This would also apply, for example, to *Clivia gardenii*, which I have heard being pronounced "garden(English form)- I (as in the personal pronoun)" In my rusty Latin that would be spelt "gardenAE", and would not agree with the genus name.

It would be interesting to have a botanist comment on the current accepted form. Another word that often gets the English treatment is "species", a word that is both singular and plural!

To mis-quote...."A Clivia by any other name would be as beautiful!"

Kind regards
Marion Went-Schultz
sa.da@mweb.co.za
5 January 2001

Thank you for pointing out these points - I have also been confused by the shortening of "gardenii" to "gardenae" simply because it is easier on the tongue. Editor.

MOLE PROBLEMS IN THE GARDEN

I wish to refer to the Border Interest Group's article on garden mole problems in Volume 9, number 3, Spring 2000 Clivia Club Newsletter and would like to share the following with our members.

I have been using a plant *Euphorbia lathyris* (the Mole Plant) over the last 25 years with excellent results in ridding my garden of moles. An article on this plant is contained on page 24 of Garden & Home dated January 1977. The plant is also referred to in an American book on plants *Exotica* by Alfred Bayrd Graf. Keith Kirsten also makes mention of the plant in one of his garden books.

During April 1995 we conducted an experiment over a period of 12 months in various parts of Port Elizabeth. It proved highly successful in getting rid of moles by using the *Euphorbia lathyris* plant. The results were published in our local weekend newspaper and ever since, I have been supplying seeds to various parts of the country.

Seeds are planted in containers and when about 15 cm high, they are transplanted up to 4 metres apart in the areas where moles are active. They should be watered at least once a week. They grow to about 75 cm high depending upon the condition of the soil. Once the roots are established, the moles leave the area. The roots are very fine and it is this characteristic which causes the moles to leave. It is not necessary to plant on lawns, since established plants in flowerbeds nearby are sufficient. After 8 to 10 months, the plants seed themselves and start dying down. Seeds should be collected and replanted to cover the area required. One should plant over a period of time so that adult plants are always present in the garden, otherwise moles will return. The plants should also be controlled to stop them from taking over the garden. This is done by cutting off the top of the plant when it starts to seed (such pruning should be done after the seeds have been collected). The plant will shoot again. The seeds are poisonous so children should not have access to them.

I can supply seeds free of charge to members provided they send me a stamped self addressed envelope to Box 19292, Linton Grange, Port Elizabeth 6015. Any additional information you may require can be obtained by phoning me on (041) 360 3480.

Sincerely,
Willie Le Roux
PO Box 19292, Linton Grange,
Port Elizabeth 6015
18 January 2001

ADVICE NEEDED ON WHAT CLIVIAS TO KEEP

Dear Meg

Each year, at about this time, I'm faced with the problem of too many seedlings that need potting up. One needs to cut down the numbers but which plants does one discard?

In selecting for the likely colour of the flower I study the base of the seedling, but I'm uncertain as to how accurate this is. The following questions arise:

1. If the base is green, will the flower always be yellow? I gather some peaches and pastels have green bases.

2. Can a yellow flower ever come from a seedling with a pigmented base?
3. Will the darker oranges have darker pigmented bases, and does a paler base indicate light orange or pastel?
4. Can one apply the same criteria to nobilis, gardenii and caulescens, and what about the cyrtanthiflora? I'd appreciate hearing from anyone who has the answers to these queries.

Kind regards,

Ian Brown
ianbrown@netactive.co.za
26 January 2001

I will answer the first two of your queries and will leave the last two to the experts.

1. If a seed has a green base it will probably be yellow, peach or pastel. However, sometimes in a very young seedling the epicotyl (the small communicating link between the seed and the shoot) may be reddish although the leaf may be green at the base. According to Wessel Lötter if the epicotyl is red the seed may not be yellow, pastel or peach.

2. No, a yellow seedling will not come from a pigmented base. Editor.

THE WORM UPDATE

Dear "Compost Heap"

I have some interesting news about the worm saga. We have bought a house at Kloof, Forest Hills area, and there were some clivia being tortured in the sun - dotted around the whole garden and really being abused. I gathered them up to replant them in the shade and noticed that they had been attacked by the Amaryllis caterpillar. Some had been eaten away right down the centre of the plant. I broke off the leaves and at the base near the ground I found pupae nestled in the soggy mushy leaves. Three plants were hosts to the worm. I can only assume that this could be the place where the larvae go to pupate. Has anyone else found out where this creature pupates? Sorry `Compost Heap Worm' but I put my foot on your brothers/sisters as you were also in the agapanthus - you have been sprayed with insecticide.

Regards
Val Thurston
thur@iafrica.com
26 January 2001

THE CLIVIA STORE eCOMMERCE WEB SITE - www.clivias.com

Hi all Clivia Enthusiasts.

After lots of input from everyone, we are now launching our eCommerce web site - www.clivias.com

We have seed that is available from Nakamura, Louis Swanepoel (one of South Africa's most respected Clivia seed suppliers) and Rudo Lötter.

I also have commitment for seed from a number of other award winning growers and of course Nick Primich who will be supplying some of his excellent seed later on in the year. We will also have lots of "garden variety seed" selected from some of the top breeders gardens at unbelievable prices.

Also on the site are 20 Clivia Stamp sets.

The Clivia Store web site is now live!!! Log into the store and select the seeds that you want. It is the place on the Internet where you can select from a number of sources and only pay for one shipment.

Remember, once you place the order:

1. We will ask you to confirm the order by replying to e-mail
2. We will ask you to confirm the best choice of shipping options and price such as
 - a. Fast Mail
 - b. Registered Mail
 - c. Our Courier
 - d. Your courier
 - e. Or collect in Johannesburg, South Africa
3. Only on receipt of your E-mail will we get authorization on your credit card
4. The goods will be shipped and you will be given the tracking number of the parcel
5. You should then get the seeds within a week or two if outside of South Africa.

All seed is

1. Cleaned
2. Treated with a mild fungicide
3. Shipped in barcode labelled Film Canisters
4. Placed in Bubble Plastic
5. Boxed in a 100x100x150 corrugated box
6. Included with your order are basic instructions.

Please address any inquiries to me at
info@clivias.com

Ken Fargher
27 January 2001

*Please note that this letter appeared on the clivia-enthusiast egroup e-mail on 27 January and the stamps and some of the seed advertised here are no longer available or have been withdrawn. This letter has merely been used as an example to show how The Clivia Store works. There have been some very satisfied customers.
Editor.*

QUESTIONS FROM A BEGINNER

Dear Meg,

At the September 2000 KwaZulu-Natal Clivia show held in Pietermaritzburg, I was fortunate enough to purchase 4 seed of Chubb's Peach X Mare's Peach. All the seed germinated, two of which showed red pigmentation while the others were plain green. One of the seeds has produced two separate individual plantlets.

I would be very interested in hearing from other members whether polyembryony in Clivias is as a result of "Apomixis" and how often this phenomenon occurs in Clivia seedlings? Also, would one of these twin plants then be a clone of the mother plant ?

I am a new convert to Clivia breeding and just attempting to gather various cultivars and seed which I can use as stock plants. When crosses are made, which is the correct method to display the cross, - Seed parent X Pollen parent - or the other way around ?

A word of thanks to all the contributors to the Newsletters who have provided many hours of interesting reading (and re-reading!) matter. I recently acquired back copies of the majority of these publications, very kindly and promptly sent to me by Lena van der Merwe of the Northern Branch. Lena, baie dankie, ek het dit baie waardeer. If any member can tell me where I can purchase complete sets of Volume 1, 1992; Volume 7, 1998 and numbers 1 & 3 of Volume 9, 2000, I would be extremely grateful.

Ken Rosling
PO Box 364, Kloof 3640
27 February 2001

Nick Primich has kindly replied to this letter. Editor.

Dear Ken,

I was interested to read your letter. You may be a beginner at Clivia breeding, but you seem to have a firm knowledge of breeding in general. I will answer your questions as best I can in reverse order.

We are working on the problem of reproducing older newsletters. We did have the idea of producing a CD with the whole lot on, but the problem is that electronic copies of some of the numbers have disappeared.

It is a general convention in most of the plant world to put the ovary parent first, and the pollen parent second. I prefer the term ovary parent, to that of seed parent, because the pollen parent usually has a hand in the seed.

Polyembryony is not unknown to clivia growers. Just the other day, Hilton Atherstone from Tzaneen mentioned to me that he thinks he may have discovered a group of plants where this is quite normal! If this is as a result of apomixis or parthenogenesis as some would have it, I am unable to say. Elroy van Vuuren told me that a seed he bought from me produced one brown-based, and one green-based plant. In the case of twins one gets identical twins from one zygote, whilst other twins derive from separate zygotes. One would need to do specific tests to say for certain that one of these seeds could be apomictic, and further if it were indeed clonal with the ovary parent. Identical twins are virtually clonal at birth, but their genome tends to differ as they age. I have never heard that the off-spring could ever be clonal with the parent. When growing crinum I came across parthenogenesis when crossing one species with another species pollen. The Ovary parent being self-sterile, yet all the progeny came out looking exactly like the ovary parent.

Thank you for your observation and sharing the experience with us.

For the benefit of the layman:

Apomixis. Omission of sexual fusion in reproduction, as in parthenogenesis, or in apogamy.

Apogamy.(bot.) Omission of the sexual process in the life-history - the sporocyte developing either from an unfertilised egg or some other cell.

Gamete. A sexual reproductive cell. An egg cell or a sperm cell.

Parthenogenesis. Reproduction by means of an unfertilised ovum.

Polyembryony. Formation of more than one embryo from one ovule or from one fertilised ovum.

Zygote.(bot.) The product of the union of two gametes.

The above definitions from Chambers English Dictionary (1990).

Nick Primich

EXTENDING FLOWERING PERIOD IN CLIVIA MINIATA REGEL USING A COLD TREATMENT

This article is a summary of work conducted by Craig Honiball at the University of Pretoria (Honiball, 2000).

INTRODUCTION

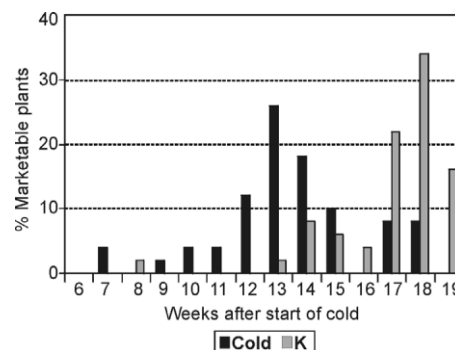
Flower forcing is undertaken in many species in order to prolong the period during which plants are in flower or to have plants in flower for specific occasions. It has been shown that *Clivia miniata* can be brought into flower outside its natural flowering period by manipulating growing temperature (Mori & Sakanishi, 1974, Vissers & Haleyd, 1994, De Smedt, Van Huylenbroeck & Debergh, 1996). It is important to note the pattern of production of 4-5 leaves between each inflorescence and that inflorescences must have reached a certain size before they will respond to a cold treatment (De Smedt et al., 1996). If a receptive inflorescence is not present, no amount of cold will cause flowering. The figure of 4-5 leaves between inflorescences is an average figure and varies from individual to individual. However, abortion or death of inflorescences can occur due to disease, insects or stresses in the cultural environment which will result in deviations from this number. It also follows that a plant must have reached a certain size before the first flowers are produced.

In local production of *Clivia*, there is often no control of growing temperature and flowering occurs mainly from August to September. The aim of this experiment was to determine whether a cold treatment could bring plants grown outdoors into flower earlier than normal. Getting *Clivia* to flower out of season implies that plants in flower are available for a longer period of the year which makes it possible for growers to extend the peak sales period. Having flowers available for longer also offers the opportunity to attempt interspecific or intergeneric crosses with plants which flower at different times of the year.

EXPERIMENTAL PROCEDURE

The trial was conducted in Pretoria at a nursery situated on the north facing slope of a hill where *Clivia* is grown under shade net. The experiment comprised 100 mature plants with at least 12 mature leaves on each plant. Fifty plants were removed from the nursery for the cold treatment and 50 plants were left untreated. The cold treatment comprised placing plants in a dark, unventilated cold room for 14 days. The cold treatment was started during the last week in April and the temperature used was 7.5 -10°C. After the cold treatment, plants were returned to the nursery. Thereafter, the number of plants which flowered at various times was recorded.

Figure 1. Percentage of cold treated (Cold) and untreated (K) plants at the marketable stage (ie in flower) in the period 6 - 19 weeks after commencement of a cold treatment. The cold treatment was started at the end of April and constituted 7.5-10°C for 14 days.



RESULTS

Figure 1 shows the percentage of plants in each of the two treatments which flowered in the period from the middle of June to the end of September. It indicates the trend whereby cold treated plants flowered before those which were left untreated. It appears that the peak flowering period occurred about five weeks earlier in the cold treated plants than in the untreated group. Therefore, it can be deduced that one will be able to extend the period during which *Clivia* is available in flower by applying a cold treatment of relatively short duration, as described, to a portion of plants intended for sale in a specific season. The latter conclusion was supported by the results of a statistical analysis. However, from Figure 1, it can be seen that the flowering period in both the treated and untreated group is spread over a number of weeks. It is therefore apparent that this method cannot be used to bring an individual plant into flower on a certain date, for example, for show purposes.

Prior to the abovementioned experiment, two exploratory investigations were carried out. In the first, a similar cold treatment was applied to outdoor grown plants at the beginning of February and flowering occurred in March and April. In the second, flowering size plants were placed in a greenhouse which was heated from the beginning of April to the end of August so that exposure to winter cold was eliminated. On the whole, the plants in the greenhouse did not flower during the natural flowering period when plants outside were in flower. A cold treatment was then applied to the greenhouse plants at the end of November and brought some of them into flower in January and February. Therefore, it is felt that it may be possible to even further extend the flowering period in *Clivia*. However, these results could not be statistically tested and will need to be verified.

REFERENCES

- DE SMEDT, V., VAN HUYLENBROECK, J. M. & DEBERGH, P. C., 1996. Influence of temperature and supplementary lighting on growth and flower initiation of *Clivia miniata* Regel. *Sci. Hortic.* 65, 65-72.
- HONIBALL, C.B., 2000. Manipulation of flowering period and shoot multiplication in *Clivia miniata* Regel, chapter 2. MSc(Agric) dissertation. Department of plant production and soil science, University of Pretoria,

South Africa.

MORI, G. & SAKANISHI, Y., 1974. Effect of temperature on the flowering of *Clivia miniata* Regel. *J. Japan. Soc. Hort. Sci.* 42(4), 326- 332.

VISSERS, M. & HALEYDT, B., 1994. Bloeiëinvloeding bij *Clivia*. *Verbondsnieuws Belg. Sierteelt* 38(4), 36-37.

Personality parade



Braam Opperman made something of a name for himself among Northern Clivia Club members when he joined us in 1999. It is not everyone who turns his house into a palace for clivias, and this at the age of 77 years no less. Everyone who has visited him at his home has come away deeply impressed at the skill, neatness, and design that Braam has put into the work that I know has been done largely by himself, with the aid of his son-in-law, Jan Moeken. All have asked, silently or aloud "What made you take to Clivias so late in life?" Here is Braam's story as told to me.

"I was born in Bronkhorstspuit in 1922. My father was the Stationmaster there, for although he had trained as a high-school teacher, he found it was far easier to bring up his family on a stationmaster's salary, than that of a teacher.

I did my schooling up to matric in Potgietersrus and joined the SADF (South African Defence Force), and went off to Libya and Italy where I was until the end of the war. I came back home, and it was not long before I married my wife, Bea. We settled down in Discovery, where we had two sons and a daughter. The second son unfortunately died in his cot in the nursing home.

I was in the construction industry, where I trained and qualified as a quantity surveyor. I had, by then, purchased a small-holding as my hobby was growing plants. I had a large area under shadecloth and raised many different varieties. One of the favourites of which was growing orchid flowers for corsages.

In July 1997, Bea underwent a triple heart by-pass. As she was also a Type 2 diabetic things went wrong. I lost my Bea who had been my good wife, companion, friend and anchor in life. For 19 days I watched her vital organs failing, one after the other. At the end she was being kept going by machines alone. It was then decided to switch them off. My system could not take the shock of Bea's death. I had a terrible feeling of guilt that I had failed my Bea in her hour of need by not realizing that she had not been well for some time. I was alone now with only my thoughts of guilt, anger, and grief. I had a total collapse both mentally and physically. I was like a ship on a stormy sea, rudderless, and without direction or hope. What a beating I took! After a while I began to realize that I and I alone could do something to bring myself back to life, and back into the community.

One Saturday afternoon in September 1998, I was watching the program "Gardens Wild & Wonderful." Frikkie Potgieter came on and gave a talk on clivias, and all the new colours that are now available. At that moment the green light came on, and I realized that this was the answer to my prayers. Now I would have to live for at least another five years to see the results of some of the crossings I would make. And that is why I started to grow clivias in earnest."

This is Braam's story, but it does not really give you the measure of the man, although it will give you some insight to his depth and understanding. He reminds me greatly of Yoshikasu Nakamura, who is also so kind, generous, gentle and understanding.

Nick Primich

_____2001 Annual general meeting

The Annual General Meeting of the Clivia Club will be held on 19 May 2001 at Hoërskool die Wilgers, Lynnwood Ridge, Pretoria.

_____2001 Show dates

\$	Saturday 1 Sept.	Metro Group, Johannesburg
\$	Sat/Sun 1-2 or 8-9	Eastern Cape, Port Elizabeth
\$	Sat/Sun 8-9 Sept.	Northern, Pretoria
\$	Sat/Sun 15-16 Sept.	KwaZulu Natal, Pietermaritzburg
\$	Sat/Sun 22-23 Sept.	Northern KwaZulu Natal, Newcastle
\$	Sat-Tues 22-26 Sept.	Cape Province, Cape Town (Kirstenbosch)

All the shows will have information desks, substantial sales of plants and seed (individuals who decide for themselves what they wish to sell and at what prices) and there are often lectures on clivia topics.

_____2001 Clivia tours

We have had some interest from overseas enthusiasts regarding the possibility of a show tour in September and have tentatively suggested the following programme.

1. Fri 7th Arrive Pretoria for the Northern Branch show on Sat/Sun 8-9.
- 2a. Mon-Thu 10-13 Fly Cape Town, visit Kirstenbosch Botanic Garden, etc, Fri 14 fly Durban/Pietermaritzburg.
- 2b. Mon-Fri 10-14 Bus tour caulescens habi tats eastern escarpment Louis Trichardt, Gods Window, Nelspruit Botanic Garden, continue to Pietermaritzburg.
3. Sat/Sun 15/16 KwaZulu Natal Branch show in Pietermaritzburg.
4. Mon-Fri 17-21 Bus tour north through KZN, miniata & gardenii habitats, perhaps game viewing, to Newcastle.
5. Sat/Sun 22-23 Northern KwaZulu Natal Branch show in Newcastle.
6. Mon 24 return to Pretoria to fly home.

These are preliminary thoughts and a substantial amount of organisation will be required to arrange all aspects. Unfortunately at this stage we can give no indication of costs, apart from saying that the Rand has depreciated substantially, and B&B accommodation should cost less than US\$40 per person per day (perhaps more expensive in the cities). To determine interest, please let us know if you are very likely to participate (there is absolutely no commitment at this stage), indicating number of participants and choice of 2a or 2b. Replies on the chat group or directly to jabel@yebo.co.za with copy to Dries Olivier drieso@minmetals.co.za

would be appreciated.

Regards,
Connie and James Abel

For sale

Advertisements. Tariffs for advertising in the Clivia Club Newsletter:

Full page - R200,00; 2 page - R100,00; 3 page - R50,00; per line - R5,00; A4 separate page insert - R800,00; A5 separate page insert - R400,00.

(You will be sent an account from the treasurer for the appropriate amount.)

From the Clivia Club:

Copies of back volumes. These are available from branch secretaries and from the club secretary. Each year's back copies will cost R25,00 (US\$15.00 or equivalent).

Membership lists. Full membership lists are available from the branches and the club at R25,00 (US\$15 or equivalent).

Clivia miniata , pendulous species, hybrids and other specialities available - seed, seedlings and mature plants. Visitors welcome. Connie Abel, Pretoria, tel/fax +27-12-3616406 or e- mail jabel@yebo.co.za

Clivia miniata (Nogqaza strain) 2-leaf plantlets from R20,00 each. Miniata orange from R1,00 to R4,75 each. Minimum order R100,00 plus postage and packaging (minimum R21,00). Order now from S.A. CLIVIA PLANTATION, Box 855, Hilton 3245. Call 082- 9555 433.

Clivia miniata F₁ (yellow x orange), "pinks" and pastels, flowering size @ R12. *Clivia miniata* yellows, flowering size @ R150. *C. miniata* "Stef's Perfume" @ R18,00. Extra for postage and packaging. Dries Bester, PO Box 75, Levubu 0929. Tel/Fax (015) 583 0299.

Clivia miniata plants for sale, 3 years old, R5,00 each out of ground. Contact Roly Strachan, Box 57, Highflats 3306 or phone or fax (039) 835 0085.

Clivia miniata : creams, yellows, peaches, apricots, reds, pastels and polychromes. Seed, seedlings and mature plants. Contact Bing Wiese, Pretoria tel. (012) 460 6382 to view.

Beginner's luck

SEED VIABILITY

Question from Dries Olivier to the e-mail clivia chat group:

I just recieved some seeds from China and put them in soap water to soak and clean. I noticed a few seeds float on the water but the majority sank to the bottom. Now, I know that Cycad growers test their Cycad seeds in this way. If a seed floats it means that the seed will not germinate whilst those that sink are fertile and should germinate. Does this also apply to Clivia seeds?

Answer from Kenneth Smith, Winmalee, Australia:

I have had this happen when I washed a large batch of Clivia seeds. Most sank but a few floated in the water. These I kept aside and sowed them in a separate pot. No germination from them. I noticed that they were very light compared to the seeds that sank, almost as if they were hollow. At the time I did not think to cut one open. Maybe next time.

On the compost heap



The editor was extremely upset to have found not only me munching in her clivias but to find a KAKworm virus in her computer which shut her computer activities down for a while.

There was a cold snap around New Year and approximately 6 weeks after it several clivias flowered - perhaps as a result of cold treatment?

News has it that Nick Primich has been showing off a blue clivia. Several people were had on the Chat Group.

Lily Borer (*Brithys crini pancratii*).



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INTEREST GROUPS

Border	Stella van Gass (Chairperson) -- Tel H (043) 737 4400, PO Box 144, Kwelera 5259.
Eastern Cape	Willie van Rensburg (Secretary) -- Tel 082 575 4934, 38 Deon Street, Rowallan Park, Port Elizabeth, 6025. e-mail willie.jansevanrensburg@resbank.co.za
Southern Cape	Ian Vermaak (Chairman) -- Tel & Fax (044) 873 4122, PO Box 4802, George East 6539. e-mail ver.fam@mweb.co.za
Northern Kwa- Zulu/Natal	Dries Olivier (Chairman) -- Cell 083 264 6230, Fax (034) 318 6667, PO Box 8783, Newcastle 2940. e-mail drieso@minmetals.co.za
Metro Clivia Group	Nick Primich -- Tel (011) 768 2996, PO Box 6240, Westgate 1314. e-mail primich@metroweb.co.za

Brom-'n-Nel NURSERY

ATTENTION

ALL CLIVIA LOVERS

**SOUTH AFRICA'S BIGGEST
CLIVIA SALE EVER**

24-30 AUGUST 2001

Bertie and Erda Guillaume of BROMN-NEL NURSERY have decided to cut down on their Clivia production.

After 30 years of breeding and improving the genetic value, we will be selling up to 150 000 plants. Apart from the common Miniata, the following will also be available:

Broad leaf red

Variegated

Rare yellows

Nakamuras

Variegated broad leaf crosses

We will be selling plants of all varieties and all ages, as well as mother plants of all Clivias.

Seed of show winning plants will also be sold.

Do not miss this opportunity!!!!

Watch out for the next newsletter and do not miss the press.

For further details contact

Bertie (015) 517 7162, Cell 082 825 2531

Erda 072 265 9467 or Celia 082 804 9650