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# CLIVIA NEWS

▼ QUARTERLY NEWSLETTER OF THE CLIVIA SOCIETY ▼



VOLUME 19 NUMBER 2 & APRIL - JUNE 2010

# CLIVIA NEWS

## THE OBJECTIVES OF THE CLIVIA SOCIETY

1. To coordinate the interests, activities and objectives of constituent Clivia Clubs and associate members;
2. To participate in activities for the protection and conservation of the genus *Clivia* in its natural habitat, thereby advance the protection of the natural habitats and naturally occurring populations of the genus *Clivia* in accordance with the laws and practices of conservation;
3. To promote the cultivation, conservation and improvement of the genus *Clivia* by
  - 3.1 the exchange and mutual dissemination of information amongst Constituent Clivia Clubs and associate members;
  - 3.2 where possible, the mutual exchange of plants, seed and pollen amongst Constituent Clivia Clubs and associate members; and
  - 3.3 the mutual distribution of specialised knowledge and expertise amongst Constituent Clivia Clubs and associate members;
4. To promote the progress of and increase in knowledge of the genus *Clivia* and to advance it by enabling research to be done and by the accumulation of data and dissemination thereof amongst Constituent Clivia Clubs and associate members;
5. To promote interest in and knowledge of the genus *Clivia* amongst the general public; and
6. To do all such things as may be necessary and appropriate for the promotion of the abovementioned objectives.

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⊗ KwaZulu-Natal	Glen Boyd and Francois van Rooyen
⊗ Lowveld	Paul Kloeck
⊗ New Zealand	Tony Barnes
⊗ Northern	Peter Lambert, Tino Ferero and Lena van der Merwe
⊗ Northern Free State	Hannes van Rooyen

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The Clivia Society Newsletter started as a black on white news-sheet dated July 1992, numbered Volume 1 number 1, called 'Clivia Club'. It formed a means of communication for people interested in the plant genus *Clivia*. It was edited/written by Nick Primich with a frequency of 3, 5, 8 & 5 during the first 4 years, using the publication month in the volume.

The frequency was fixed on four annually with Vol. 5 No 1 of March 1996.

The date changed to the southern hemisphere seasons with Vol. 8 No 1 of Autumn 1999. The first three used yellow paper as cover. The name changed to 'CLIVIA CLUB NEWSLETTER' with Vol. 9 No 1 Autumn 2000 with full colour photos on the cover pages. Another name change to 'CLIVIA SOCIETY NEWSLETTER' came with Vol. 10 No 4 Summer 2000, and in 2005 reverted to a quarterly number.

CLIVIA NEWS is the continuation of this series.

## EDITORIAL

### REPORT TO THE ANNUAL GENERAL MEETING OF THE CLIVIA SOCIETY 2010

This report covers Volume 18 Number 2 through to Volume 19 number 1

**T**he newsletter has been following a set pattern and elicits favourable comment from the odd few that venture an opinion.

While it was unfortunate to again only have had a single issue for Numbers 3 & 4 of 2009, this did not appear to faze the membership and made for a bumper Christmas holiday issue.

There appears to be a greater readiness for members to present material for publication and this is much appreciated since it offers the readership with novel and valuable information.

#### Topics that members can address in communications or articles are:

Clivia in habitat

Personalities, the plants that they grow and their breeding achievements

Reports from Clubs particularly as regards reports on talks or outreach

Show pictures, particularly top plants and their growers/ showmen

Named Clivia cultivars or clones and their characteristics

Descriptive terms and botanical terminology

Experiences in breeding and growing

Prediction of trends or directions for breeding

Pests and diseases.

Technical developments in the marketplace

Short reports on research outputs

Heritage and heirloom plants

Photo-essays any topics of interest to the Clivia circle.

Anything related to collectable or memorabilia in the world of Clivia.

Aspects that present problems are being up to date and having the correct details and names of contact persons of the various Clubs. I wonder if it is necessary to publish all of these and not just have the Society Secretary as contact person in South Africa with the list of international contact persons?

Also problematic at times are the advertisements, particularly as to whether they are still current when going to press, thus still relevant and therefore still need to be published? There should also be effort from all Clubs to find sponsors and advertisers for the Newsletter.



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I wish to thank all those that made contributions to the issues of 2009-10, and in particular Willie and Cynthia le Roux for support and regular contributions.

Thanks as always to the Layout Artist, Fréda van Wyk, who suffered the bereavement of the death of her husband Tinus in December, but has continued in doing her work with care, dedication, creatively and with resolve. Thanks too to Annetjie and her team at CPD printers for regularly getting *Clivia News* to press.

I'm grateful to Helen Sanders of New Zealand for her contributions of Clivi-Arta, and recommend that, as in the past, she receive copies of the publications of the Clivia Society.

As always a big "Thank you" to Lena and especially to Sakkie – he keeps the reins tight and me on my toes!

The forthcoming year with the Cape Clivia Congress around the corner offers challenges. If the Newsletter is to contain programmes, information on speakers, Auction Catalogue etc then I need fair warning and a free flow of information and timely receipt of material to achieve this.

*Roger Fisher*

*Editor – Clivia News*

## Editorial Vol 19 no 2

The World Cup 2010 soccer is with us. I must say, that while I am no sport aficionado, I am waving the proudly South African flag.

Which raises the thought – we have sport as substitute to wars. That makes sport expensive but saves on wasted weaponry and lives. As editor I suffer the slings and arrows of feuding and acrimony. What do we, who in the name of the genus *Clivia* indulge in internecine forays, need, by way of communal diversion, to find each other?

This issue deals mostly with peaches. Since a fair amount has recently been written on this particular colour phenomenon it is opportune to collect various thoughts on the matter, even if the authors may not be in agreement and some of their ideas mutually exclusive. It gives me pleasure to have them shared between these pages and my particular thanks to all authors for taking the effort in making their thoughts and experiences available. A themed issue also provides opportunity for recording some named cultivars and cultivar groups and their origins.

I hope you enjoy the approach.

Then, to Kevin Walters – congratulations on a well-earned if somewhat belated membership in perpetuity of the Clivia Society. &

*Clivia greetings*

*Roger Fisher*

*The Executive of the Clivia Society and its members offer their heartfelt condolences to Sakkie Nel and his family on the recent loss of his sister and brother.*

## ADVERTISEMENTS

WILL ANYONE WISHING TO ADVERTISE OR WHO KNOWS OF POTENTIAL SPONSORS OR ADVERTISERS PLEASE COMMUNICATE WITH SAKKIE NEL IN THIS REGARD - SEE INNER COVER FOR CONTACT DETAILS.

## CLIVIA 2010 Cape Clivia Congress

Arrangements for CLIVIA 2010, the 5th International Clivia Conference, are going according to plan. Full details of the Conference and associated tours, Shows and other events were set out in the last CS Newsletter (Vol. 19 Number 1) and are also available on the website of the Cape Clivia Club at [www.miniata.co.za](http://www.miniata.co.za). I am not going to go into detail here, but remember particularly; you are unlikely to ever again have the opportunity of attending a Clivia photography workshop with 'the master', Ian Coates.

Speaking of websites, the question has been asked why, if the Conference is being jointly organized, why detailed information is appearing on the Cape Clivia Club (CCC) website only. The simple reason is that the CCC site can be updated more quickly and we did not want one website to be saying one thing while the other still said something else. That would be a recipe for confusion.

As with previous conferences, overseas delegates have booked their flights and accommodation

and have tended to register early. South Africans have been slow off the mark – something to do with all the sport that is now taking place here? Remember that the period for “early bird” registration expires on 15 July. Fees at the full rate will cost you more if you wait to register after that date.

Another reminder is that the closing date for Auction entries is 2 July.

Mark Twain, the American author who visited South Africa on his travels wrote “Twenty years from now you will be more disappointed by the things you didn't do than by the ones you did do... Explore. Dream. Discover.”

The joint organizers, the Clivia Society and the Cape Clivia Club, look forward to welcoming you to what we intend should be a memorable experience.&

*John van der Linde*

For the organisers



## CLIVIA PERSONALITIES

### Kevin Walters – An Australian Clivia Breeder

[Kevin Walters is one of the founding members of the then Clivia Club in 1992. He was awarded lifelong honorary membership of the Clivia Society at the 2010 CS AGM.]

“Orange is the colour of exuberance and vitality, and that enlivening splash of orange in the spring garden colourscape means that old favourite *Clivia miniata* is in bloom” ... so says one of Australia's oldest and most respected breeders of Clivia, Kevin Walters of Toowoomba, Queensland. (Kevin Walters p.29).

Kevin Walters has been quietly breeding some of Australia's best clivias for decades, producing some superb orange and yellow clivias, known for their large recurved flowers and beautifully formed spherical umbels.

Kevin was fascinated with bulbous plants as a young boy, and this interest was piqued by the garden of his paternal grandmother Charlotte, which was full of bulbs such as Belladonna lilies,

Hippeastrums, narcissus species, and “drifts of freesias in the front garden.” He was given his first Clivia in his early teens by his grandmother, who could scarcely have imagined how he would develop them as an adult.

When Kevin first started with clivias as a young man, there was almost no information available on such plants. The books and magazines dedicated to these plants had not yet been written, and it really was a case of trial and error, and waiting patiently, sometimes for years, to see what worked.

Kevin dabbled in clivia hybridising for about fifteen years, but it was only after he used a good form of yellow clivia that he began to achieve his spectacular results.

He managed to acquire two Belgian hybrid seeds from Goodwins in Tasmania in 1964. One of these seed grew to maturity and flowered, and he called this plant “1964.”



Kevin Walters

In the early 1970's, Kevin acquired his first yellow clivia – Aurea, from a Mr Pollard in Caulfield in Victoria. He was later able to purchase more of this strain from Adelaide. It must be remembered that at this time, these yellows were indeed rare and prized plants.

He made his first cross Aurea X 1964 in 1976, and the progeny of this cross included the well-known and highly regarded Relly Williams, Valerie Martin, and Valerie Martin Supreme – all orange flowering plants with large full flowers, which were 'split for yellow.'

Kevin made another cross in 1979 – Aurea X a Kewensis orange. This orange had an interesting history – the first seed of it came from the Kew Gardens in England, brought back hidden in a handbag. The plants resulting from this cross comprised about a third yellows, one of which had a green throat and was later named 'Monica Conquest.'

The well-known clivia breeder Bill Morris was among the many admirers of these yellow clivias bred by Kevin, and Bill visited him many times, further enlightening Kevin about observing his plants for form, as well as for colour. Kevin credits Bill for opening his eyes to the concept of the flower form; these lessons were further reinforced

by the noted iris breeder and judge, Rita Caldwell. Rita explained to Kevin that "the gardener goes for colour whereas the breeder's main concern is form." (Kevin Walters, 1987.)

Kevin was making friends around the world at this time in his life, and often corresponded with Les Hannibal of California, a well-known bulb breeder as well as something of an expert on crinum.

It was 1992, however, that Kevin remembers with great clarity and pride.

Ken Smith of Sydney organised for Yoshikazu Nakamura, universally regarded as the one of the world's best clivias breeders, to visit Australia.

Kevin met with Nakamura on several occasions, and Nakamura was so impressed with Kevin's plants that he took a quantity of pollen back to Japan to assist in his own breeding program. Kevin also sent plants and seed to Japan, and some years later, he received back from Nakamura some seed of Walters Yellow X Vico Yellow, Walters Yellow X Vico Gold, and Monica Conquest X Vico Yellow.

Nakamura also named one of Kevin's plants. This plant was an interspecific (*cyrtanthiflora* X *miniata*) bred by Kevin, the colour of which Nakamura said reminded him of the cherry blossom at home, so



*A Kevin Walters yellow clivia.*



*Kevin Walters Cream.*



he named the plant Sakura, which means cherry blossom.

By this time, Kevin had also made contact with clivia growers in South Africa, and was in fact one of the founding members of the Clivia Society, along with Nick Primich, and others.

He made the acquaintance of Dr Keith Hammett when he visited from New Zealand, and Bob Pearce, a wholesale nurseryman who accompanied Dr Hammett. These men were also very taken with the yellows that Kevin had bred.

Over the next decade, Kevin was honoured with gifts of seed from Nakamura, as well as growers from South Africa, including Nick Primich, James and Connie Abel, Dawn Strydom, and in more recent times, Sean Chubb and Felicity Weedon. Kevin, of course, reciprocated these favours, as well as sharing and exchanging seeds and plants with other growers in Australia.

In his later years, Kevin has had the desire to return to his beginnings, in regard to one of his early crosses. In 2005, he again crossed Aurea X 1964, and he is also evaluating some of the first and second generation crosses that Nakamura did

with his yellows, as well as assessing the progeny of his clivia "Sakura."

Clivia bred by Kevin are widely sought after, and are in collections of people around the world, including Japan, South Africa, and North America, as well as in his home country. Collectors worldwide admire and desire the sumptuous flower-heads with the beautiful large recurved petals, for which Kevin's plants are renowned.

He is keen to establish the area where he has lived and worked all of his life to become a centre of excellence for the plant he has spent his life trying to understand and improve.

The world of clivias has been, and continues to be, a source of never-ending fascination for Kevin, and we look forward to seeing further results of his endeavours in the years to come. &

*Di Mathews*

#### REFERENCES

Kevin Walters *Australian Garden Journal* Vol 6 No 4 April/May 1987.

Photographs used with kind permission from Gary Fry of Toowoomba.

## CLIVIA SOCIETY MATTERS

### MEMORIES ARE MADE OF THIS

It's Friday 14th May 2010 and a sunny afternoon with a fresh smell of the sea eagerly awaits the arrival of the delegates and other Clivia friends to the magnificent 'The Willows' seaside holiday resort outside Port Elizabeth where the Clivia Society's AGM is to be held the next day.

The Eastern Province Clivia Club acting as host welcomed the 68 Clivia lovers to a "meet and greet" gathering later that evening at the resort's conference center.



*Left: Willie le Roux and Gerhard Faber.*

*Below: Piet Theron and Liz Boyd.*





*Left: Koos Geldenhuys, Roger Fisher, Cynthia le Roux, Maxie Calitz and Glen Boyd.*

*Below: Saturday morning saw some of the early risers taking a stroll along the beautiful sea-shore while others were off to view some Clivia shade houses around Port Elizabeth. Peter Lambert, "Old Faithful" Pat Gore (furthest), Glen Boyd (back to camera).*

Old friendships were re-kindled and new ones made over a glass of wine and a very tasty braai served by the caterers. This was followed by a group of happy faces sitting around chatting the night away.

A light lunch was served followed by a lively AGM which ended just in time for the Super 14 rugby match between the Stormers and the Blue Bulls. A well prepared and tasty lamb and chicken potjies served after the match were enjoyed by all.

Entertainment came later from a group positioned at a round table (near the bar) telling jokes about lions, baboons, more lions, dogs and you know what. More people joined and the circle around the table became wider and wider.

By now "The knights of the round table" were on form and could hardly wait for the laughter to subside before firing another round of jokes. It was well into the early (or is it the late) hours of Sunday morning when these knights decided to retire and say their goodbyes to get some shuteye before their journeys home. The local members and those who were leaving by air ended an unforgettable weekend with a lovely breakfast later that morning.

A big thank you to the Resort staff who went out of their way to keep everybody happy as well as to Dr Lena Van Der Merwe and Wimpie Maass for capturing these scenes. &

*Willie Le Roux ECCC*

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## LETTERS

## COMMENTS ON SEAN CHUBB'S GROUP 3 YELLOW'S ARTICLE (January - March 2010 Newsletter)

I was very pleased to read in the previous edition of the Newsletter (January – March 2010 edition, p. 29) Sean Chubb's article referring to yellow clivias which have red berries and the comments about Alpha Thurston Yellow. However, I must point out while that Alpha Thurston Yellow actually is a Group 3, while the other four cultivars listed by Sean are not.

All four have traces of anthocyanin pigments and the photos accompanying the article clearly show that the three blushed yellows are not pure yellows – best shown in the 'Greendale Blush Yellow' photo.

Group 1 and Group 2 are albino yellows and have yellow berries. They also breed albino seedlings when selfed (if they are self fertile – some are not) or are crossed with others in the same Group.

When crossed between Groups they are complementary and produce 100% orange (or orange/red) offspring.

Ndwedwe Alpha yellow behaves similarly and is complementary to the other two Groups and is thus a new Group (Group 3) itself.

The yellow blushed plants and Oribi Gorge yellow – which similarly has red berries – I have been calling members of the "orange spectrum". Orange clivias have a colour range from red to orange to pale orange (pastel) to very pale orange or red (usually called peach, like 'Chubb Peach') and finally like the four pictured in Sean's article – which only appear yellow. It is possible that an orange can be so pale that its flowers even appear pure yellow – but] its pigmented berries (red or orange) are a sure sign that it is still an orange. The full range of the "orange spectrum" seems continuous and red and yellow are simply the poles or end members of the total range.

However, albino plants are unable to produce anthocyanin pigments in any part of the plant so are quite different to the plants which have anthocyanins in their berries or even traces of it in their (blushed) flowers. Thus we must keep the grouping of Group 1 and Group 2 and now Group 3 (Alpha Yellow) to albino plants only.

From Sean's note, 'Mvuma Yellow' may be a new Group 4 yellow. However, Sean did not say that 'Mvuma Yellow' produced all unpigmented seedlings – only that it is semi-fertile and he is growing on the unpigmented seedlings. If some seedlings are pigmented it could be extraneous pollen.

Because I believe there are other reasons why seedlings are sometimes described as unpigmented it is necessary to flower both unpigmented and pigmented seedlings before reaching conclusions. Also, of course, it is necessary to know Mvuma's berry colour.

With the blushed yellow flowers there is possibly just a shortage of a particular transcription factor in the flower only (not in the rest of the plant) which leads to very little pigment production in the flower.

In the berry all the structural genes, the regulatory genes and their transcription factors are normal – so the berries are orange or red (ignoring chlorophyll effects). As these "yellows" are part of the "orange spectrum" they will breed oranges when bred With the Group 1, Group 2 or Group 3 yellows.

However, as Sean says that the four blushed yellows are "all compatible with each other" producing yellow (or slightly blushed) flowering seedlings when crossed together, this simply means that the mutation involves the same transcription factor shortage in all four plants.

As they all came from the same "greater Pietermaritzburg area in the early 1960s" this

is not surprising. This is actually how the Appleblossom collected plants also behave and I have called them "Type" peaches – as I suspected that they had red berries (but as no information about this has been published, I am unable to take my conclusions any further).

The Appleblossom plants were collected from the same area as Sean's four flushed yellows and produce similarly coloured flowers (yellow

or pale orange and yellow) when intercrossed. These flushed plants should be crossed with Appleblossoms to ascertain whether they are compatible or complementary and whether they should be placed in what I have] classified as Type E peaches, or in a new Type F. &

*Bill Morris*  
Australia

## READER'S OPINIONS

### WHEN IS 'CLIVIA' NOT A *CLIVIA*? 2 - PLINY'S CLAMATORY BIRD

**C**aius Plinius Secundus, or Pliny the Elder, was a famous Roman scholar, historian and natural historian whose major work was a 37 volume encyclopaedia of Natural Science. He is also famous, particularly in our part of the world, for having said "*Ex Africa semper aliquid novi*", nowadays a rather over-used saying meaning 'Always something new out of Africa'. Born in about 23 AD, he died while at work in 79 AD, studying the erupting Vesuvius as it buried Pompeii. Ouch.

In his tenth volume, called "The Natural History of Birds", chapter 17 was entitled "Birds, the race of which is extinct, or of which all knowledge has been lost". In this chapter Pliny said: "*cliviam quoque avem ab antiquis nominatam animadverto ignorari – quidam clamatoriam dicunt, Labeo prohibitoriam –, ...*" which I think translates as 'I notice also that people now do not know what bird it was that was named by men of old a 'clivia'. Some say that it was a clamatory, others that it was a prohibitory, bird'; or as Philemon Holland translated it in 1601: "Likewise the bird named

in old time Clivina, or Cluina, which some call Clamatoria, and which Labeo describeth by the name of Prohibitoria, I see is as little knowne as the other".

Clamatory means 'producing clamour' which is 'to utter or proclaim insistently and noisily', and this was thus one of those birds specifically designed to drive one nuts with its noise. Apparently 'prohibitory' indicates that this was a bird of ill-omen, or as my Latin wordlist tells me - 'clivia' can be an adjective which means 'which forbid anything to be done (having bad omens?)'.

It seems to be a good omen that this is a 'clivia' that is no longer with us. &

© 2009

*Greig Russell*

[My suspicion is that this 'clamatory clivia bird' is the hadedah and still very much with us, and particularly fond of upending clivia seedlings in its probing for worms! – Ed]

## ERRATA

Waterberg Clivia Club Show - the previous published information is incorrect. Show dates are 27 & 28 August 2010. Entrance is R10.00 per person. It will be held in the Doppersaal, Nylstroom (Modimolle).

## CULTIVAR GROUPS

## BONNY'S PEACH

**Y**ou do not learn to select horses from looking at a thousand horses. You develop the capability for selection from looking at thousands and thousands and thousands of horses" So says Jaap Werners, vice-president of the Dutch National Equestrian Federation and former head of the *Koninklijk Warmbloed Paarden-stamboek Nederland*. I share my wife's passion relating to the breeding of sport horses. Attending a conformation evaluation session always remains to be a wakeup

call to me: seeing a breeder's vision realising on the results of years of hard work. Meeting up with Nick Kruger at his farm 'Forryhil' is also such an experience to me. Nick is a Clivia breeder that developed expert clivia knowledge over many years of breeding and cultivating thousands and thousands of Clivia at his farm near Dargul in KZN, always engaged to improve the strains he has been breeding. Even more significant is his devoted sense for standards for breeding the finest peach and pastel coloured clivia.



His committed effort breeding a number of strains over many years resulted in exceptional hybrid clivia plants that provide a real colour palette to the eye.

Central to this colour palette is the beautiful hybrids that he has obtained using the genetic material from his Bonny's Peach. So what is Bonny's Peach then? Let Nick tell the story of Bonny's Peach.

#### The Story behind Bonny's Peach

There are a total of 8 different clones in the collection that were given to Nick Kruger by the late Bonny Patterson, 12 years ago, when he lived on the KZN North Coast. The Patterson's farmed for three generations at Mount Albert Nursery in the Kearsney-Stanger district, now known



as Kwaduguza. Bonny told Nick that her late husband's Great Grandmother removed some yellow clivias from the wild nearby, and planted them at the nursery. The peaches she could not explain, having only noticed them after Nick drew her attention to them. They were all different shades of peach, with good heads and broad petals, except for two which had green throats.

Nick has registered them as "Bonny's Peach Group" namely BPG 01 to 08. There were also some yellows which he labelled Kearsney Yellow (this could be the Mapumulo Yellow?).

A description of the individual plants is provided below.

### BONNY'S PEACH GROUP INDEX

BPG01 Large, well formed umbel, high floret count, rich peach colour, semi broad leaves

BPG02 Best of the Group. Pretty true peach colour, reflex petals, broad leaves

BPG03 Delicate peach/pink colour(like a blossom) semi broad leaves

BPG04 Light peach colour, similar to 03 (no pink), good flower, semi broad leaves

BPG05 Very pale peach colour - almost yellow, average flower narrow leaves

BPG06 Yellow/peach colour with green throat, average flower, narrow leaves

BPG07 Small unusual plant, almost green petals graduating to yellow potential for breeding small green flower clivia.

BPG08 Similar to 07, larger flower

The puzzle is: are all these peaches related, or are they from the wild? A DNA analysis would be required to tell us more about them.

### An Exceptional Bonny's Peach

Bonny's Peach BPG02 is a magnificent plant. The flowers have good broad tepals with a lovely peach colour and reflex well, always providing a full umbel with little gaps in between the flowers and carried proud on a strong scape. And as important, the plant stem is strong and the leaves are well knitted to the stem. From a breeders perspective



Bonny's Peach is exciting as it has proven over years of breeding, both as plant and pollen parent, to transfer its magnificent characteristic over to its progeny.

Some of the earliest crossing was with BPG 02 and a pastel split for yellow -20% resulted in



Forryhill's 'Bride's Dream'



Forryhill's 'Touch of Class'

peaches, some were outstanding! It was some years later that I crossed the rest of the group with different parents which now form the basis of Forryhill Peaches [Story to follow - ed]. &

*Chris de Vry*

## GROWERS' & BREEDERS' NOTES

### THE QUEST FOR A PEACH STANDARD FOR CLIVIA

The article which Jim Comstock wrote in Yearbook 6 (2004) entitled 'A Call for a Peach Standard', has not achieved its purpose because misconceptions and contradictory opinions persist about the origins, colour and classification of "Peach" coloured Clivia.

#### What is the colour 'Peach'?

Jim points out the tendency to 'see' any Clivia that is between yellow and pale orange as being called 'peach'.

He therefore proposes a different, genetic standard for 'Peach'. He believes that the peach colour which has occurred naturally in his 'Morning Light' and Conway's 'Tessa' (though some have alleged that 'Tessa' was found in a nursery) and in 'Chubb Peach' is a particular colour variation, like the yellow mutation is, and breeds like a recessive trait as yellow does. They also produce green-based seedlings.'

He mentions that he 'himself had found three or four other peach sports occurring in various, un-



*Chubb Peach Cultivar group.*

PHOTO J VAN DER LINDE

related, normal-orange populations' and knew then (2003) of at least six other peach clones that [had] been discovered by other collectors in California'. He maintains therefore that the peach 'is a mutation which occurs much more frequently than the yellow one does'.

The Standard for 'Peach Clivia' which he therefore proposes is a genetic one confined to those Clivia which would 'breed true when crossed with other peaches and produce green-based seedlings'.

Clearly, however, this proposed standard would result in very different flower colours being included – Jim would include a range of colour from the 'deep peach' colour of 'Morning Light' and 'Tessa' to the 'lighter and paler' colour of 'Chubb Peach', 'with the colour concentrated in the centre of the petal'.

Also these peaches when crossed produce pigmented stemmed seedlings presumably, but not proven, because they all have single mutated genes expressing its particular peach colour but situate at different loci on their chromosomes.

However, 'Chubb Peach' when crossed with those yellows now called 'Group 1' does produce green stemmed seedlings all of which will flower with differing 'peach' colours, being within the range described by Jim as 'pale orange to yellow', all having green stems but otherwise different from the true breeding peaches falling within Jim's proposed standard.

The other peaches in Jim's proposed standard produce pigmented seedlings when crossed with Group 1 Yellows.

There must be a wide range of unpublished experience now available of the flower colour of pigmented based seedlings bred by crossing Jim's selected clivia with different cultivars. I for instance have found that while 'Jim Comstock Peach' pollen which I was given produced pigmented seedlings when used with 'de Villiers Variegated Peach' (a Group 1 derivative of 'Chubb Peach') they flowered peach. And because the same can be said of the flower colour of many other hybrids, both with pigmented or green stemmed

seedlings, does Jim's proposal do any more than identify a certain genetic type of peach flowered clivia and should it exclude others from the description 'Peach'? This brings me to 'European Peaches'.

### European Peaches

The name 'Europeach' was registered by an Australian breeder in about 2007 to identify a cultivar group which he intended breeding from a selection of similar flowered peach coloured plants which he had grown from the same batch of seed he had imported from Europe.

Their flower colour is very similar to what has been named 'Cameron Peach' and that breeder found that the seedling stem colours in his group were mostly green, with some lightly pigmented.

The late Mike Christie bought a farm called 'Tipperary' near Nelspruit in Mpumalanga in South Africa with his friend Cameron McOnie for the commercial production of clivia. They imported clivia seed from Belgium and Spain. When Cameron died, Mike was joined by Rory Niven. Rory became interested in the peach coloured clivia flowering among the plants grown from that imported seed. He showed some of them at the 2001 Northern Clivia Club Show in Pretoria calling them 'Niven Peaches'.

When Rory emigrated to Australia, Mike Christie sold Tipperary and moved to Malmesbury near Cape Town, primarily to grow leather leaf fern for export, but he also brought selected



*Niven Apricot.*

PHOTO GORDON FRASER



PHOTO SEAN CHUBB

*Cameron Peach double umbel 2005.**Tipperary Peach Cultivar Group.*

PHOTO SEAN CHUBB

*Cheryl Apricot.**Tipperary Peach cultivar Group.*

PHOTOS CHRIS WEGEMOED &amp; KAREN DE JAGER

clivia with him for breeding. He called in John Winter from Kirstenbosch as a consultant to advise him on breeding the clivia. From those he developed by selective breeding a "strain" (now officially called a "cultivar group") of *Clivia miniata* with uniform broadish leaves and peach coloured umbels which bred true when interbred. He named it 'Cameron Peach' for his first partner. However, there were many other colours in his collection, except as far as I know, there were no yellows.

Before Mike died in 2006 he gave John Winter a number of seedlings and seed of that cultivar group. They have all flowered with the same broad leaves and the same flower colour. Contrary to what has been written elsewhere, John Winter found that these peach flowered plants all had green stemmed seedlings.

You will find on pages 28, 29, 42 and 64 of Yearbook 4 published in 2002 photographs

of peach and pink flowered clivia which Mike left at Tipperary farm and which a group from the Research Station at Nelspruit led by Chris Wegemoed and calling themselves 'Clivia Unlimited', were hybridising. I visited them later that year and those photographed plants were the only such plants they had to work with. You have all seen the remarkable range of peach, pink (which Jim Comstock defines as a 'pastel with no yellow in it'), pastels and green throats which Chris has bred from them.

I do not know to what extent Chris can predict their flower colour from the stem colour of their seedlings, but it is interesting to note that none of them has yellow flowers. I suspect that his predictions about the flower colour of their seedlings are based only on his own knowledge of their parentage.

#### **Victorian Peaches**

Which brings me to the 'Victorian Peaches'. Victor Murillo wrote about these in Yearbook

PHOTOS VICTOR MURILLO



*Victorian Peach, Light Form.*



*Victorian Peach.*

9. They were developed when he was working at Sunlet Nursery in California. The owners wanted to develop clivia with a wide range of colour for the commercial landscapers' trade. They had been developing a salmon/peach range and the start of their breeding program 'included a Belgian peach and two high quality yellows, which originally came from the Vic Daniels collection'.

What Victor developed was a broad leaf clivia with a range of flower colours which he categorised as 'light peach', 'medium peach' and 'dark peach'.

They all had pigmented stems and he predicts the flower colour of their seedlings only by



*Dark Peach.*

PHOTO CHARL COETZEE



*Cynthia Giddy owned by Charl Coetzee.*

his knowledge of the parentage of a particular seedling. In fact the darkest pigmented seedling base often produces the lightest peach colour flower. Victor developed yellow and green throat clivia as a separate endeavour of his own. Clearly therefore Victorian Peaches are a very different group from the Cameron and as yet unnamed Australian ones.

**Groups**

What we used to know as 'strains' are now officially

called 'cultivar groups'. That description would fit Cameron Peach and the yet to be named similar Australian peach flowered group but possibly not Victorian Peaches because of their variety of flower colours and differing seedling stem colours. However, Victor does identify specific groups of plants within his Victorian Peach range which have the same characteristics and breed true and, if separately named, would qualify as cultivar groups.

The natural mutations referred to by Jim Comstock are individual plants, not groups, and therefore would be distinguished only by the names given to them.

Nonetheless we have also read of 'Victorian Peach' and 'Cameron Peach' described as 'Group 2' Peaches and 'Chubb Peach' described as a 'Group 1 Peach'. This must arise from the 'grouping' of some yellows as Group 1 and Group 2.

Twenty years ago we did not know how to breed yellow clivia except vegetatively. This was because clivia breeders such as Cynthia Giddy had found that Natal Yellow was self-sterile but when crossed with other yellows produced seedlings with pigmented stems which flowered orange. She therefore stopped marketing seed but sold yellow flowered offsets extensively.

At the first International Clivia Show at Pretoria in 1994 Fred Gibello showed what was judged the best yellow. He had obtained it from a Mrs Höll at Swellendam near Cape Town. Mrs Höll's husband had been the Postmaster at Pietermaritzburg and shortly before they retired to Swellendam, she bought a yellow flowered clivia from Cynthia Giddy.

Pollen from the Gibello plant was used by Wessel Lotter in Pretoria on his Natal Yellow and the resultant seedlings were green stemmed and flowered yellow. Clearly therefore the Höll Yellow was different and Wessel and Bill Morris worked out that the pairs of mutated genes in Natal Yellow and Höll Yellow must be at the same locus on their chromosomes so that when they were crossed their seedlings each inherited one mutated gene from each parent which paired up at that same locus in their seedlings resulting in their yellow flowers; and that the

only reason for pigmented orange flowered seedlings having been produced when Natal Yellow was crossed with other yellows such as Eshowe, Kewensis and Vico must be that they had their pair of mutated genes at a different place from Natal Yellow on their chromosomes. Consequently when they were crossed the mutated gene from each paired up in the seedlings with a normal gene at their respective loci, their anthocyanin pathways were therefore not blocked and they flowered orange.

Wessel named the Eshowe type yellow 'Natal A' and the Natal Yellow type yellow 'Natal B'. This naming was later changed to 'Group 1' and 'Group 2'. Any yellows in Group 1 when interbred would produce only green stemmed seedlings which flowered yellow and the same applied to interbreeding of any yellows in Group 2, but if you crossed a Group 1 with a Group 2 only pigmented seedlings with orange flowers would result.

When it was found that 'Chubb Peach' produced only green stemmed seedlings all of which flowered various peach colours not only when it was line bred but also when it was crossed with Group 1 Yellows, 'Chubb Peach' was called a 'Group 1' Peach.

This led to breeders trying to 'Group' all peaches in the same way. None of the other naturally occurring peaches referred to above nor any of the peach cultivar groups nor 'Victorian Peach' bred the same way with Group 1 Yellows.

So the question arose: 'is there a Group 2 Peach?' Only one Peach, Meg Hart's 'Cransley Peach', which I believe occurred naturally and was not cultivated, has produced green stemmed seedlings when crossed with Group 2 Yellows but there seems to be no reliable evidence yet to confirm that they all flower peach.

I have seen the Australian peach cultivar group and the Cameron Peach cultivar group called 'Group 2 Peaches'. On what possible basis? Because they breed true and have green bases and because Chubb has been called Group 1? But crossed with Group 2 Yellows Cameron Peach invariably produces pigmented based seedlings. In what "group" group would you

place all the natural peaches referred to by Jim Comstock only because they also all breed true with green stemmed seedlings? Cransley Peach would qualify as Group 2 on the same basis as Chubb qualifies as Group 1 – if its green stemmed seedlings when crossed with Group 2 yellows do flower peach. What is Victorian Peach then “ Group 3? And what about the other peaches being cultivated every day?

### Peach Standard

Which of course brings us back to Jim Comstock's quest for a 'Peach Standard'

Earlier this year I took this up with the Enthusiasts' Group and suggested the following:

1. 'Natural Peaches' being all those peaches referred to by Jim Comstock and identified by their individual names (asking for the names of the others referred to by Jim, but not named) all of which have occurred naturally and produce green stemmed seedlings with the same flower colour as their parents when line bred.
2. 'Cultivar Groups' being plants selected from the same source for their similarity of plant form, seedling stem colour and flower colour which are cultivated by selected interbreeding to produce a group of peach flowered plants which breeds true. These would be the Cameron Peach and yet to be named Australian cultivar groups and any other such groups still to be cultivated.
3. Groups such as Victorian Peach (and Chris Welgemoed Peaches?) identified by their given names which have been cultivated to have a specific range of flower colours but whose seedling flower colour cannot be identified by their stem colour alone, unless their owner knows their parentage and how to apply it .
4. Peach flowered plants individually cultivated which can be identified only by their given names and do not breed true. These will have a wide range of colour between Jim's 'pale orange to yellow' but, as we have seen, the range of colour in the 'Natural Peaches' makes specific colour alone an insufficient measure for their classification.
5. Group 1, 2 or more would not be appropriate

except for use by those who want to describe an affinity of a particular peach for Group 1 or Group 2 Yellows, which resulted in their hybrid seedlings having green stems and peach flowers - as happens with Chubb when hybridized with Group 1 Yellows.

### Breeding

1. The Natural Peaches will only breed true if line bred, but every one of them can be improved by crossing them with any other Clivia *miniata* with a superior plant or flower form. The F1's will all be pigmented and have flowers in the orange range but if you select the best of them and sibling cross them, Kerrie McElroy advises that "they should only produce 25% F2's which are homozygous (i.e have identical genes) for the peach mutation and thus peach flowering. Back crossing the F1 plants to the peach parent should produce 50% peach flowering plants"

'Chubb Peach' is different because of its affinity with Group 1 Yellows. Crosses with them produce only peaches (always with better flowers because the Chubb Peach flower is so poor) in different peach tones, depending on the yellow used, because the peach gene in Chubb is dominant. Be careful though because these F1's will be heterozygous (split) for yellow so that if you cross them with a Group 1 Yellow you will get only green stemmed seedlings but they will flower either yellow or peach.

You can also cross ChubbPeach with plants split for Group 1 Yellow such as 'Floradale Apricot' or 'Kirstenbosch Supreme'. With 'Floradale Apricot' you will get some green stemmed seedlings which will flower either yellow or a good pinky-peach and some pigmented seedlings which can flower even better peaches or pastel. Crossed with 'Kirstenbosch Supreme', the green flowered seedlings will flower peach if crossed with a Chubb Peach which is not split for yellow, but the pigmented ones will be orange because that mother is a hybrid of Group 1 and 2 Yellows.

2. Breeding within a cultivar group such

as 'Cameron Peach' will produce green stemmed seedlings all of which will have the same flower colour and form and the same plant form but its uniformity is lost if they are outbred to a plant which is not one of that cultivar group.

Cameron Peach has a magnificent umbel and its flowers are particularly weather resistant. Therefore I have crossed Cameron with Group 1 and 2 yellows and other yellows such as 'Oribi Gorge Yellow' which fall into neither of those groups and with 'Victorian Peach' and a 'Tipperary Peach' and 'Floradale Apricot' and 'Autumn Splendour'. At the time I wrote to the Enthusiasts' Group, all their seedlings were pigmented. Subsequently, however, both John Winter and I have produced green stemmed seedlings from crosses of 'Cameron Peach' with particular 'Group 1' Yellows (Christo Lotter's 'C2' and my 'Margot D.'). Time will tell how all these different crosses will flower.

3. 'Victorian Peach' has produced only seedlings with pigmented stems for me, but Victor himself has written that "due to the inbreeding of certain Victorian Peach plants, back crossing, etc. we are finding that some of the Victorian Peach offspring will produce beautiful peaches with Chubb Peach, Cameron Peach, de Villiers variegated Peach, Horace Anderson Peach, Group 1 and Group 2 Yellows."

There was a very encouraging and helpful reaction from many members of the Group, some way beyond my own scientific knowledge and experience but among the points made were the following:

1. Keith Hammett was concerned (and Jim Comstock agreed) that a "Natural Peaches" category would be based on phenotypic characteristics (those caused or produced by environmental factors) and "perceived similarities" rather than scientific fact. If specific such plants are to be grouped that should be based on "specific genetic similarities".
2. The Punnet Square is useful to predict colour inheritance when there are only two genetic

variables, such as in Group 1 and 2 Yellows but not when more genetic variables are in play.

3. Keith Hammett points out that in "Clivia we have three pigment systems operating, namely carotenoids, anthocyanins and chlorophyll. This means different forms of carotenoid and anthocyanin pigments controlled by different genes which mediate the metabolic pathways leading to those pigments" or as Jim Comstock puts it "intricacies of the genes govern (...) the expression of pigments ..., whether it is production of pigments, modifications of the pigments, cellular acidity, pigment patterns, etc".
4. Keith Hammett and Bill Morris have written in the Yearbooks and Newsletters how the exact make up of the colour in any particular petal can be accurately determined by a colour chemist. However, apart from its inaccessibility, I wonder how that could be an aid to determining how that plant will breed – surely what we need to know is the combination of genes which produced that colour. For instance if the pink in 'Emmie Wittig' and the pink recently expressed in two 'Floradale Apricot' selfed seedlings were found to have the same chemical composition, would that mean that when crossed they would produce the same colour pink offspring, or can that colour be produced by differing combinations of genes?
5. The significance of green stemmed seedlings in breeding peach clivia has also been queried. Bill Morris is convinced that no peach flowered Clivia, not even Chubb Peach, can have a pure green stem - properly examined it must be at least olive in colour. Many have reported that green stems in some very young seedlings become pigmented as they age.

In my own experience however, it is impossible to determine by differences in the green stem colours of seedlings bred from a 'Chubb Peach' hybrid split for yellow, which will flower peach and which yellow.

Jim Shields suggests that the absence of anthocyanin in the stem could mean that the flower colour in peach flowered

green stemmed seedlings is produced by carotenoids. Jim Comstock reminds us that in his book on 'CLIVIA', Harold Koopowitz "reports on preliminary studies that show the presence of 3 different anthocyanins in *C. miniata*: cyanidin in the leaf bases and berries and 2 different pelargonidins in the flowers. Apparently, whatever leads to a different expression of at least one of the pelargonidins in some types of peach coloured *Clivia miniata* is linked to the expression of cyanidin in the leaf base."

In any event Victor Murillo and many others have produced very good peaches which had pigmented stems as seedlings, and that with the darkest pigmentation has produced light coloured peaches.

It follows that stem colour cannot be a reliable basis for a peach standard.

6. What becomes very clear from all these reactions is that most of us are experimenting with interbreeding of peach coloured *Clivia*, to the extent that what I suggested be classified as 'Natural Peaches' will be very difficult to find as they have all been 'contaminated' with other genes. Only breeding within cultivar groups remains wholly predictable and even there gene contamination is taking place in the quest for superior peaches.

### Conclusion

The current tendency appears to be that most breeders are experimenting by out-breeding even those peaches which could be identified by a single mutated gene. The objective is to discover exciting new colours and better flower and plant forms, but by doing so any possibility of a generally accepted genetically based "Peach Standard" has been eliminated. What is essential for success in that objective is as much detailed knowledge as possible of the breeding characteristics of the parents used. That knowledge only comes with experience and because of the slow turn around time of blooming *Clivia*, this can take many years. Unfortunately there also seems to be a general reluctance by breeders to share their



*TK original x Hirao, owned by Cliviatrends.*

PHOTO CHARL COETZEE

experiences, both good and bad, resulting in repetition of the same mistakes.

But more and more better peaches are being bred and as the breeders progress the genetic experts gain more and more of the information required to explain colour inheritance. Wessel Lotter's research leading to the identification of Group 1 and Group 2 Yellows was followed by the scientific explanation based on different mutated genes occurring on different loci. This led to breeding of the then rare and expensive yellows becoming commonplace.

Toshio Koike's breeding of 'Hirao' with its all green flowers and green colour paternal inheritance potential has highlighted the role that nuclear genes may play in the expression of colour- not only in picotees and parti colours but in green expression also.

The more we share our breeding experiences the more we will all benefit in the quest for better peaches, but there is such variety in the colour peach and so much potential for different gene combinations that I do not think it can ever have one standard applied to it – whether based genetically or on colour.

I can only hope that the experts among you will remember that I have no training in genetics or even botany and will therefore excuse any blunders I may have made! &

*Mick Dower, Cape Town*

May 2010

# CLIVIA 2010 PROGRAMME



21 September

## Session 1: Chairperson CCC

09:00 - 09:15 Welcome (CCC)

09:15 - 09:30 Opening (CS)

09:30 - 10:00 Haselau, Wayne: The heritage of *Clivia nobilis*

10:00 - 10:30 Van Rooyen, Francois & Tarr, Brian: The heritage of *Clivia gardenii*

10:30 - 11:00 Winter, John: The heritage of *Clivia miniata*

11:00 - 11:30 Tea

## Session 2: Chairperson USA/Europe

11:30 - 12:00 Van der Merwe, Lena: The heritage of the Clivia Society

12:00 - 12:30 Coates, Ian: The heritage of *Clivia mirabilis*

12:30 - 13:00 Russell, Greig: The heritage of the Blackbeards

13:00 - 14:00 Lunch

## Session 3: Chairperson NCC

14:00 - 14:30 Chubb, Sean: The heritage collection

14:30 - 15:00 De Coster, Pierre: The heritage of Clivia in Europe

15:00 - 15:30 Todd, Robin: The heritage of Clivia in the United States

15:30 - 16:00 Tea

## Session 4: Chairperson ECCC

16:00 - 17:00 Discussion of the day's talks

22 September

## Session 5: Chairperson KZNCC

09:00 - 09:30 Marriot, Helen: The heritage of Clivia in Asia

09:30 - 10:00 Hammett, Keith: The heritage of Clivia in New Zealand

10:00 - 10:30 Smith, Ken: The heritage of Clivia in Australia

10:30 - 11:00 Tea

## Session 6: Chairperson Australasia

11:00 - 11:30 Conrad, Ferozah: The evolution of the genus *Clivia*

11:30 - 12:00 Dixon, Roger: Relationships in the genus *Clivia*

12:00 - 12:30 Spies, Paula: Genetic variation in *Clivia*

13:00 - 14:00 Lunch

## Session 7: Chairperson Metro CC

14:00 - 14:30 Maleka, Frank: Colour formation in Clivia

14:30 - 15:00 Spies, Johan; Van der Westhuizen, Hesmari; Stegmann, Suzanne: Implications of the research results for Clivia lovers

15:00 - 15:30 Discussion of the day's talks

15:30 - 16:00 Tea

# REGISTRATION FORM: Clivia 2010

## 21st & 22nd September 2010 Cape Town, South Africa

### 1. PARTICIPANT ATTENDANCE INFORMATION

**Note:** Please provide information as you wish it to appear on your badge and on the official participant database. A copy of this registration form should be completed for *each full registration (not required for accompanying persons)*.

Title: Mr/Ms/Dr/Prof		Last Name / Surname	
Mailing Address:		First Name:	
		Company / Organisation:	
		Phone & Cell:	
Country:		Fax:	
Postal/Zip Code:		Passport / ID number:	
E-mail address:		Web address:	
Indicate your membership (where applicable) with "X"		Clivia Society	Other: please specify
Special Dietary Requirements: Mark with "X"	Vegetarian	Halaal	Other Please specify -

### 2. ACCOMPANYING PERSON / SPOUSE

	Title	Family Name / Surname	First name
First accompanying person			
Second accompanying person			
Third accompanying person			

### 3. SUMMARY OF ITEMS

A	Description	Number of persons	Total
1	Full registration (on or before 15 July)	500	
2	Full Registration ( after 15 July)	600	
3	Accompanying person registration*	400	
4	One day full registration: 21 September	300	
5	One day full registration: 22 September	300	
6	Accompanying person registration: 21 September only	300	
7	Accompanying person registration: 22 September only	300	
8	Auction on Wednesday 22 September: snacks and light meal, incl. wines	100	
9	Full registration for Photographic Workshop on or before 15 July	150	
10	Full registration for Photographic Workshop after 15 July	200	
<b>Subtotal</b>			

\*An accompanying person is defined as a person accompanying a fully registered delegate to the paper presentations.

#### Registration fees include the following entitlements:

- Full registration - entrance to sessions, conference bag and registration pack and teas. Snacks and wines at the evening "meet and greet" registration function are also included. Light lunches will be available in the Sanlam cafeteria for your own account.
- \* Accompanying person – as above, but excluding conference bag and registration pack.

#### 4. PAYMENT BY MEANS OF A CREDIT CARD. If you submit credit card details, your card will be manually debited by Sure African Imprint Travel. Please provide the following information.

Card type		Card Number
Expiry date (month and year)		Last 3 digits on back of card (CVC number)*
Name of card holder (as printed on the card)		

### 5. DISCLAIMER

Registration fees do not include insurance for participants against personal injuries, sickness theft, or property damage. This applies to any event associated with CLIVIA 2010. Participants are advised to obtain whatever insurance they consider necessary. Neither the Organizing Committee nor its sponsors or committee members assume any liability for loss, injury or damage to persons or belongings, however caused. In the event that the CLIVIA 2010 Conference is postponed, cancelled or abandoned by reason of war, fire, storm, explosion, national emergency, labour dispute, strike, lock-out, civil disturbance, inevitable accident, force majeure, the non-availability, either wholly or partially, of the Conference Centre or any other cause not within the control of the Organizing Committee, the said Committee shall be under no liability to the Sponsors, Exhibitors, or delegates in respect to any actions, claims, losses (including consequential losses), costs or expenses whatsoever which may be brought against or suffer or incurred by sponsors, exhibitors or delegates as a result of the happening of any such event(s).

Signature:

Date:





If faxing: Please do NOT return this page.

#### 6. CANCELLATIONS AND REFUNDS POLICY

- Refund (less 20%) if written cancellation is received before 15th August 2010.
- Refund (less 50%) if written cancellation is received before 31st July 2010.
- Refund (less 70%) if written cancellation is received on or before 15th July 2010.
- No refund will be granted after 15th August 2010.
- The committee reserves the right to cancel any of the tours should there not be sufficient support. In this case fees paid will be refunded.

#### 7. PAYMENT

The conference is not registered for Value Added Tax.

All payments are due with submission of the registration form.

To qualify for the discounted registration fee (R500.00), payment should be made on or before 15 July 2010.

#### 8.1 PAYMENT BY MEANS OF A BANK TRANSFER

- Please state your full names clearly on the money transfer.
- Please note, bank charges are for your OWN account and this should be stipulated to your bank. Please advise your bank that the charges should be included in your deposit amount.
- A copy of the bank deposit receipt should accompany your registration form and must be posted or faxed (+27 12 804 8892) to the Conference Secretariat: CLIVIA 2010 at P.O. Box 74868, Lynnwood Ridge, 0040 Pretoria, South Africa.

#### Conference account details

Payable to	Clivia Society		First National Bank
Branch name/code	First National Bank Adderley street / 201 409	Swift code	FIRNZAJJ
Account name	Clivia Society	Account number	62258353384
Reference	Insert your <b>surname</b> as the reference on the deposit slip		

After depositing funds, kindly send an e-mail to Clayton Jonkers at: [clayton.jonkers@horwath.co.za](mailto:clayton.jonkers@horwath.co.za)  
Please attach your proof of payment or copy of deposit slip to the e-mail.

#### 8.2 PAYMENT BY MEANS OF A CREDIT CARD

If you submit credit card details, your card will be manually debited on behalf of the Clivia 2010 Conference by Sure Travel (African Imprint Travel.). Provide the required details under point 4 on page one.

#### 9. SURE AFRICAN IMPRINT TRAVEL: OFFICIAL TOUR OPERATOR FOR CLIVIA 2010.

Sure African Imprint Travel can take care of your flight reservations, accommodation arrangements, car rentals and airport transfers. Please visit the website for comprehensive information. Any specific requirements and needs can be requested on a down-loadable form from the website. Your contact person at Sure African Imprint Travel (Ninapark Akasia, Pretoria) is William Cook, at E-mail: [wcook@saitravel.co.za](mailto:wcook@saitravel.co.za); Tel.: +27 12 5421911 (office hours); Fax: +27 866886170  
Cell Phone: 27 825767080; Web site: [www.africanimprinttravel.co.za](http://www.africanimprinttravel.co.za)

#### ACCOMMODATION

Sure African Imprint Travel has been appointed to handle reservations. Special group rates have been negotiated with several hotels, guest houses and B&B's.



# Clivia Society Conference Clivia Auction Application Form

To be submitted by 2 July 2010 to Joubert van Wyk: Signed, scanned and emailed to myClivia@africa.com

Name of applicant ("seller"):				
Telephone number:				
Email address:				
Postal address:				
Seller's banking details				
Account name:				
Bank:				
Branch:				
Branch number:				
Account number:				
Plants submitted for consideration:				
No.	'Name' or description and a short history of the plant (e.g. breeder, name of photographer, date of photo, colour number from Clivia Colour Chart II etc):	Live auction	Photo*	Reserve price, if any

\* Three digital photos of the plant including a flowering umbel must accompany the application form. The photographs must be no smaller than 800kb and no larger than 1.5 Megabytes. Recommended size could be achieved at 72 ppi and 800 x 600 pixels in 8 bit mode. Please do not interpolate photographs upwards.

The seller herewith authorises the Clivia Society to publish the pictures that accompany this form and the information relating to the plant(s) mentioned on this form in any manner deemed fit. The seller further authorises the Clivia Society to pay the net proceeds, i.e. after deduction of 10% commission, to the seller by EFT to the account number specified above in this form, at the risk of the seller.

The Clivia Society makes no warranties or representations of any kind concerning the accuracy of the information provided to it by sellers and provided to potential bidders. All such information is provided on an "as is" basis by the Clivia Society.

In no event shall the Clivia Society, its office bearers or agents be liable for any direct, indirect or consequential damages resulting from the offer or sale of any auction plants or the transfer or payment of any monies.

Signed by seller:

\_\_\_\_\_

Date:

For office use only:

No.	Plant selected (yes / no)	Live auction	Owner informed	Reserve price	Winning bid	10% Com	To seller
Total:							

\* To be paid to the seller.

## BREEDING WITH “EUROPEAN” PEACHES

There is a group of *C. miniata* which produces colours in the peach to apricot range when crossed among themselves which in many cases, can be traced back to seed originating from Europe. Some people refer to these plants as being “Group 2” peaches to distinguish them from Chubb peach, which they term a “Group 1” peach. As I show below, this latter terminology can cause much confusion, and so, for want of a better name, and because of their possible common origin, I am calling this group “European” peach to distinguish them from the other groups of peaches which exist.

The purpose of this article is very simple: Firstly to list some of the peaches falling into the “European” peach category; secondly, to set out which of these peaches can be crossed together so that there is a good chance of obtaining progeny which will also have peach flowers; and thirdly to suggest crosses that should be avoided

– unless you wish to get orange flowers! I leave it to others to go into the genetic complexities behind this, and other, groups of peaches.

“European” peaches that are well-known to South African clivia enthusiasts include ‘Cameron’ Peach and others from the same stable, for example the ‘Tipperary’, ‘Niven’ and ‘Welgemoed’ Peaches. All four of these – more correctly referred to as peach cultivar groups – originated from seed imported from Europe by the then owner of the Tipperary Nursery, near Nelspruit.

Another well-known one, the ‘Victorian Peach’ cultivar group, was bred in California, and plants imported from there are to be found in collections throughout the world. Other Californian peaches which appear to fall into the “European” peach category are ‘Helen’, ‘Tessa’, ‘Ellexa’ and ‘Sunrise-Sunset’. You will find some lovely pictures and descriptions in Harold Koopowitz’s book “Clivias”. There are also plants in Australia and New Zealand which apparently fall into this peach category.

Have a look at the picture of a cross between ‘Anderson’s peach’ and ‘Jelena’, taken by Helen Marriott.

I hope that this article will encourage you to try breeding with “European” peaches. Your efforts may reward you with a magnificent plant like that.

### Distinguishing features of “European” peaches:

Let me hedge my bets by saying that this is a broad guide to identification. It may not be totally conclusive. The leaves of this group of peaches are typically a broadish dark and glossy green. They clearly look different to the lighter green narrower leaves of the typical Chubb peach. The range of colours and shape of the flowers also differs from the ‘Chubb Peach’, as does their breeding behaviour. I am not good at describing colours, but the flowers of one plant were described by someone as “a rich, warm, peachy-apricot with pink highlights”. A diagnostic feature may be the appearance of small splashes of darker colour in the petals of some, but not necessarily all, of these peaches,



*John Winter's Cameron Peach.*



*Amore Olivier's Cameron Peach.*

*Tipperary Peach Cultivar Group.**Tipperary Peach Cultivar Group.**Welgemoed Peach.**Victorian Peach.*

possibly as the flowers age or if they are damaged in some way. I will mainly let the pictures with this article speak for themselves. Note the variations in colour within the range. Also, for comparison, note how different the narrower-petal flowers of the 'unimproved' Chubb-type peach are.

### **Breeding results that can be expected:**

What I say below is based on limited personal experience – a few crosses but no flowers yet. I have however read widely on the subject, have spoken with other breeders, and also rely on the views of an upcountry breeder with many years' experience of working mainly with plants from the Tipperary "stable". I believe that it is possible to save years by learning from his breeding results, especially his successes.

### **1 Successes**

If you cross plants within the "European" peach group, for example, 'Cameron' x 'Cameron', 'Cameron' x 'Victorian', or 'Victorian' x 'Welgemoed' then resulting seedlings with unpigmented bases will – I have been told – in most cases flower peach. Seedlings with pigmented bases may flower any colour between peach and orange, so do not be too quick to discard them! I have a seedling from a cross between two plants of the 'Cameron' peach cultivar group. It began life with a green stem, later showed a flush of pigment. It nevertheless bloomed for me in 2008 with peachy apricot flowers and a green throat.

### **2 Crosses which will NOT flower peach**

As a generalization, if you cross any of the "European" peaches with any plant from outside that group you will get seedlings that will flower orange. The young seedlings will all have pigmented stems. In particular, here are two examples of such crosses that I know a number of breeders have made:

'Victorian' Peach x 'Chubb' peach.

These two peaches are so genetically different that they combine to produce flowers which may be very attractive but do not reproduce the colours of either of the parents.

### 'Cameron' peach x Group 2 yellow

Here the breeders were possibly misled by the use of the term "Group 2" for this peach. Perhaps they thought that the colour would be dominant over that of a "Group 2" yellow, in the same way that the Chubb peach ("Group 1" peach) colour is dominant over that of a "Group 1" yellow. Unfortunately, this assumption is incorrect! It is an easy mistake to make and that is why I prefer a term like "European" peach for this group of peaches.

### 3 All is not lost!

If you have a seedling that has flowered orange (say a 'Cameron' peach x Group 2 yellow), you can recover the peach colour in the next generation. Try to get hold of some "European" peach pollen and pollinate the flowers of your plant with that. You should get a good percentage (maybe as much as 50%) of seedlings that flower peach amongst the offspring. My guess is that they will have unpigmented stems while small and that those with pigmented stems will probably all bloom orange. You might be lucky and obtain some that have flowers in the peach to orange range.

If you now choose to breed further with any peaches 'recovered' in this way remember that there could be Group 2 yellow genes lurking in the background. These could emerge to give you a few yellows in subsequent generations, for example, if you were to cross siblings. Unless you have plenty of room, you should rather not self-pollinate your original seedling because, although you will certainly get some offspring with unpigmented stems, some of these will be peaches and some will be yellows and you will have to keep them all until they flower to see which is which! Also, as before, remember that yellow genes could be lurking in the background of any peaches that you manage to 'recover'.

By the way, if someone else comes up with a more appropriate name than "European" peach for this group of peaches I will be the first to accept it. I would like to thank all those people in several countries who have helped me in



*Anderson's Peach.*



*Jelena.*



*Anderson's Peach x Jelena.*

the preparation of this article and/or who have supplied photographs.

Finally, good luck with your "European" peach breeding.

[This is an updated version of an article written for the Cape Clivia Club e-newsletter "Cape Clivia News"]. &

*John van der Linde*

PHOTO HELEN MARRIOTT

PHOTO GARY KITCHEN

PHOTO HELEN MARRIOTT

## STORIES BEHIND THE COVERS

### FRONT COVER

A cross between 'Anderson's Peach' and 'Jelena', photographed by Helen Marriott.

### 'Anderson's Peach'

The plant was featured as Cover Photo no 3 in Clivia Society Newsletter vol. 14 no. 3 (July-Sept 2005) and the story of the cultivar told on page 7 of that issue.

### BACK COVER TOP PHOTO

'Jelena' (Photo Gary Kitchen)

'Jelena' is a registered Clivia whose background is unknown. Noel Giddings' wife Lyn said it just showed up amongst his clivias around 2000 and he couldn't remember where he had got it from. A few members of the local Clivia Club have got their heads together and worked out that it probably came from a local general nursery that has since closed down. I would describe it as a tulip shaped, green centred cream but its description says a pinky cream. Lyn tells me it has a pinky overtone some years.

The first year it came into flower Noel pollinated everything he had with it. Needless to say he had a motza [great quantity] of seeds and then seedlings to sell/give away. He selected a few of each cross to grow on for himself with varying results, all of which flowered different shades of orange, some ghosts and a few had a unique red edge to the petals.

When Ian Anderson discovered his peach he had no idea how to grow and care for clivias and went to the local clivia club for advice thinking he had a special Clivia. Noel befriended Ian and they became best of mates, so much so that Noel looked after 'Andersons Peach' for the first couple of years, hence came the cross between 'Andersons Peach' and 'Jelena'.

After Noels passing, Lyn moved house and regrettably had to down scale the clivias and subsequently most were sold as unflowered seedlings. It is only since Noels' passing that the peach and apricot clivias have showed up from some of his later crosses with 'Jelena'.

A very interesting story if nothing else comes of it. I will continue to trial crosses of both and see



PHOTO GARY KITCHEN

what happens. I have some seeds ripening at the moment between a gr1 peach and 'Jelena' and an F3 cross including 'Jelena' to follow on from Noels beginnings to see what happens. I asked Lyn Giddings today where the name Jelena came from. Incidentally she laughed when I asked her. She and her late husband Noel were trying to come up with names for a few clivias at the time.

It was the first flowering season in their new house and they had decided that pink cream wasn't a good reference name for it any more after breeding with it for 10+ years. At the time the tennis was on TV and Lyn suggested they name them after tennis players. They named one after Venus Williams (a red flowering clivia *miniata* split for 'Jelena'), one after Serena Williams (a large flowering orange ghost with a red picotee edge split for 'Jelena'), and one after Jelena Dokic (the pink cream).

There would be literally thousands of 'Jelena' crosses around Toowoomba that the growers would not be aware of the potential of because it was not known to be a European type peach back then. To Noel and Lyn it was just a pink cream that they hoped to breed a pink with some day, so Noel pollinated everything with Jelena from day 1.

Gary Kitchen, Australia

### BACK COVER BOTTOM PHOTO

'Girly' (Photo Willie le Roux)

See story on p35. &

## PESTS AND DISEASES

## A TALE OF TWO FLIES AND A WASP

The following pictures describe two flies that play important roles in our lives.

**Tachinid fly**

The Tachinid fly (1) may be seen as the clivia lover's friend as it parasitises the larva of Brithys Crini.

The tachinid fly lays her eggs directly on the host or where they can be ingested by the host. The larva lives in the host until the larva is ready to pupate. The host may still be in the larval stage or a pupa. By now, the host is dead.



*Legend: 1: Remains of a pupa that had been parasitised, 2: Maggot that emerged from the pupa, 3: Same maggot that pupated, 4: Fly that emerged from pupa, 5: Remains of unaffected pupae from which moths emerged.*

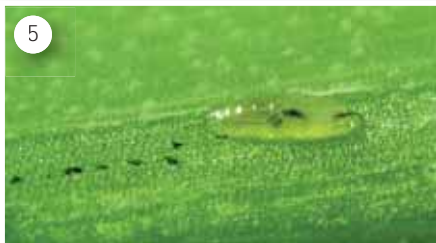


The maggot (larva of the fly) eats its way out of the host and pupates quickly afterwards (2). The adult fly emerges after about a month (3). The tachinid fly may help contain the numbers of the amaryllis caterpillar.

The infected caterpillars that were observed had all been feeding on crinum and it is not known how the fly behaves on clivia.

**Leafminer fly**

The clivia leafminer fly (4) lays her eggs on young clivia leaves. The larva starts eating into





the leaf and mines downward.

The young larva is transparent, green from the plant material it ingests (5, cuticle removed). The mouthparts move in an arc parallel to the cuticle, resulting in the cuticle being separated from the spongy mesophyll. This is a later instar, probably ready to pupate (5a, cuticle removed).

The pupae can be seen under the cuticle of the leaf (6 and 6a). The fly breaks through the cuticle of the leaf (7). After a while, the wings take shape and the fly turns black (7a to 7c).

### Parasitoids

A parasitoid is an organism that spends a significant portion of its life history attached to or within a single host organism which it ultimately kills (and often consumes) in the process. Parasitoids can be very effective controlling the numbers of their hosts.

Most of the natural enemies of leafminers are parasitic wasps.

### Parasitoids in Aphids

The following pictures illustrate the parasitoid's life cycle and how aphids are affected.





*A spent mummy.*



*A wasp that emerged from the neuroptera's egg.  
The strip is a one-millimetre scale.*

The wasp lays her eggs under the skin of the aphid (8).

The larva lives inside the aphid until the larva is almost fully grown when it eats the aphid from the inside, killing it. Still inside the aphid, the larva pupates (9). The pupa remains inside the aphid from where the adult wasp emerges (10). The aphids are prevented from multiplying and the numbers are effectively controlled.

The spent mummies are empty shells (11 and (12).

### **Parasitoids in Neuroptera**

In Neuroptera, the parasitoid lives in the egg of the host. The larva is ready to pupate when the inside of the egg is consumed. The pupa then remains inside the shell until the adult wasp cuts a neat opening in the shell and



emerges (13).

The neuroptera larva concerns us, as it is a natural enemy of Brithys Crini.

### Speculation

The wasps pictured below have been seen near leafminers, but of course, one cannot assume that any of them is the parasitoid of the leafminer without proper scientific evidence. Time will tell. &

*James Haxton*



### Sources

*Wikipedia*

*AJ Urban in Clivia Forum 20 April 2010*

## CLIVIA REFERENCE & TERMINOLOGY

### A System for Grouping Peach Clivias

In the Clivia Newsletter Vol. 8, No.1, p.10 -13, Autumn 1999, I proposed a list of yellow clivia cultivars divided into two types – namely Group 1 and Group 2.

I used this terminology as it had been used previously by C.C. Hurst in his “Experiments.

In Genetics” (1925) to describe two types of white Cattleya orchids which breed true when crossed within their groups but when crossed between the groups produce normal purple Cattleya flowers (presently this is described as the action of complementary genes). I had also suggested in an article in *Herbertia* No. 46, p.95 – 96 nearly ten years earlier (1990) that the crossing of various yellow clivias to give orange flowers was due to the same mechanism.

More recently I have been trying to understand the situation with Peach clivias and related types

(pinks, apricots etc.). My conclusions about these clivias and their pigments

formed over a number of steps leading to the groupings I have given below and I will outline these steps.

A number of years ago I had the opportunity to observe and compare a number of peach Clivia *miniatas* in the collection of Mark Cant, a young Australian horticulturist – namely five separate peach plants which have been registered as ‘Cant’s Europeach Cultivar Group’ (which emerged from a batch of imported European imported orange seed) and two imported Dave Conway (ex U.S.A.) peaches, ‘Tessa’ and ‘Helen’ – which were on loan to Mark.

It was possible to match the ‘Tessa’ and ‘Helen’ flowers with the ‘Cant’s Europeach” flowers as far as my eye was concerned – however

the 'Cant's Europeaches' all produced peach coloured berries whereas both 'Tessa' and 'Helen' produced orange/red berries. This immediately suggested that although the flowers of these peaches were very similar, they were in fact two different types of peach.

Following on from this observation, I have since been trying to collect information about the berry colours of as many peach, pink, apricot etc. *miniatas* as possible, but have found that berry colours are very rarely published when particular cultivars are described or pictured. However, I have managed to obtain a few, for example: 'Naude's Peach' has red berries, 'Wittig Pink' has maroon and 'Anna Meyer's Peach' has red.

From "Clivias" by Harold Koopowitz, in his chapter titled "Named Pastel Clivias", I found the Dave Conway-bred 'Dorothy' described as having "bright cerise berries".

Then, under 'Tessa', Koopowitz describes Conway's breeding method – which was to put mixed pollens (presumably from his own plants on to "yellow and orange plants". From one such endeavour, Conway obtained around one thousand seeds which he grew to flowering. What would be the result? I would expect mainly pastel or pale orange flowers with occasional yellows (depending on how much yellow pollen was in the pollens mix) and some deeper oranges or even reddish flowers, Koopowitz then states "In the group were several peach-colored flowers as well as several clones with pink tones, one of which was 'Tessa'. "Several" is not many (say 3-5, or so), so the peach and pink tones were rare (say 6-10 total out of one thousand). The rest, again presumably, were mainly pastels and pale orange. Conway kept the rare ones – and some others he judged worth keeping – named them and they became his commercial stock, propagated vegetatively for sale. Based on the above, all Conway's pastel, peach and pinkish flowers will have orange, or similar, berries.

Again in "Clivias" under pastel clivias, Koopowitz writes that 'Anna Meyer's Peach' is "an apricot coloured clone that appeared spontaneously in Meyer's Breeding program", then further, "Meyer claims that her first peach (are there

others?) was achieved by using yellow pollen". Why Koopowitz says "claims", I don't know. Who is best to believe other than the breeder?

When I received information about Christo Lotter's peach breeding he stated that in 1993 he flowered a cross of an orange (berry parent) with a yellow (pollen parent) which was pink (pinkish?). In 1994 when it flowered again "it was apricot". He put this apricot pollen onto another yellow and when the offspring flowered they were peach. Presumably his peach strain derives from line breeding these plants. However, the fact is they started from an orange x yellow cross.

In an email, dated 23rd April 2009 Rudo Lotter explains his breeding experiments aimed at recovering 'Naude's Peach' from his father's cross of 'Naude's Peach' with a (Group 2) 'Giddy Yellow'. Rudo backcrossed 'Naude's Peach' onto his father's cross with the expectation of 25% Group 2 yellow, 25% 'Naude's Peach' and 50% orange. From this backcross (about 500 plants) Rudo has flowered yellows (green stemmed seedlings), pastels (pigmented stemmed seedlings) but only one peach. Unfortunately no counts were quoted but one out of hundreds is roughly similar to Dave Conway's "several out of one thousand". The reason the peach was rare is simply because they are not single gene mutations but probably just rare gene combinations of regulatory genes.

Victor Murillo explains the history of 'Victorian Peach' in his article in the Clivia Yearbook No. 9, p.72-74. He states that the breeding involves "a Belgian peach and two high quality yellows given to John by Eric Anderson. They produced a group of original peach-flowering plants with which I then began to work". This led me to re-read my correspondence with Eric Anderson. In a letter dated 21st September 2002 he mentions crossing a peach, which had emerged from Schenkel broad leaf orange seed, with yellows.

He adds "All the offspring came up peach, some a little lighter, some a little darker".

He then mentions an F2 that came up from a different yellow in another nursery that came up orange. He does not mention seeing this, but simply reports it.

This information seems to agree with Victor Murillo's report above. The apparent contradiction between the two I suspect is due to the perpetual problem with different people's ideas of colour – the problem of accurately describing light orange versus pastel versus peach versus apricot – and so on. I think it may have been a case that one yellow produced variable peach flowers while the other yellow produced somewhat darker peaches, pastels and pale oranges – all lumped together as oranges. Most likely both yellows were Group 1. Peach is usually dominant over yellow (both Chubb Peach and European peaches), but they can produce varying depths of colour.

Having originally used Group 1 and Group 2 labels for yellows, in addition, it now appears there is a third group (Group 3 Alpha yellow and yellow offspring). To avoid confusion with "groups" I suggest we now use Type A Peach and Type B Peach etc for the different Peach types as follows:

#### **TYPE A**

Chubb Peach  
Cransley Peach  
Howick Yellow  
Gail's Peach

#### **TYPE B**

European Peach  
Cant's Europeach  
Morning Light  
Victorian Peach  
Original Cameron's Peach  
Cheryl's Apricot

#### **TYPE C**

Naude's Peach

#### **TYPE D**

Tessa  
Helen  
Poorman's Peach  
Gamma Peach (?)  
Lotter's Peach  
Meyer's Peach  
Other Conway peaches

#### **TYPE E**

Appleblossom

Type A and Type B are different, single gene

mutations similar in that they both produce peach pods.

Type C and Type D are both rare, multiple gene combinations similar in that they produce non peach berries – generally orange or red.

Type C and Type D both come from orange x yellow crosses, but Type C has a Group 2 yellow parent (in Naude's Peach case, it is probably Natal Yellow) whereas in Type D various Group 1 yellow plants are the parents.

Type E is a wild collected selection of plants which originated from a small number of plants (restricted gene pool) which had a higher number of the rare genes (but not necessarily the same ones) that are present in Type C or Type D. Therefore, I suspect they have orange/red berries.

Note that I have ignored referring to "green stems" versus "pigmented stems" in this because I do not believe it means anything except how much pigment the plant can produce and how long it takes to produce it and under what environmental conditions.

James Comstock in a recent email to the Clivia Enthusiasts' Group suggested (and I think he is right) that low and slow development of pigment in various reports may be due to low light in colder climates and I would add under more shaded conditions where seeds are germinated, compared to where larger plants are grown. Further 'Sunrise Sunset' shows different time taken for the same flowers (of this clone) to develop their colour - with old flowers being darker than young flowers. Similarly there are reports of "green stemmed" seedlings developing pigment over time. I think it most likely that well-pigmented seedlings will be orange or pastel but pale pigmented ones can still turn out to be peach or apricot etc.

There are numerous other plants that can be added to TYPE B (e.g. Tipperary Peach, Australian Erasmus Peaches, Toowoomba Peaches) as they are recognised by origin, breeding or pod colour and also to TYPE D (e.g. other Conway peaches, Dorothy, Sunrise Sunset etc.).

The most important thing is that crosses within the types will breed true while crosses between

the types will generally give oranges. However, TYPE A and TYPE B will give 100% peach when selfed (unless they have been crossed with yellow and are thus heterozygous, when yellows can occur).

In TYPE D, because of their orange x yellow background they will not give 100% peach flowers. There will be a much higher percentage of peach, possibly 50% or more, but some pastels, yellows and oranges will appear as these are in their background. Line breeding of TYPE D peaches for a number of generations will increase the percentage of peach flowering plants.

Wittig's Pink and other pinks are sometimes called peaches and should be placed in the various Types in this article. They are basically plants whose flowers contain dilute concentrations of anthocyanins and particularly Markham's Anthocyanin 3, which I will discuss

in another article. However, I am still unsure in which Type to place Wittig's Pink. At present I suspect it belongs in Type D as its pod colour is quite different to its flower colour.

Just as in my original yellow listing some of these may be incorrect: further recording of berry colours and further breeding results may show errors in my classifications but I feel sure they will be of assistance to breeders over time.

What is needed are specific crosses within the groups to check out how they work – with results including at least rough proportions of the resulting flower colours and pod colours as well. Hopefully my Type lists are a start.

I would greatly appreciate any contributions to my lists – information about other peach cultivars, berry colours or results of crosses already made can be sent to me direct: &

*Bill Morris,*

P.O. Box 17, Medowie, N.S.W. 2318, Australia

## CLIVIA CULTIVARS

### Sean Chubb's 'Poorman's Peaches'

**M**y story behind the 'Poorman's Peaches' goes back a long way. I thought some people may be interested in the origins.

In 1994 at the inaugural meeting of the Clivia Club, as it was then known, I took along one of my 'Chubb Peaches' in flower. Nick Primich, the founder of the Clivia Society, took a great deal of interest in my plant and we arranged to exchange some seed. On my return home I posted Nick about 20 of my then very precious 'Chubb Peach' seed. I waited for a reply from Nick but it was only a year later when I saw him again did I ask if he had received the Chubb Peach



*Poorman's Peach No. 3.*

seed, he brushed me off in the manner only Nick could. The next year in the post arrived a parcel of Clivia seed from Nick Primich labeled

PHOTO SEAN CHUBB

*'Innominate Miniata'*.

I was interested in the label since these were the exchange seed from my Chubb Peach seed 2 years earlier. I contacted Nick right away and he said "Oh those are just some seed I collected off the floor", thus the name *'Innominate Miniata'*. I was a little taken aback but did not respond to his comment and thanked him for the seed. Four years later these same seed began to bloom, the first being the most beautiful Peach I had seen and thus the name *'Innominate Peach Perfection'*.

Then a stunning Yellow flowered and another Peach, *'Innominate Peach Apricot'*.

I was blown away by these plants and so contacted Nick who had a good laugh at my expense saying that all this time I had believed he had given my poor quality seed and look what he had sent me. This was Nick's sense of



*'Innominate Peach Perfection'*.

PHOTOS SEAN CHUBB

humour. He called these Peaches *'Poorman's Peaches'* implying that he would probably never make much money out of them, a name that certainly does not do these stunning plants justice. Anyway the name stuck and even today they are called *'Poorman's Peaches'*.



'Commonwealth'.



Far below: 'Nella'.

Below:

Pat Gore's 'Yvonne'.



Only a few people managed to get seed from Nick, Oom Pat Gore is one of them and he has a famous plant called 'Olympic' from this line.

Nick Primich sold all his clivia shortly after and Oom Gert Esterhuisen bought some of the plants.

I managed to acquire an offset of 'P6' from him. 'P6' is an outstanding 'Poorman's Peach'. A few other named 'Poorman's Peaches' are ; 'Yvonne', 'Commonwealth' and an exceptional plant called 'Nella'.

I have been breeding with these 'Poorman's Peaches' ever since and some of the offspring are remarkable.

The KZN Clivia Breeders are selling some of these seed this year. The list can be viewed at [www.cliviasa.co.za](http://www.cliviasa.co.za)

I hope this story is of some interest to a few growers. &

*Best Regards*

*Sean Chubb*

KZNCC

[Nick Primich tells the story of his 'Poorman's Peach' in the Clivia Newsletter 2001-1].

## CLUBS &amp; INTEREST GROUPS

## The Story of a Great White

"Best flower head on Show, but condition of plant lets down". That was the comment penned to a little slip of paper lying at the base of my plant once the judging had been completed. The judges could only award the plant a Second Prize in the category: *Miniata* Yellow Broad Tepals – 1 Umbel, and I had to agree with them. Regretfully the plant had earlier spent two hours inside the loading bay of the vehicle transporting it from its home in Grahamstown en route the 2009 Eastern Province Clivia Show in Port Elizabeth. I had also been at fault since the plant had been squashed amongst its brothers and sisters since late 2007 when they were bagged up into their final resting place. There they were standing shoulder to shoulder in tightly packed rows in my overcrowded shade house. Several leaves had been damaged by my own legs brushing past it over the years to follow while I was waiting in anticipation for the first sign of flowers. Nevertheless, it remains to be a magnificent plant.

What a pity that the digital images captured on my CANON PowerShot A620 fails to reflect the pale, smoky white hues of the petals. My perceived prejudice was countered by comments such as "It is a pure white flower!" and "I have never seen such a white Clivia (before)". Generous cash offers were made to me throughout the two day show in Port Elizabeth, yet I stood firm and resisted with the knowledge that I am indeed the proud owner of an outstanding Clivia plant. Furthermore, I had pollinated the flowers with one of my favourite own hybrids, an enormous orange flower with its genetic roots in an earlier crossed Nakamura plant.

Many enthusiasts approached me with the question: "So where does this plant come from?"

#### Origins of The Great White

My best friend, Charl Malan, selflessly shared with me a batch of seed which he received from Mr. Yoshikazu Nakamura in early 1997. Charl and I agreed to use a simple numbering



Great White.

PHOTOS GRAHAM CROUS

system to mark the different types of seed, and proceeded to start the tedious process of planting them independently. One of my first plants to flower in 2001 was a plant from a small batch of seed which we had labelled 15.97. These plants grew rapidly and displayed healthy vigour, a trait that I immediately recognised as holding major potential for future generations. Mr. Nakamura's description for these seeds was simply "Large flowers, round petals, many flowers X Chiba Yellow".

My 15.97 plants flowered again in 2003, this time even more spectacular than in the past. By now the plants had also grown substantially and had produced a multitude of suckers. In this year (2003), Charl invited me to his property, a stone's throw from my humble dwelling.

He proudly showed me a plant which he had named Ghost No. 2. This plant was raised from seed that he had acquired from Mr. Nakamura in 1994 with a description as follows: "Big Flower X White Flower, Not Pure White". So, there it was; Mr. Nakamura had already recognised the latent potential of producing white flowers in 1994!





*Ghost No 2.*

So much has been written and researched about the possibilities of creating a white flowering Clivia plant. Most of the scientific material is

so complicated that I understand very little thereof. I have no doubt that the quest for the ultimate white Clivia would continue in the years to come. Somehow I am feeling a sense of contentment, I am satisfied with my creation.

Just prior to placing the Great White on show, I had pollinated it with a striking orange flowering plant 33.03(01), a hybrid that I had produced by crossing the very same mother plant (15.97) with a Vico Yellow. It is with great excitement that I watch the seeds developing on the plant, the anticipation of something special spurring me on to wait patiently

for the seeds to ripe. &

*Philip Crous*

(Grahamstown) Garden Route Clivia Club

## STORIES BEHIND THE COVERS (CONTINUED)

### Wern's Special History

**A**t the 1998 Clivia Conference held in Cape Town a young man by the name of Werner Strauss who had a passion for growing Clivias, build up enough courage to go and have a chat to one of the most famous Clivia growers in the world, namely Mr Yoshikazu Nakamura via his interpreter. To his surprise Mr Nakamura later handed him a handful of seeds from a bag which he carried with him. With a smile stretching from ear to ear and his new found treasure he set off home to germinate the seeds.

A couple of years later Werner decided to move to New Zealand and donated all his plants to his father Dawie Strauss, a well known Clivia grower at Somerset West. During their first flowering season Dawie found 6 of the plants producing the most magnificent flowers and decided to name them Wern's Special with a code no A1-A6.



*Girly (Werns special) pink-peach.*

During 2004 I was lucky to acquire one of the original plants (a pink) and some seeds of his A2 Wern's special X self. Some of these flowered during 2008 and produced mostly pink flowers. A few more flowered during 2009, one of them with super shape and super coloured flower.

It turned out to be a WOW and I named her Girly. &

*Willie le Roux*

PHOTO WILLIE LE ROUX

## INTERNATIONAL CLIVIA NEWS

## CLIVIAS AND THE FLORALIES OF GHENT (BELGIUM) – A SYMPHONY OF COLOURS AND FORMS

This famous and spectacular plant exhibition opens its gates every five years; this year from the 17th to 25th April. A 4,5 hectare roofed garden was waiting for all plant lovers, a round of 2 km length, 500 plant competitions, 305 exhibitors and 24 world-famous florists were showing their magic green thumbs. 22 000 m<sup>3</sup> soil had to be formed to lovely hills and soft landscapes, 440 m<sup>2</sup> area under water with 8 fountains had been built.

The plant show was just overwhelming: One strolled cosily halfway over bridges through artfully modelled scenery with colourful flower gardens, fragrances and beautiful arrangements.

Figure 044

In between you found calmative green and landscapes with animals made of plants. Modern creations, an insight in the future of garden architecture, and flowers as a part of artwork were also to be seen as well as a tremendous aviary with little songbirds.

Among all this magnificent floridity the heartbeat of every clivia lover could follow an even higher rhythm: Renowned Belgian clivia breeders showed their treasures. Dirk Lootens presented a lot of lush flowering clivias in huge plant tubs. One of them was filled with wonderful 'White Lips'.

Figure 045

Cady Poelman showed a magnificent planter with white striped Akebonos. Pierre De Coster, as a member of the Clivia Society and one of the who organizers of Floralties, had the idea to create a stand for the Clivia Society of South Africa.



*Stand Clivia Society.*



Stand Dirk Lootens.



Stand Clivia Society.



Stand Dirk Lootens.

He provided a circular lawned area that framed a water basin, with four patches of clivias: two in orange, one in yellow and one with excellent variegated clivias.

Dirk Lootens complemented this gorgeous arrangement with a patch of outstanding clivias in different colours.

Two large cones of beautiful proteas, ordered by Georges Delaey, resident in the Cape, completed this set.

The stand of Pierre De Coster could make every Clivia fan speechless with amazement.

Lots of marvellous orange clivias were combined with palms to create a wonderful part of a garden with fantastic effect of long vistas.

Eye catching was an over 25 years old Belgian Clivia with the origin from Louis De Caluwe. He got this plant from Jean Pierre Bouckaert from Merelbeke. His family have, in former times, won different prizes at the Floralties exhibition. This special Clivia has to be treated with caution to preserve the leaves.

Further properties were a yellow Clivia from Australian origin, a light green and also a young multicoloured from Nakamura. All about were high quality clivias in different colours and flower shapes making this stand a real festival for the eyes.

In summary it can be stated, that this plant exhibition



*Below: An over 25 years old Belgian Clivia with the origin from Louis De Caluwe.*



was an experience one never forgets. I can highly recommend that you join it when it opens again – unfortunately not until five years from now! & Elke Jansen, Germany

PHOTOS: ELKE JANSEN  
PHOTOS OF THE STAND OF DIRK LOOTENS:  
PIERRE DE COSTER AND DIRK LOOTENS

**CLIVIA SOCIETY MEMBERSHIP FEES & PUBLICATIONS**

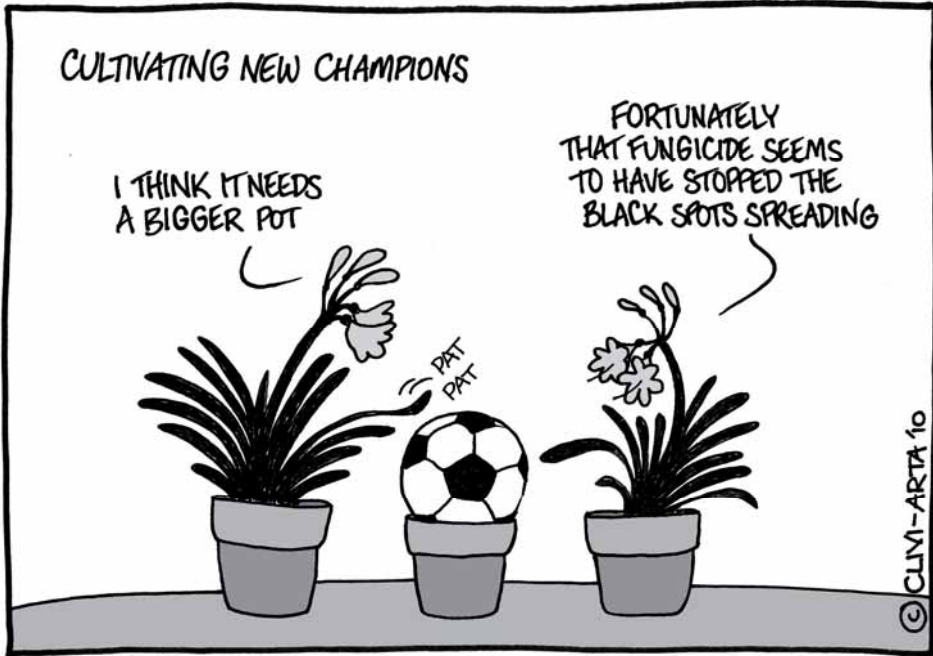
MEMBERSHIP FEES		Int.	USA	Aus.	NZ	UK	RSA
1. Pay per credit card to Clivia Society RSA Treasurer		1					
2. Pay to William McClelland in America			2				
3. Pay to Ken Smith in Australia				3			
4. Pay to Alick McLeman in New Zealand					4		
5. Pay to Jaco Nel in Britain						5	
6. Pay to RSA Club Treasurer							6
Society membership-2010		R 220.00	US \$ 28.50	AU \$35.00	NZ \$ 36.00	£ 16.50	R 120.00
Membership fees for Students		R 110.00	US \$ 14.25	AU \$ 17.50	NZ \$ 18.00	£ 8.25	R 60.00
Honorary Life Members		Nil	Nil	Nil	Nil	Nil	Nil
<b>2010 Publication Prices</b>		Int.	USA	Aus.	NZ	UK	RSA
Yearbook 1 -Electronic printing - Postage included		R 242.00	\$ 29.00	\$ 32.00	\$ 39.25	£ 18.00	R 220.00
Yearbook 2 3,4,6,7,8,9,10 or 11 - Postage included		R 77.00	\$ 15.00	\$ 22.00	\$ 23.00	£10.00	R 70.00
Ten or more copies of same item by Club or Group **			\$13.50	\$20.00	\$ 21.00	£9.00	R 60.00
Yearbook 5 -Electronic printing - Postage included		R 297.00	\$ 36.00	\$ 39.25	\$ 48.25	£ 22.25	R 270.00
Cultivation of Clivia - Postage included		R 88.00	\$ 11.00	\$ 12.00	\$ 14.50	£ 8.00	R 80.00
Ten or more copies of same item by Club or Group **			\$10.00	\$10.80	\$ 12.50	£7.00	R 70.00
Kweek van Clivia - Posgeld ingesluit		R 88.00	\$ 11.00	\$ 12.00	\$ 14.50	£ 8.00	R 80.00
Ten or more copies of same item by Club or Group **			\$10.00	\$10.80	\$ 12.50	£7.00	R 70.00
Newsletters after 2002. Per copy - Postage included		R 19.80	\$ 4.00	\$ 4.00	\$ 5.00	£2.00	R 18.00
Ten or more copies of same item by Club or Group **			\$3.60	\$3.60	\$ 4.50	£1.75	R 16.00
Hints on growing Clivia - available in electronic PDF format via e-mail		R 17.00	\$2.50	\$2.50	\$ 3.50	£1.50	R 17.00
Proceedings of Clivia 2006 Conference on double DVD -7.50 hours		R 230.00	\$31.00	\$34.00	\$44.00	£ 20.50	R 230.00
**Postage addit. and to be added to purchase price							



**CLIVIA SOCIETY PUBLICATIONS**

CLIVIA SOCIETY PUBLICATIONS	
The Cultivar Checklist of 2009 may be ordered from Ken Smith in Australia.	<b>Price</b>
Price for Australian members - Postage included	AU \$ 10.00
Price for the rest of the world members - Postage included	AU \$ 13.25
<b>2010 Advertisement Prices</b>	
Cost	
Small (1 to 6 lines)	R 40
Small (7 to 10 lines)	R 70
Quarter page	R 125
Half page	R 250
Full page	R 500
A5 single page insert supplied by advertiser	R 600
A5 double page insert supplied by advertiser	R 1,000
A4 single page insert supplied by advertiser	R 1,200
A4 double page insert supplied by advertiser	R 1,500
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**CLIVI-ARTA**



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