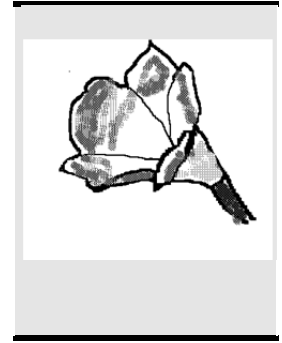


# Clivia Club

PO Box 6240 Westgate 1734 RSA



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## AMARYLLIDS IN AUSTRALIA

To those who are interested in the varied ways in which man perceives and categorizes his complex world may I recommend "The Savage Mind" by Claude Levi-Strauss, in particular the section on ethno-botany. Herein we are reminded that not all people look at the plant kingdom with the eyes of western botanists. In fact, far more people see with an eye to utility (food, medicine, building materials, poisons, etc.) as well as magical and religious associations. Consequently what may be viewed by a western scientist as a single entity, viz. a species, may be called by a hunter-gatherer or grass-roots farmer by three or four different names depending on its stage of growth, degree of maturity, or how he intends to use it. This should not come as a surprise to us or be especially hard to accept when we remember that as gardeners and horticulturists we have our own particular dialects in the language of botany.

When I speak to my bulb-fancying friends of Amaryllids you can be fairly sure that the main conversation will not take consideration of *Narcissus*, *Brodiaea*, *Leucojum*, *Ipheon*, or *Tulbaghia*, although all are entitled to inclusion. *Clivia*, *Crinum*, and *Amaryllis* itself will probably escape mention unless insinuating themselves in the form of rare species or cultivars. In Australian bulb circles, or at least in my circle within circles, the term Amaryllid is almost sure to herald discussion (with a goodly component of one-upmanship) primarily of rare and/or difficult and invariably expensive South African genera such as *Boophaea*, *Cybistetes*, *Hessea*, *Haemanthus*, etc. From this perspective *Cyrtanthus obliquus* and *Nerine filamentosa* are Amaryllids, *Cyrtanthus mackenii* and *Nerine sarniensis* aren't!

Such genera as *Chlidanthus*, *Eucharis*, *Habranthus*, *Hymenocallis*, *Stenomesson* and *Zephyranthes* may also rate no mention in Amaryllid talk or else bring up the tail end of the discussion following the query "and what about South Americans?" Here again we have the dichotomy of *Zephyranthes primulina* being an Amaryllid, or more exactly a South American, while *Zephyranthes citrina* is just a bulb. Northern hemisphere species will creep in if they are sufficiently rare or spectacular, also our limited range of Native Australians (*Crinum*, *Calostemma* and *Proiphys*).

To show how tenuous are those divisions which we tend to take as god-given immutable laws (and use in interminable and inconclusive arguments with fellow collectors), the botanist Cronquist, whose line is now followed in official Australian botanical classification, has scrapped the family Amaryllidaceae completely, lumping it in with the Liliaceae. Which leaves US where? I know few bulb buffs who are prepared to drop 'Amaryllid' from their language.

You may have noticed above that I was rather cautious in generalizing about this use of the term Amaryllid in Australia, limiting it eventually to my own circle of associates. If I have learned one thing with age it is that as soon as you make a sweeping statement, twenty people will pipe up to demolish it! Say that *Crinum flaccidum* is hard to flower on the east coast and someone will tell you of their forty scapes a year; say that *Cyrtanthus falcatus* is rare and someone knows of a nursery that has hundreds (please let me know where!). If this is the case in my own country, then how peculiar may this concept of Amaryllid appear to growers overseas. Let me therefore paint the picture, as I see it, with my Australia's Amaryllid Alphabet:

*Amaryllis belladonna* -long popular and very common, it rarely rates a mention unless one has a striking and uncommon cultivar. Distribution is usually from neighbour to neighbour over the back fence and each town seems to have its distinct form. Beginners try to slot their plants into cultivar names such as those listed by the American Plant Life Society but soon realize that this is a complete waste of time (ditto for *Agapanthus* cultivars). There have been brief outbursts of interest in selection and hybridization within Australia but few reliably named or documented plants exist. Furious and futile arguments occurs as to whether our large form of belladonna (20 + florets on stems to 90cm) are intraspecific hybrids or x *Amarygias*. Hybrids with *Crinum* and *Nerine* occur but are not common. Prices, for Belladonna \$2- \$12, for Crinodonna \$5- \$15.

*Ammocharis coranica* -may be in cultivation here but all plants that I have seen in flower have been *Cybistetes*.

*Brunsvigia* -the so-called "Australian josephinae", a sterile clone or hybrid, is moderately common, usually riddled with virus and sells for about \$45 a mature bulb. Seedlings of various species, most commonly *B. orientalis*, are sometimes available at \$10 -\$20. No one seems to have raised them to maturity or if so they are surprisingly quite about it. I have heard mention that *B.orientalis* 'flowers once and then dies', presumably why its seedlings are comparatively common.

*Clivia* - sorry , folks, but these don't really qualify as Amaryllids unless they happen to be a good form of *citrina* or *C.caulescens*! However, you can console yourselves with the fact that any *citrina* type, no matter how wishy-washy, can fetch up to \$35 an offset. You can also have arguments on a par with Amaryllid growers as to whether *C.gardenii* really exists and if so, how it differs from *C.nobilis*. Gain points and prestige also by claiming to know someone who knows someone who has a pure white. *Clivia miniata* is very common, a weed of old gardens, but relatively expensive none the less -it is heavy to post, only sells in nurseries when in flower and then only to people who are so unlovable that they haven't anyone to give them a barrow load of the damn things for free.

*Crinum* - other than *C.asiaticum*, *bulbispermum*, *mooreii*, x *powellii*, *pedunculatum* and the cultivar known as "Probably Ellen Bosanquet," all *Crinums* may be considered Amaryllids. Nurseries tend not to stock them too often because of their pot- splitting growth rate but with not too much trouble you can acquire the above named for \$5 -\$20 each, price mainly determined by bulb size. Of native species we have, according to the botanists, about five or, according to the horticulturists, about ten or twelve. We do not have the extensive though still expensive range of hybrids such as they have in the USA but this lack has had some benefit as a number of growers are at work breeding their own.

*Cybistetes longifolia* -occasional offers of seedlings at \$10 -\$15. Contrary to rumour, owners of mature plants find that given the right conditions it is a regular and reliable bloomer .

Cyrtanthus - were all the rage but seem to have gone out of fashion. None the less conversations can be built on how *C.obliquus* drops dead just before reaching maturity or how *C.labiatus* produces millions of bulbils but not a single bloom. *C.mackenii* has been joined by *C.brachyscyphus* and *C.obrienii* as non-Amaryllids, as have their many coloured hybrids. The beautiful hybrids between *C. elatus* and *C.sanguineus* or *C.eucallus* still rate a mention and sell at \$5 -\$10. Selection needs to be done to overcome the weak stem which often mars these crosses.

Gethyllis, Hessea and Strumaria- typical Amaryllids in that they did not exist in Australia until I had imported some extremely expensive seed, whereupon numerous people gleefully informed me that they had in fact been growing them for years!

Haemanthus and Scadoxus - *H. coccineus*, *H.albiflos*, *S.multiflorus* and *S.puniceus* are fairly widely grown but still manage to qualify as Amaryllids as they sell at \$10- \$20 a mature bulb. Other species fall in the name-your-own-price category and a few not-for-sale hybrids.

Nerine-species, named cultivars and Australian bred hybrids are, I believe, reasonably common and popular but I am not qualified to speak of these -my friends do not mention them when I am around as I tend to launch into a long and vehement monologue regarding their refusal to flower for me.

Paramongaia -although strictly a South American and therefore not a proper Amaryllid it is invariably classified with the latter because we all feel obliged to mention that we have, or had, or want to have a seedling thereof.

As an Amaryllid fancier I feel that I belong to a horticultural elite. At the same time I hope that one day they will all become as common as belladonnas, thus ensuring the future of these beautiful and all too often rare and endangered plants.

Elitism plays a large part at the moment in introducing and establishing Amaryllids in Australia but elitism could threaten their survival. I refer to the almost Scroogelike possessiveness that overcomes some collectors, including some Botanic Gardens, so that not one seed or offset will they sell or give away -interests may change and their treasures languish away for lack of proper care or their custodian passes on they must perforce leave them to those who don't care or know how to care. It is an old homily but true that "you never lose the plant you give away"- or sell!!

Bruce J. Knight

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### **Mr. Nakamura's visit to Australia.**

During the clivia flowering season of September-October, 1992, I had the pleasure of hosting a visit to Australia by Mr. Yoshikazu Nakamura. This was a valuable learning experience for me. The aim was to view and discuss as many different clivias as possible. The organisation of the visit proved to be a real communications exercise that involved a lot of thinking about Clivia. I was able to include visits to the Botanic Gardens in Sydney, private gardens, nurseries and other points of interest. Mr. Kevin Walters in Queensland, and Mr. Cliff Grove in Western Australia were able to help also by allowing Mr. Nakamura to view their collections as part of his trip.

I was fortunate in having the help of two people who aided me in Japanese correspondence. A long-time friend of mine, Mrs. Megumi Bennet, was able to translate incoming letters and also rewrote the itinerary in Japanese so that we could forward it to Mr. Nakamura. This proved

invaluable. To help me cross the language barrier I was fortunate in obtaining the help of a Japanese student staying at Springwood. Mr. Kozumi Yamashita agreed to act as translator during the time that Mr. Nakamura stayed with my family. Kozumi was an extremely important link for those involved with Mr. Nakamura's visit. We were all able to discuss Clivia breeding and culture, often quite in depth.

The first few days were spent viewing the plantings at the Royal Botanic Gardens, city parks and suburban gardens. Our "common" miniata was in full bloom and put on a beautiful show. The large flowered selections were located in the newer plantings compared to the well-established mass display of the "common" type in the Gardens. Unfortunately, the large planting of C.gardenii was not flowering at the time of Mr. Nakamura's visit. He favoured the smaller flowered "common" miniata and would have liked to see the gardenii in bloom as well.

We had an interesting visit to the original plantings of the Clivia hybrids made by the late G. Keith Cowlshaw, at St Ives. The depth of colour and the larger florets stand out in the group. It was a pleasure moving around the garden locating and discussing the different blooms with Mr. Nakamura. He is a keen observer and would note the smallest difference in the flowers. Some of the choicest Cowlshaw plants were taken to a nearby retirement village, where Mrs. Cowlshaw now resides. As we discussed the merits of each one, Mr. Nakamura could already see appropriate lines of potential crosses.

Whilst our main aim was to view and discuss Clivia we did visit the Bonsai nursery run by Brian and Megumi Bennet. The variety of plant material there, and at the adjacent palm nursery, gave Mr. Nakamura a chance to view a wider range of plants growing in our nurseries. Several other nurseries were visited during our travels. Points of interest were included in the itinerary. We saw a fantastic display of Australian fauna at Featherdale Wildlife Park, and some spectacular scenery at lookouts in the Blue Mountains. I am sure these few trips proved interesting for Mr. Nakamura, as we were able to see a diverse range of vegetation. Mr. Bill Morris took the time to visit my place for a discussion about Clivia with Mr. Nakamura. The difference in growing areas between Bill's place and mine saw his flowering finish before Mr. Nakamura's visit. Bill brought some photographs and we spent the afternoon exchanging ideas regarding Clivia. We also visited the nursery of Mr. Malcolm Cumming at Berrima, in the Southern Highlands of NSW, and saw plants at his Sydney home. Mr. Nakamura was able to select some seedlings that were of particular interest to him. An early drive to the airport on the Monday of week two saw Mr. Nakamura off to Queensland and Western Australia over the next few days. Having Mr. Nakamura stay with me for two weeks was certainly an honour. I learnt from his experience and was very happy to share my knowledge with him. The help that I got from my friends in Australia made the visit a memorable one. The links that I have made through study of Clivia continue to expand into a pastime that is most satisfying. I know that the experience was a real treat for my two children and played an important role in showing them how different people can get on with one another. It really is a small world. It just goes to show what a bond there is between Clivia enthusiasts. I recall a comment made by Nick Primich in a past newsletter, "sometimes I have found that my friends have taught me more in a minute than what I have found in years of battling".

Ken Smith  
Australia.

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## CLIVIA NOTES

Several items have been mentioned in past issues of the Clivia Bulletin which I deem need some clarification:- Clivia plants often obtained from the wild may be quite self sterile, but outcross readily. This behaviour is due to their having grown in one area many millennium without major climatic changes or the natural introduction of new breeding stock. As a consequence members of such colonies are so inbred that the chromosome compliments in all plants are near monozygous, practically clonal in composition. They are in need of genetically differing pollens from other plant colonies, or from genetic mutations to provide some diversity. New genes often, but not always, provide hybrid vigour (heterosis).

This is why a number of the yellow flowered clones have been found so exasperatingly self sterile. One has to outcross to gain fertility, and then backcross to exclude the orange coloured genes. I have experienced the same behaviour with an attractive Clivia striata which had foliage with numerous gold stripes. The plant would not self and its offsets usually reverted to a non-variegated form with normal green foliage.

So I cross this C.striata with pollens from my yellow form, several C. x cyrtanthiflora forms and a nobilis hybrid. Much to my surprise near half of the resulting seedlings showed the striata pattern, but not the typical golden yellow. These seedlings were with pale green stripes or striata. Intercrossing and selfing these seedling plants did not intensify the striata significantly. The golden hue was not regained. Mixed seed was distributed to Bill Morris in NSW, Wally Lane and several collectors near Santa Barbara. All have commented on the hybrid behaviour of their semi-striata mixtures. Some bear yellow blossoms with the usual slender tepals. I lost my c. striata in our big 1990-91 freeze which dropped below minus 10 C. for near two weeks. The original C.striata and a poor replacement were never as hardy as normal hybrid stock. Both require more shade in order to avoid sunburn. But the strange thing was, while the plants froze, the seed survived and much of it germinated.

I have encountered self sterility in numerous Crinum and Amaryllis belladonna variants. These plants often yield parthenogenetic (Apomictic) maternal seed, but I have never found evidence of such seed development amongst the Clivia.

I have turned in a brief report to the IBSA concerning the use of the Neem Tree (Azadirachta indica) extract as an insecticide which is made from the seed. This water extract is ideal for the treatment of mealy bug, chewing insects, ants, fungal attacks and mosquitoes which plague the usual Clivia plantings. It is an outstanding control item and simple to prepare if one has a Neem tree handy, yet practically non-toxic to Man and animals. It's a long used medicinal plant in India.

Finally, has anyone developed a tetraploid hybrid Clivia

Sincerely  
Les Hannibal

(The Neem Tree in South Africa is known variously as Melia azedarach, Sering, Persian lilac or syringa. Some authorities consider all the parts of the tree are poisonous to man. ed. )

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Dear Nick

I have received your two letters. I was glad to hear you got the Lycoris. You will experience very soon what it is to grow them. They are so through and through lousy, I can't part with them any-

more. It has become a real challenge where I always lose. I wish you also a lot of luck with your Clivia Club, and most of all a lot of strength. You will certainly need it once your members have produced their little article and you stand alone to make the next number of your bulletin. After ten years as treasurer in the Vlaamse Iris Vereniging I know the cinema! I have in all 14 yellow clivias, but only one with the larger petal. The photo is this springs flower, the colour is really a little darker (than the photograph).

On the Easter week-end, we made a five day trip to Berlin, with a day spent in their really wonderful botanical garden. A lot of Hymenocallis and Crinum, but being Easter Sunday no staff member was attainable for you know what!

Every time the US dollar plunged under 30 Belgian franc, I ordered ten old issues of *Herbertia* etc. at the A.P .L.S.(The American Plant life Society). So now I have the complete collection, which is by far the best help for amaryllid growers that I know. If you ever need something out of it I will make you a Xerox.

Thanks for the *hippeastrum* offer. I am just straightening out the mess, but you can expect my list next time. I have noticed that Europe is very shabbily represented in your Clivia Club. You know I am not the greatest clivia enthusiast, but if you want someone out of Belgium in your clan, you can put me on your list. Just let me know the conditions.

Willem Reuter

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Dear Mr. Primich

Enclosed is a check for \$2.00 to cover the packing and postage of the clivia seeds. I enjoyed the last newsletter. Les Hannibal's letter in which he explained how by notching Clivia roots you can produce offsets, is the first time I have seen in print what I have done by accident several times. Cynthia Giddy's article was well written, and very complete in a general way. Her article has led me to wonder if there has been any research that has scientifically scrutinised bud formation in clivias with emphasis on the inter-relationships between drought, temperature, fertiliser, and being root-bound. All the information available to me is very specific in principle and very general in application. Can it be said that a period of drought alone, independent of all other factors, initiates bud formation; and if it does, exactly how long should that drought last?

I have enclosed two other items. One is a copy of an article from a commercial plant-trade magazine of the 1930's. It features the work of a plant breeder, an E.P. Zimmerman and the hybrid clivias he bred in Carlsbad, California. I would like to know if you or any of the Clivia Club membership may be familiar with his work. His hybrids were the result of his crosses with *C.nobilis* and *C. lindenii*. I have been told that *C. lindenii* is likely a *C. miniata* selection of the Victorians. It would be nice to find *C. lindenii* which has been described as "a large conservatory plant". It is my hope that *C. lindenii* or some of the progeny of the crosses between it and *C. nobilis* still survive in a garden or an approachable institution somewhere in the world.

The second item is a photograph of a *C. flava* hybrid. I would appreciate knowing how similar it may be in leaf and flower to yellow clivias available in South Africa. As I am just beginning to explore clivias, I am collecting the species and all the variations I can find here of *C. miniata*, and *C. miniata* "flava". Your newsletter certainly allows a view as to what activity may be taking place.

Sincerely yours  
Colman Rutkin

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Dear Sir

I am enclosing cheque to the value of R10.00 and would like to become a member of your club. I am not a very clued-up gardener, but am learning. Love the garden and in particular the clivia. Have two of them in my garden, one flowered last year- hopefully the other will also flower this year. I believe you put out a very good newsletter in April, and would love to receive a copy of it if still available.

Many Thanks  
Audrey Cloete

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Dear Mr. Primich

Your kind offer regarding seed for distribution in July is appreciated. Enclosed please find my cheque to cover postage and package costs. I have taken the liberty of sending the April newsletter to Prof. Kristo Pienaar, well-known botanist, author of numerous books on indigenous flora, and Radio and T.V. personality who writes a weekly article in the magazine section of "Die Burger" called "Vra vir Kristo", with a request that he asks Clivia lovers to join the club.

As you will observe from the attached article from "Die Burger", 05.06.93., he has responded magnificently. "Die Burger" has a large and wide circulation in the Cape Province. I daresay this publicity and the fact that he has also joined our club will stand us in good stead. I support Mr. Vorster's suggestion (Vol.I No.3. Nov .93) regarding a joint order. I have also been thinking of exchanging plants with our friends in Australia and Japan. Would this be possible, and if so what are the requirements? Please amend your list of addresses in the newsletter which still reflects my previous box number.

Kind regards  
A.Gibello

P.S. I have lots of other news. Hope to meet you when next I visit the Transvaal, hopefully in August.

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Clivia Breeding Plantation  
Hybrid Seeds for Sale

Cost per 1 seed US\$

1	(C.m. x Y) x Y (green stem 30%) (red stem good flower)	2.00
2	yellow 100%	5.00
3	yellow x Vico yellow	8.00
4	C.m. (Daruma) wide short leaves	2.00
5	C.m. variegated	2.00

6	C.m. (Daruma) variegated	5.00
7	C.m. x C.g	2.00
8	C.m. variegated x C. 9	3.00

For shipment in December - if sold out will substitute.

Payment to Yoshikazu Nakamura, savings account #540-623619, at the Asahi Bank, Mobara branch,  
1-4-1 Chyoda-chyo  
Mobara city  
Chiba prefecture  
Japan

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Dear Mrs. Amos

My husband Michael is actually the Clivia-mad one in our home. We have two areas in our garden especially set out for clivias. The one contains fifty-six Clivia miniata (including some hybrids). The other has in it nine caulescens, eight gardenii, and nine nobilis. We also have a pot with six yellow miniata in it, which we are waiting to flower. We bought the one plant in 1990 (December), from a Mrs. Watkins in Natal for R75.00. Five smaller plants have grown, but no flowers as yet. We do believe that this may be as the result of our move eighteen months ago to the Transvaal. We estimate that the original plant to be about four to five years old now.

Through discussion and research we have found that people commented that the yellows from Mrs. Watkins were genuine yellow, bearing yellow seed pods, and therefore producing yellow-flowering plants. It appears that the yellows available from Mrs. Giddy (also in Natal) may not always produce yellow plants from seed, but rather revert back to the orange. (*It would seem Mrs. Giddy's yellow may have been self-sterile and Mrs. Watkins' was not. A lot of people fall into this trap and think that the self-sterile yellow reverts to orange when there is not another yellow to pollinate it. Would Mrs. Giddy care to comment? ed.*)

Apart from the plants mentioned above, which are already in the garden, we have collected seed from the plants that flowered, and collected seed from various plants throughout the country. To date we have potted:- miniata 218, gardenii 25, and three of unknown variety. We still have miniata and gardenii seeds awaiting planting.

My husband and I have been to various libraries, antique bookshops, and institutes to read up and research information relating to Clivia. There certainly appears to be much discrepancy about identification of clivias, other than miniata. This has also manifested itself in the retail selling of the plants. So a word of warning to buyers- the clivia you buy may not be what you think it is.

We have recently found that the Allensnek Nursery in Constantia Kloof is selling clivias of all varieties as Clivia x cyrtanthiflora. Undoubtedly many an unsuspecting customer will fall on these thinking them to be a new species and paying R25.95 per plant!!

In our investigations we established that there is a gentleman doing research into crossing the Clivia miniata with the cyrtanthus in order to get a more tubular flower ala nobilis for the miniata, but with an open "mouth".



Apparently the resultant flower is now being crossed back onto *miniata* to try and obtain the desired result in shape and also to attempt to get a far redder colour to the flower. As yet there are no *Clivia x cyrtanthiflora* on the market as none exist. (? ed)

From our experience, unscientific and limited as it may be, we differentiate between the *Clivias* as follows:-



*Cyrtanthiflora*



*nobilis, gardenii, caulescens*

*miniata*

*Clivia miniata*- only in the flower, Hybrids have fat (wide) leaves, whilst true *miniata* have the narrow spear-like leaves, whose tips are acute or acuminate.

*Clivia nobilis* - in the flower, a yellow colour, where the seed will form changing to a red- orange for the mid-section of the flower and a green tip. The leaf has a notable difference in the tip shape from the other species, namely a slight indent at the end or retuse shape. When in flower the umbel also appears more closely bunched than either the *caulescens* or the *gardenii*.

*Clivia caulescens* - in the flower, a redder colour, than the *nobilis*. The colour being from the seed, forming area through the mid-section, with a green tip.

*Clivia gardenii*- in the flower, the umbel appears more spread out than *nobilis* or *caulescens*. Regarding the leaf formation at the base of the plants the following is noticeable.

*miniata* & *caulescens*

*gardenii* & *nobilis*

N .B. the differences by which my husband and I tell the *clivia* species apart are the result of our own observations, and at the end of the day may hold no water. We will however, be keeping an ongoing record of how these plants progress. Perhaps some other club members can shed more light on the subject, or check on our observations.

A note to serious clivia collectors, or those just starting. Buy the clivia species from the area in which they occur naturally, they are much cheaper. By doing this my husband and I have found mature flowering plants (sometimes with up to eight smaller plants growing in the same container!) for three to four rands!! Also try buying from suppliers/nurseries outside of the city/suburban environment. These places have just as good a stock at far more realistic prices.

Further, try the indigenous nurseries, join the Botanical Society which enables you to buy plants from any of their branches, and visit nurseries (especially on the outskirts) who do their own propagation. At these places the staff, often owners, are most helpful and eager to share knowledge or keep plants aside for you. Be warned though, these are not places of great architectural features but rather out in the open under nature's canopy of trees. What a pleasure!

While we are continuing our research into clivias, we are also collecting as far as possible, the entire indigenous range of *Crinum* (20 different species), *Cyrtanthus* (48 different species), *Nerine* (30 different species) (we have the four clivia species.)

So who knows what may happen in crossing the clivia to some of the above. Any suggestions?

Yours sincerely,  
Michael & Renee Stevenson.

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### **WANTED**

Field-collected plants of *Clivia nobilis* and *C. gardenii* from as many localities as possible.

I have been doing research on the taxonomy of *Clivia*, and recently submitted a manuscript on the subject for publication in *Flowering Plants of Africa*. In the course of this study, it became clear that *C. nobilis* & *C. gardenii* have never been properly circumscribed. In other words, although there are people who claim that they can adequately distinguish between these species, their opinions rest on one or two specimens, and I am not sure that the criteria used to distinguish them, hold water.

I therefore wish to grow a selection of field-collected material in order to solve this problem. Seed would be welcome, but plants of flowering size would enable me to reach a conclusion so much sooner.

P. Vorster  
Botany Department, University of Stellenbosch, Private Bag X5018, 7599 Stellenbosch

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*Dear Friends,*

*A little earlier, but perhaps we will have a fifth issue in December. Just remember that will depend more upon you than upon me. Bruce Knight is an old friend of mine, but he is still a young person and an excellent and knowledgeable writer on many aspects of botany and horticulture. His superb article continues the fine Australian tradition that has been established in our little newsletter. Some people take us at our masthead's value and think that we only consider articles on *Clivia*. True, we are centred on *Clivia*, but which of us does not have an interest in other plants? Most clivia fanciers have an interest in the amaryllid family. I will certainly publish any*

worthwhile contribution that comes into my letter box, although it would have to be a really remarkable article about daisies!

Excellent letters from Colman Rutkin and Michael and Renee Stevenson. Let us have some comment from the members about these matters which are discussed in the letters, Please, if there is anything which you don't understand, or disagree with, please let us hear from you. It is not a crime to have a different opinion, and we would like you to air it. What about Professor Kristo Pienaar, and the twenty-odd new members who joined on his recommendation? A hearty welcome to you, and please make your presence felt. Let us hear what you have to say. Write in Afrikaans by all means. We will of course have to supply a translation for our overseas friends, and you can do it yourselves or leave it up to me.

I have repeated Dr. Vorster's request for wild-collected specimens. This is important to Clivia people, because surely we would like the mystery and the mistiness cleared up about the differences between nobilis and gardenii? I will go even further, and ask anyone with knowledge of Clivia of any species growing in the wild to report these as fully as possible either to Dr. Vorster, or to myself Are there any clivia growing wild outside of any Reserve?. A gentle reminder, Clivia is a protected genus, and may not be gathered without a permit.

About importing plants! A lot of difficulties in the way, that is why I have published Yoshikazu's list of seed available this December. Expensive ?, I suppose so, but infinitely cheaper than plants. Why not lash out and try a few? A lot of people say they do not have the patience to wait for the seed to grow, but if you think about it, you do not have to wait for the seed to grow, you just let it get on with the waiting and you go ahead with your other things. May all your Clivia thrive!

Best regards, Nick Primich (ed)

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## **CRYPTOSTEPHANUS VANSONII x CLIVIA UPDATE.**

No2.

March is half over and the fruits are developing nicely on the cross-pollinated inflorescence. The twenty-eight fruits on this first cross (C. miniata as the pollen donor) have changed very little. The second round of cross-pollination has resulted in only nine fruits setting. I used C. x cyrtanthijlora as the pollen source. I don't know why fewer fruits resulted from this second round of cross-pollinating. Perhaps I was not as consistent with the second and third inflorescences as I was with the first. At the time of writing a fourth flower stem is developing on my plant. Here I go again.

Culture.

My two plants of Cryptostephanus vansonii are treated the same as my Clivias. I have them potted in terra cotta pots using a very open potting mix. Slow release fertiliser is used and I have topped the pots with white granite chips. The seed I have sown were placed individually in fifty x fifty tree tubes. The same potting mix was used. The small seed was just pressed into the surface. Growth of the seed is very Clivia-like. They are noticeably slender and pale green. They are developing slowly.

No3.

It's the middle of June and the fruits on the first inflorescence ( using *C. miniata* as the pollen donor) are changing colour to the red of the ripened fruit. Fruit diameter did not change over the past six months. I will be leaving them on the plant until spring, unless they decide otherwise. The later-pollinated inflorescences still have green fruits. All things being equal they should ripen by late spring. Then it is a matter of waiting until the seedlings develop and mature enough to flower. I wonder what we will get? Maybe just *Cryptostephanus*, or perhaps something different.

No4.

Last week in July, and the fruit has decided it is time. Collected the twenty-eight fruits and cleaned the pulp from the small, brown seeds. One hundred and eight seeds were produced, some fruit having only one seed, up to a maximum of nine seeds per fruit. The seed is very *clivia*-like in shape. The majority are roughly five millimetres in diameter, and some of the larger ones approximately eight millimetres. I will be sowing them in individual seedling tubes to minimise the disturbance to the developing plants. What do I expect? Perhaps some seedlings that show a broader leaf development compared to the *C. vansonii* seedlings I already have growing. Maybe the purplish pigmentation at the base of the leaf, variation in growth rate indicating some hybrid vigour. It will be interesting watching them develop.

Ken Smith  
Australia.

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## ON THE COMPOST HEAP

Being a worm, or a caterpillar, has its compensations. You know, although we start around the edges, we always get to the heart of the matter. We also have impeccable judgement. We know instinctively that clivia are the best of the amaryllids. We know the *miniata* is better than the pendulous species, and we know that *var. citrina* is the best of the best. Who taught us? Nature! It is wound into the convolutions of our chromosomes. We will, in times of need, nibble at nerine, or make a hash out of your amaryllis. We will even demolish your *hippeastrum* for you, and in times of great stress will eat up the *Chlidanthus fragrans*. All in all we are a pretty obliging and accommodating lot.

Lily Borer.

## THE VALUE OF A FLOWER

On a grave, in a church, for weddings or for funerals, in our highest or our lowest moments we turn to flowers to say what we cannot otherwise express. Nations, states, provinces, and cities have floral emblems chosen to display some aspect that we feel is best put over by a floral emblem. *Zantedeschia aethiopica* has the dubious distinction of being known world-wide as the "funeral lily". In spite of this sombre connotation, it is still used for many other purposes, including stockfeed. Moral comforter, medicine, decoration, many are the uses put to our flowers.

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Dear Nick.

Thank you for your letter of 6th May and for Clivia Club Newsletters. 2; 1 and 2; 2, I look forward to a copy of 1; 1 when your reprint this or have extra copies made a ~ indicated. A simple photocopy would be quite acceptable to me.

I did not receive a copy of the ready-printed article from Cynthia Giddy, which went with 2; 2 I would welcome this.

I find the newsletter to be very useful and I will try to contribute. I found Les Larsson's bibliography of Clivia references from Plant Life - Herbertia in 2; 3 to be especially helpful.

I trust the order of my initials and loss of a T from my name was not one of your deliberate mistakes to make sure we were reading the publication with due diligence. I would however, like to appear as Dr. K.R.W. Hammett and to be listed as a breeder (of Clivias). This list is important for direct member to member contact. It will enable me to alert other people who may wish to join the Clivia Club.

Carl Atkinsons's suggestion of compiling a list of all known plants is important as is the compilation of all published names. This should be a great deal easier for Clivia than for a genus like Dahlia where several hundred thousand names have been published over the last two centuries.

What does the abbreviation IBSA stand for? Coates' article 2; 3 p 2-4

Have you had any success in finding a source of *C. caulescens*?

I enclose a photocopy of the entry on Clivia from John Weathers' "The Bulb Book" published in 1911. It is possible that not all members are aware of this work. Weather is recorded as having been born at Newmarket, County Cork on 17th June 1867 and having died at Islesworth, Middlesex on 10th March 1928. He was a gardener at Kew in 1888 and became Assistant Secretary to the Royal Horticultural Society. He also ran a market garden at Isleworth. He wrote a number of horticultural books during the early years of this century. "The Bulb Book" is a highly regarded work.

It is interesting to note the early widespread use of the name *Imantophyllum* for what we now call Clivia. It is also interesting to note the variety of forms given names which indicate yellow flower colour, namely *aurantiaca*, *sulphurea* and *citrina*.

Best wishes,  
Keith Hammett