

The cover of the journal 'Chamaerops' features a vibrant tropical scene. The background is a clear blue sky with soft, white clouds. In the foreground, there are several palm trees and other tropical plants. A prominent palm frond with long, slender leaves is in the upper left. Another palm frond with a fan-like shape is in the upper right. The overall composition is bright and lush, evoking a sense of a tropical paradise.

CHAMAEROPS

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Editorial

• *Martin Gibbons, E-ditor, martin@palmssociety.org*

Unless you have recently arrived from another planet you cannot have failed to notice the drift - should I say the rush - towards electronic communication technology. The take-up in just the last five years has been phenomenal, everything now seems to be e-this and dot com that. Every product advertised on the TV is accompanied by the website address of the manufacturer, and now there are even mobile phones which allow you to receive emails while on the move (though quite why anyone would actually want to do this is beyond me, though the technology is fun).

Always keen to adapt to changing climates, the European Palm Society is no slouch when it comes to keeping up with the future. The exciting news is that ours is the first Palm Society in the world (and there are many) to go fully on-line. From the current issue, our magazine, 'Chamaerops', is being published on the web. If you don't have a computer or access to the world wide web, don't worry, as we will still be publishing the 'hard copy' of our journal, and your membership will remain unaffected. However, consider the following which are exclusively offered on the net.

Our magazine 'Chamaerops' will be published on the internet every quarter in full and glorious colour. Accessible to all e-members via an individual password, you will be able to save pages and read later, or, more likely, read it on-line. As each issue is superseded it will go into the Chamaerops Archive, where along with ALL back issues (35 to date) it will be fully searchable using keywords. Thus you will be able to look up all references to a particular plant, or, say, all articles by a particular author. We are working on getting all back issues archived and more are being added all the time, though it may be some while before the archive is complete.

Secondly, we will have a palm forum in which all members are invited to join. Make contact with other enthusiasts, ask a question about palm

cultivation, and generally chat about our favourite subjects with other members right across Europe and the world. Also we will have a Buy & Sell spot where you will be able to offer, or seek, free of charge, surplus plants, seeds, or anything else palm related. Commercial companies are invited to buy advertising space too.

There will be a FAQ (frequently asked questions) page where you can find out all about our Society, contact details, membership requirements, information about our get-togethers, etc.

Next, the Palm Shop will be open for business. Here you can buy back issues, badges, T-shirts, Chamaerops binders, etc., at prices that are specially discounted for members.

Finally, we are planning to build up a photographic library by and for members, who are again invited to contribute.

And all this for only £12 (= Euro 20 or US\$19.50) per year!

The free Public Area offers a selection of Chamaerops articles to give you an idea of what to expect in the Members' Area. Becoming a member is easy. Get enrolled online within one minute, using our secure, encrypted enrollment service. And for a limited period only, you can access the whole site using the password '**tryout**' and login '**chamaerops**'. Our website address is of course www.palmssociety.org. Go check it out!

I hope that you will be as excited by this new development as I am and will want to enjoy the benefits of the European Palm Society in the 21st Century.

See you in Cyberspace!

Martin Gibbons
E-ditor!

www.palmssociety.org



A Secret Garden on the Lleyn Peninsula

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Thrusting out into the Irish Sea, like an arm from the mountainous shoulder of Snowdonia, is the Lleyn Peninsula, North Wales. Bounded by the sea on three sides, with the mountains to the east, it is a wild landscape. Shrubs and trees are sculptured by westerly winds. But, as you enter Abersoch, its sheltered position is apparent. This is especially true at Haulfryn Coach House, situated to the rear of the town, where its position has allowed sub-tropical plantings.

After hearing rumours of a ninety year old Butia Palm, planted on the Lleyn Peninsula at the turn of the Century, I decided to investigate the story. So we booked into the Port Tocyn Country House Hotel, Abersoch. The proprietor, Mr. Fletcher-Brewer, informed us of the probable location of the palm. Having found the property situated behind the 'Palm Bistro,' we walked down a gravel drive. On either side of us, *Echium piniana* had self-seeded to weed proportions, which I have only before seen on such a scale in the U.K. at Treско (Scilly Isles).

Originally the property - a large stone house and gardens - belonged to the Minobrias family who have been in the area for a long time. I managed to track them down but they could not offer me much information other than the fact that the property now belongs to the Warren family, who, for their part, have turned it into flats.

As you approach the stone property, not only are *Echiums* prevalent but there is also a rare *Cordyline banksii* 'Purpurea,' along with *Cordyline australis* of different ages, and a lovely eight foot *Cordyline australis* 'Albertii.' To the left of the drive is a very fine grove of *Trachycarpus fortunei*. To the front of the house is a group of *Chamaerops humilis* which, at eighteen to twenty feet, are the biggest I've seen in Britain. Then, as we approached the back of the house,

we got our first glimpse of the *Butia capitata* - standing about thirty feet tall. It has to be said that it has got quite a poor trunk and is full of holes. But who cares? It's a fully grown *Butia* growing on mainland Britain and there are not many of them around!

Along the stone wall, which goes round the back of the house, are some plants which are worth mentioning. *Acacia verticillata* was in full flower (it was April when we were there). *Grevillea juniperina* was dripping with flowers. In the corner of one of the walls there was the bold, jagged, blue-grey leaves of *Melianthus major*. *Sophora microphylla* was full of its yellow lantern-like flowers. *Nerium oleander* were in bud. And, *Pelargonium* sp. were thriving against the wall, so they obviously survive the winter in this mild climate.

At the back of the garden there was a *Yucca* bank with quite a few good sized *Agave americana*. *Oscularia caulescens* was spilling over the rocks. *Osteospermum* 'Nairobi Purple' (syn. 'Tresco Purple') was in full flower. *Carpobrotus edulis* and *Carpobrotus acinaciformis* had spread itself all over the bank. The orange flowers of *Lampranthus aureus* shone in the spring sunshine and *Sedum dendoideum* was spreading itself around the *Agaves*.

We had now reached the lower edges of the garden, so we made our way along a side path back to the house where there were several shrubs demanding our attention, such as *Euphorbia mellifera* with its honey scented flowers. There was a large, imposing *Drimys winteri* with its balls of fragrant creamy white flowers. The red flowers of *Crinodendron hookerianum* looked quite magnificent in its cool, sheltered site. Nearby was an old shrub of *Leptospermum lanigerum*.

All too soon it was time to head home. The future of this private garden remains to be seen.

Above: Butia capitata and Trachycarpus fortunei in the back garden.

Below: Chamaerops humilis in the front garden.

Interview with the Editor

Imtiaz McDoom-Gafoor, London, UK

We are approaching the 9th anniversary of the formation of the European Palm Society and so I thought it would be a suitable opportunity to interview our editor. On a recent visit to the Palm Centre I interviewed Martin and we explored such subjects as the European Palm Society, The Palm Centre, and of course his many palm expeditions abroad which have introduced so many new palms into cultivation. In this issue we cover most of the exciting new palms and other exotic plants, and how they were discovered and made available to cultivation. In the next issue we look at the challenges of palm exploration, the formation of the European Palm Society, the Palm Centre and other matters.

IMG: You are associated with introducing several new species of palms into cultivation. Let's examine some of these starting with the genus Trachycarpus. What prompted you to get involved with Trachycarpus and where is it found?

Martin: Investigating Trachycarpus was a spin off of starting the Palm Centre. My first love is hardy palms and it was discovering which species could be successfully grown outdoors in the UK that prompted my explorations. I knew there were several other species of Trachycarpus that were written about but there seemed to be very little in cultivation. I developed a passion for Trachycarpus and over the next seven years I went on several major expeditions to try and find the different species.

Trachycarpus grows in a broad band across the foothills of the Himalayas from west to east. There is *T. takil* in the extreme west in western Nepal and northern India, and *T. nanus* at the other end. The genus grows across Nepal into north-east India, Sikkim, Burma, Thailand and China. I also suspect that there are more, undiscovered species of Trachycarpus where the Himalayan mountains taper out, over towards Vietnam.

IMG: Who do you travel with?

Martin: Most of my trips were done with Toby Spanner who has a nursery similar to the Palm Centre, in Munich in Germany. Our passion for Trachycarpus developed simultaneously.

IMG: What is your favourite Trachycarpus species and why?

Martin: My favourite species would probably be the most obscure of them all, which is *T. princeps*, which grows where China, Tibet, and Burma meet. It is the most difficult to get to and is in a politically very sensitive area. We were able to find and name it but we were only able to find two seeds despite a thorough search. It will be a long time before it comes into cultivation because of the remoteness of the area.

IMG: Why is Trachycarpus princeps not in cultivation outside of its native area?

Martin: It grows in an extremely remote and difficult place which is absolutely off limits to foreigners. The first time we tried to get to it we were picked up by the police and returned in no uncertain fashion to civilisation. Although we subsequently went on an officially sanctioned expedition when we were able to find it, we haven't been able to get back since. The other reason is that they seem to seed so sparingly. We found only a few seeds although at that time of year you would have expected to find lots. I also know two or three Chinese people who have gone back since and they also report the paucity of seeds, so I think it will be a long time before they come into cultivation.

IMG: How does princeps differ from other species of Trachycarpus?

Martin: It is unique because it has a waxy white underside to the leaves. You can literally scrape it off with a fingernail. It is very distinctive in that respect. It grows on the banks of the Salween River, now the Nu Jiang river („Angry River“), which starts in the Himalayas and empties out into the Gulf of Martaban in Burma. It grows in the most spectacular setting: it's as though there was a range of mountains and a giant took a huge axe and cut a great gouge in the mountain with the river now running through the bottom. These almost sheer rock faces are 700 or 800 ft tall and *T. princeps* grows on one of these rock faces.

IMG: What is the most cold hardy of the Trachycarpus species?

Martin: Takil is probably the most cold hardy species. It's from central northern India where it grows on a hillside near a place named Pithoragarh, which these days is a trekking resort. It grows at a high altitude, about 2400 m, where it is said to be covered in snow from November to March and consequently should be an extremely hardy palm. It was 5°C when we were there in October and it gets progressively colder through November onwards, until it is bitterly cold in the depths of winter. Old records describe them growing in great clumps and rows, but we only found seedlings. We learned that all the adult trees had been cut down in recent years. To think that in the space of fifty years it has gone from hundreds and hundreds of mature trees down to a few hundred seedlings is a terrible tragedy.

IMG: Which species would rival the ubiquitous fortunei in time and why?

Martin: Fortunei has two serious rivals. The first is wagnerianus because the leaves are so stiff, it's fast growing once it gets to a reasonable size, and it's much more wind tolerant—which is the main weakness of fortunei. I think it will rival fortunei as soon as it is more widely available. The other one is *T. latisectus* which we found in north-east India. That has much broader leaf segments than fortunei, it has a bare trunk which

to my mind is more attractive, it's very fast growing, and has glossy leaves. It's such a beautiful palm and I think when it becomes more widely available it will rival fortunei.

IMG: How hardy is it likely to be?

Martin: No test has yet been done on its cold hardiness, as there are none growing outside the Kalimpong area, but I believe it will probably be almost as hardy as fortunei.

IMG: What prompted you to look for it?

Martin: A botanist from the Edinburgh botanic garden told us about two strange Trachycarpus palm trees that were growing at the entrance to the famous Windermere Hotel in Darjeeling. We were on a trip in India and decided to go up there and take a look at them. We thought we would be able to identify them at a glance, but in fact we didn't have a clue as to what they were. They were certainly Trachycarpus. We knew everything that they weren't. They certainly weren't takil, they weren't fortunei. We wondered whether they could possibly be hybrids. We decided to leave that particular problem for a while. Later we were in Kalimpong in north-east India and were staying in the Everest Lodge, and there was one of these trees in the garden. It was so much like the other two we realised immediately that it must be a new species. We decided to call it *latisectus* which means 'broad segment' and refers to the broad segments of the leaves.

IMG: What is the difference between Trachycarpus martianus, Khasia Hills' and 'Nepal' forms and where have you seen them?

Martin: They are very similar, one being slightly finer, and the Nepal form being slightly hardier as it grows at higher altitudes. They are both actually the same species although at one time they were considered different species. One was called Trachycarpus martianus, the other Trachycarpus khasianus. They have since been lumped together and I think for good reason.



They grow at a fairly high altitude. The one that grows near Shillong in Meghalaya province is on the side of a very steep valley and is shrouded in mist for half a day which gives an indication of its requirements. Again it is in an absolutely beautiful setting; you drive along a plateau and then this very steep valley begins. You can look down into this valley and at the far end you can see Bangladesh, which the whole plateau overlooks. The other species, *Trachycarpus martianus* Nepal form, grows not far from a popular trekking route in Nepal. The route goes around Annapurna and you can see the palms from this trekking route. So we went along with the other trekkers with our rucksacks and climbing gear, but whereas they went along the path we headed up into the hills. We climbed up these rock faces and after two or three hours we were in an area where there were just hundreds and hundreds of them. They were in an incredibly beautiful area; these palms choose really beautiful places in which to grow, or maybe they simply make the area beautiful.

IMG: Trachycarpus oreophilus is yet another new species that you have discovered. Where is it found?

Martin: *Oreophilus* grows on a mountaintop in northern Thailand. The mountain is called Doi Chiang Dao, and it grows near the city of Chiang Mai which is the second city after Bangkok. It had been known about for years and for a long time it was considered to be a species of *Livistona*. Then it was decided it was *Trachycarpus martianus* and was given that name in the absence of herbarium material. We went up there two or three times, though it's a killingly difficult 4 hour climb. It's very wet, it rains, the sun comes out, it rains again, the sun comes out. So all the time you are soaked and then you are dried out and soaked again and dried out. Again, it's an area of unbelievable beauty. You get up to the top and you can see all these *Trachycarpus* growing on limestone cliff tops, in little crevices, on ledges and they get absolutely battered about by the wind so nobody knows what they look like in cultivation in a sheltered position. A close inspection revealed them to be a new species. We

named them 'oreophilus' which means 'cloud-loving.' There are none anywhere in the world apart from those which came from our original collection. When the plants we have collected have started to grow they will show their true colours and I'm sure they will look quite distinctive.

IMG: Where have you seen the best example of Trachycarpus growing in cultivation outside of its native Asia?

Martin: Without a doubt, around the lakes in Switzerland and northern Italy. They reach perfection and look better than they do in the wild. In fact, palms generally look better in cultivation than they do in the wild. The *Trachycarpus* around the north Italian and Swiss lakes look absolutely gorgeous, almost like a different species. I put that down to the absence of wind and also the high humidity caused by the lakes. I have never seen a single *fortunei* in England that looks half as good as most of the *fortunei* in northern Italy and southern Switzerland.

IMG: What do you think about the natural distribution range of the genus Trachycarpus in general, and could there be other undiscovered species out there?

Martin: As I said, *Trachycarpus* grows in a band from west to east which tapers out in China and towards north Vietnam. It is also worth mentioning that several species we found grow in very tiny areas. *Princeps* immediately comes to mind. It just grows in one tiny area just a few hundred square metres. *Takil* is the same, as is *oreophilus*. It just grows on one cliff top and, although it could be a couple of square miles, it is still very local. In all of these cases if you didn't happen to know they were there you could easily pass by and not even notice them. This makes me optimistic that there are more species to be discovered especially in a place like north Vietnam which hasn't had a great deal of botanical exploration. Another example is *T. latisectus*. In the wild it just grows on one tiny cliff face and

there are perhaps forty individual trees and that's it. When they are gone it will be extinct in the wild, but if you didn't know they were there you would certainly not stumble across them by accident. Since we have found several species in such tiny areas, it is logical to assume that there are other tiny areas that we have missed. I also think there are other species of *Trachycarpus* in the hills of northern Burma, an area that hasn't been explored properly for over fifty years and even then not terribly well. But I will never go there whilst that terrible regime is in power; as soon as it falls, however, I'll be on the first plane to Mandalay.

IMG: What is Plectocomia himalayana, where have you seen it and what conditions does it grow in?

Martin: *Plectocomia himalayana* is a very interesting palm. It grows in the Kalimpong area of West Bengal in north east India. It is a climbing palm, a rattan, grows to about 80 ft and snakes itself up into the treetops. It doesn't have a very thick stem, maybe about an inch in diameter; is very spiny; and the leaf rachis, the central stem of the leaf, is extended into a cirrus which is a long whip-like leaf extension covered with backward facing spines. It is using this that enables the palm to climb up into the treetops. They are in an area that gets frosted every year, growing at about a 2500m elevation. I am optimistic that they can grow outdoors in this country, particularly in a sheltered area such as London or the south west of Britain, based on the natural environment in which they grow. They don't grow in an area with hot temperatures, but rather mild summers, cool winters, and plenty of rain.

IMG: What are your recollections of visiting the high Atlas Mountains of Morocco? What were the conditions in which Chamaerops humilis variety cerifera was growing?

Martin: We heard about *Chamaerops humilis* var. *cerifera* from a customer who had seen it growing in the Atlas Mountains. Prior to that it

was only represented in collections in very small numbers such as the south of France and Valencia botanical garden in Spain. We went up to the high Atlas Mountains of Morocco and what completely surprised us was that we found not hundreds, not thousands, but tens of thousands of examples of *Chamaerops cerifera*. 'Sometimes they covered the entire landscape from horizon to horizon in a sea of blue. The extraordinary thing is that they are so common in the wild yet so rare in cultivation with no real explanation. We were able to collect hundreds of thousands of seeds, and our friend there is still collecting seeds for us. We have distributed them around the world. In fact, the seeds in the wild have a very poor germination largely due to the attention of goats, rats and other animals. Also the harshness of the climate means only a small percent germinate, but the seeds are good, and when brought into cultivation, and given ideal conditions, they germinate well. As regards cold hardiness of the climate, they grow up to very high altitudes up to 1700 m where it is bitterly cold in winter, scorchingly hot in the summer, and very dry in the dry season. They grow well in such extremes of climate but adapt well to more temperate conditions.

IMG: Do you consider it a variation of the green leaf Chamaerops humilis or a distinct species?

Martin: I think they deserve species status but it really has to be examined scientifically and compared with all the other forms in a very variable genus and perhaps DNA analysis done in order to prove that it is different from the rest. There are tall *Chamaerops*, short ones, ones with thorns, others with no thorns, blue ones, green ones, silver ones, suckering ones and solitary ones, so it could be said that it is just another variation in a very variable genus. However, we think that the differences are so marked, particularly the pale blue colour which is on both sides of the leaves, unlike some which just seem to have blue colouring on the back of the leaves, which is unique in *Chamaerops*. Also the speed at which it grows is much slower than the regular green form. The thorns are black, which is also unusual.



It needs a major reassessment of the genus to unravel it.

IMG: Caryota „Himalaya“ has generated considerable interest amongst palm growers. What sort of environment does it grow in and is it a high altitude form of Caryota urens or a distinct species?

Martin: We first saw it growing in Darjeeling and were reliably informed that it snows there every year, so it became apparent this fishtail palm has some cold hardiness. We have subsequently seen it growing widely in that part of the world—north-east India, Kalimpong—and are currently testing it for cold hardiness in Britain. Regarding whether it is a new species or not, I'm not sure. It is grown in California where it is referred to as *Caryota urens* 'mountain form' but the whole *Caryota* genus is in a mess and in need of a major revision. It is different in appearance from many of the other *Caryota* but it would be inadvisable of me to say it is a new species or just a form of another species. It may indeed turn out to be *C. maxima* or *C. ochlandra*, which are the most likely contenders.

IMG: Some of the highest altitude palms in the world grow in South America. What are the most cold hardy palms you've seen in the Andes and where?

Martin: The most exciting palms I have seen in the Andes are without doubt *Ceroxylons*. Whether they are truly cold hardy or not is yet to be determined. I suspect their main attribute is that they grow in cool conditions rather than that they are cold hardy. There is little point in having a cold hardy palm that will tolerate very low temperatures but only produces one or two leaves a year here in the summer, like *Rhapidophyllum hystrix* or *Sabal minor*. They are very hardy but only produce one or two leaves a year in our climate. In my opinion, it is better to have a palm that, in a bad winter, will have to be protected but actually grows well in our cool summers, and several species of *Ceroxylon* fit this bill. Another cool tolerant palm is *Parajubaea cocoides*, an absolutely beautiful palm. It grows in Quito in Ecuador in some numbers and in

some of the inter-Andean villages and is another palm species not known in the wild but only in cultivation. It probably has similar hardiness to the *Ceroxylons*, perhaps -5°C . There is also another species, *Parajubaea torallyi*, which grows in Bolivia at over 3000 m and is considered somewhat hardier. It is not yet in cultivation in Britain but we are working on trying to obtain seed. It would be suitable for the sheltered garden in large cities.

IMG: What was Panzihua in China like? What conditions does Cycas panzihuaensis grow in?

Martin: Panzihua city must be the most polluted city on earth. It is a coal mining area with dozens of steel smelting factories that spew waste products into the local rivers. It was like a scene from hell! We saw bright green rivers, jet black rivers, milky white rivers and rust red rivers and all this pollution running straight into the Yangtze river. A yellow fog would descend on the area as the pollution was so bad. In the middle of all this, in the public park, there grows *Cycas panzihuaensis* which apparently is one of the most numerous cycads in China. We did not see it in the wild but we saw a large number of cultivated specimens in the parks and gardens of Panzihua city. Superficially, from a distance, it looks vaguely like *Cycas revoluta* but the leaves are more upright and it has a thicker trunk. It is said to be extremely cold hardy and fast growing. Some of the Chinese growers that we talked to said it grows two feet of trunk in five years, which is astonishingly fast for a cycad.

IMG: Musa hookeri is a relatively unknown banana. Where does it originate and what is its climate like?

Martin: *Musa hookeri*, or *Musa sikkimensis* as it should now be called as this is its correct botanical name, is a very hardy banana which grows to 2100 m. It is probably as hardy as *M. basjoo* but has a different appearance with a distinctive liver colour to the back of the leaves.

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Fairchild Tropical Garden

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Fairchild Tropical Garden (FTG): I drove by it regularly growing up in Miami, but never did appreciate it. Gardens? Boring. Palm trees? Boring; well, except for coconut palms which were good for climbing and for their coconuts. Palmettos were simply a nuisance, and even more so when your schools were named after them (Palmetto Elementary, Palmetto Junior High School). How one's ideas change with maturity! Now I would put FTG on the top of my list of places to visit in Miami, especially for those interested in palms, cycads, and basically all species of exotic tropical and sub-tropical vegetation. So when we visited Florida this past Spring, we naturally made FTG our first trip.

The timing was good as the Spring Show and Sale of the South Florida Chapter of the International Palm Society was being held at FTG, featuring the palms of Cuba. This was an opportunity to view and purchase from 600 species and varieties of palms and cycads, from a total of 27 vendors, both professional and amateur. According to the S. Florida Chapter brochure, when they first started having these sales in 1981, there were 150 species available; quite a contrast to today.

Unfortunately there are logistical problems in taking plants back to the UK, but this should not lessen the pleasure of „window shopping.“ Do be warned though, that you will end up walking away with a real feeling of envy for what people living in much warmer climates than ours can grow outside, as well as the growth rates they can achieve. I did learn, however, that *Trachycarpus* does not grow very well in the South Florida heat, so be happy for this one advantage. If you have not worked out the logistics of taking plants back to the UK, you can still take home a souvenir from your visit. Seeds are being given out by the South Florida Chapter, to encourage distribution of palms. The seeds available will depend on what is fresh at the time. I came back

with some *Butia Capitata*.

Another attraction is the Montgomery Garden House, where you can view the original water colour paintings of Lee Adams, painted in the 1960's (reference: *Principles*, 39(1), 1995, 42-45). Reproductions (size 20"x30") of three of these paintings are available to purchase. I have enjoyed looking at them in our dining room for several years now. There are also other prints available along with every book imaginable on palms and cycads in the FTG book shop.

After finishing with the Show and Sale there is the rest of FTG to see, which in itself is enough of a reason to visit. I will not attempt to describe in detail FTG, instead let me quote from their brochure: „you will find the renowned collection of palms, cycads and other tropical plants which provides a living laboratory for scientists, and the opportunity of discovery for everyone.“ That is no exaggeration. FTG is 83 acres in size and was established in 1938 by Robert H. Montgomery and Dr. David Fairchild. As far as their collection of palms goes, the Montgomery Palmetum is a world renowned collection including some 900 species, many of which are endangered.

One of my favorite spots in FTG to visit is the conservatory called „Windows to the Tropics“ where plants which may not be hardy enough to withstand the relatively cool Miami winters are kept. What I find particularly interesting is the collection of bromeliads and numerous Red Sealing Wax palms (*Cyrtostachys renda*) with their outstanding red trunks.

Of course there are palms throughout FTG, with the largest concentration in the Montgomery Palmetum. Follow the „Palm Walk“ through this area to view the palms. In addition you are encouraged to leave the path and walk on the grass for a close-up view. Also in this same area is the „Sunken Garden,“ a natural hole in the limestone containing a small pond and waterfall—a nice place to cool off on a hot day. I

Don't Miss !!!

Palm SHOW & SALE

MARCH 27 & 28

← PALM BEACH
AUTIUMBIUM →
RESTORING

↑ EXIT

have a vested interest in the garden, as my Father built the waterfall.

In 1992 Hurricane Andrew hit FTG very hard. Looking at the gardens today, at least as a visitor, you would never know such an event took place. The one exception is a small location which was left in the state it was in after the Hurricane passed through, to allow it to recover naturally. It is worth a look just to see the size of the massive oak tree that was toppled during the storm.

The South Florida Chapter holds a palm sale in November as well as March, both excellent times of year to visit Florida (see the FTG web page for exact dates). On that note, let me tell you how to get to FTG via the scenic route. From Miami Beach or Miami International Airport find I95 south. Take Exit No 2 to S.W. 8th/US 41, turn left in an easterly direction (if you turn right to the west, you will end up in Little Havana and if you want to try Cuban food this is the place to go). Turn right/south onto Brickel Ave/US 1, which is lined in part by royal poinsettia trees, which are stunning in the Spring when in bloom. Pass the entrance to Rickenbacker Causeway leading to Key Biscayne (if time allows a drive along the causeway gives excellent views of the city and Biscayne Bay). Turn left onto South Bay Shore Drive past the Planetarium and Vizcaya. Continue on until you reach the area called Coconut Grove, one of the older parts of Miami where you will have nice views of the bay and the many sailboats on it. When I was a teenager, Coconut Grove was the hippy hangout. The hippies have grown up and, in the process, found the meaning of money. As such, now you will find rather expensive marinas, condos, shops, and restaurants. As you would expect, there will be many coconut palms along the route, species which are resilient to lethal yellowing, which destroyed the original tall varieties.

When you come to the centre of the Grove you veer right onto MacFarland Lane and then shortly after a sharp left on to Main Highway, which takes you through the commercial centre of the Grove. Stay on Main Highway through some of the wealthy residential areas lush in subtropical vegetation, till you reach Douglas Road, then turn left, then a right onto Ingraham Drive.

At the intersection of Ingraham Drive and Le Juene Road turn left, and after a short distance you will reach a traffic circle (round-a-about, the only one I know of in Miami); take the exit to Old Cutler Road. Continue along a road which is shaded much of the way by giant Baynon Trees with their multiple trunks/roots, until reaching Old Culter Road, which will eventually lead up to FTG. In my opinion, that is the best drive through Miami.

You can visit FTG via Internet at www.ftg.org. For further information you can also contact me at: mikehorwitz@compuserve.com.

Interview with the Editor

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It, too, grows in the Kalimpong area. I am beginning to sound like Kalimpong is the only place we ever go to! The reason is we know a family there who are really keen on palms and they have done some major botanical work for us in the hills and valleys around Kalimpong.

IMG: Do you know of other high altitude bananas from the mountains of China?

Martin: There is another unknown banana that we found in the Yangtse valley in China. It was growing at 2800 m, where it gets bitterly cold in the winter, and this plant produces edible fruit. We brought back a few corms to London and we are attempting to grow plants from those and hope to introduce it into cultivation in the future. There is another banana species called *Ensete wilsonii* which is said to grow in north Vietnam. We have not been able to get seed of it but are expecting some in the next few weeks. It, too, should be very hardy.

To be continued in issue #38

Winter Growth

Alan Hindle, 3 Wenlock Close, Sedgley, Dudley, West Midlands DY3 3NJ

As a relative newcomer to palm cultivation, my collection consists mainly of seedlings, which I would obviously like to grow to a plantable size as quickly as possible. My first batch of seedlings, purchased in 1996, consisted of *Trachycarpus fortunei*, *Trachycarpus wagnerianus*, *Phoenix canariensis*, *Dypsis decaryi*, *Livistonia australis*, *Rhapis exelsa*, *Caryota rumphiana*, and *Butia capitata*. I potted them up straight away into 10cm terracotta pots using a proprietary loam based compost and then placed them in our lean-to conservatory. Subsequently a green slime appeared around the outside of the pots indicating poor drainage. Only the two *Trachys* survived, which I believe was due to their more rootbound state and robust constitution. They are now about 40cm high and will soon require repotting for a fourth time.

Somewhat disillusioned by my lack of success, the following year I obtained large specimens of *Chamaerops humilis* and *Yucca gloriosa* (20-cm pots), which both went straight into the ground. The *Chamaerops* are protected from hard frosts with bubble wrap, and the *Yucca*, with its razor-sharp blue-green leaves, receives none. The latter is also starting to become quite large and is beginning to develop signs of a trunk. Later on I also purchased a *Butia capitata* of a reasonable size (12-cm pot), along with seedlings of *Brahea armata* and *Chamaedorea radicalis*.

In order to try and improve the drainage quality of my potting mixes I started off by adding sand and coarse gravel to my loam based John Innes 3 compost, but found this difficult to wet and slow draining. I now add perlite granules, grit, and some organic matter to a loam based or peat based compost (depending upon the plant's acidity requirements). I also decided to stand the pots on saucers full of gravel in order to minimise the chances of plants being left standing in water.

Also that year I pot-planted a cheap but fairly large *Phoenix canariensis* into a barrel planter along with half a dozen *Pelargoniums*. This attractive arrangement, placed outside our front door, is brought into the porch on frosty nights and moved under the carport during ground frosts.

In the spring of 1998, I ordered seedlings of *Caryota* 'Himalaya', *Rhopalostylis sapida*, *Sabal bermudana*, *Sabal palmetto*, *Trithrinax acanthocoma*, *Brahea edulis*, and *Jubaea chilensis*. The *Sabal palmetto*, *Trithrinax acanthocoma*, and *Brahea edulis* were re-potted due to their more developed root systems. The *Jubaea chilensis* died inexplicably, something I have heard has happened to other EPS members. I would like to know what accounts for failure with *Jubaea* seedlings and the secrets for their successful cultivation. Are better results achieved by planting them straight into the ground?

That spring I also emptied my *Pelargonium* barrel to find that the *Phoenix* had sent roots down to cover the base of the barrel. While still in its plastic pot, I decided to transfer the *Phoenix* into the ground. I then bought a new one (along with some more *Pelargoniums*) to refill the barrel. The *Phoenix* in the ground is protected with bubble wrap when the temperature drops below 3° Celsius (as reported in my letter in *Chamaerops* 33). In the autumn I purchased seedlings of *Sabal minor*, *Syagrus romanzoffiana*, *Trachycarpus latisectus*, *Trachycarpus martianus* and a *Trachycarpus fortunei* of about 1.2m in height, which remains in its tub.

Later that year, in my eagerness to induce winter growth in my seedlings without the high costs of heating the whole conservatory, I proceeded to make a foolish mistake. I purchased a two-shelf cold frame with a removable



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transparent plastic cover, which also unzipped at the front. In this I placed many of my small seedlings together with a fan heater at the bottom, which was set to a minimum temperature of 16 Celsius. Unfortunately, the dry air created by the fan heater, in such a confined space, had serious consequences for those seedlings which were either in the firing line or were more sensitive to low humidity. Of the casualties, my Sabals, Brahea armata, and Trithrinax were damaged but all recovered, whereas my Caryota 'Himalaya' palms are still suffering. Caryota 'Himalaya' is living on the edge, not helped by its mineral requirements; Trachycarpus martianus is now just about recovering but the dry air exacerbated its problems with red spider mites; and Trachycarpus latisectus is just a brown stump. At the conclusion of my experiment I must report that most of these seedlings are still in their original pots, and are no more advanced than when I bought them.

Late in the autumn of 1999, I received seedlings of Ceroxylon parvifrons, Dyspis decipiens, Jubaea chilensis, Livistonia jenkinsiana, Parajubaea cocoides, Phoenix reclinata, Phoenix rupicola, Sabal uresana, and Trithrinax campestris. Still adamant on maintaining winter growth and having read Paul Saunders' article on the subject of over-wintering seedlings indoors (Chamaerops 34), I took advantage of the fact that we were renovating our front room and had removed the radiators. The room also has a large south-facing window, thus providing conditions of good light, no dry air, and cooler nights. The room's temperature in the winter rises to around 18 Celsius in the daytime and drops to around 10 Celsius at night. I brought in those small seedlings, which were more likely to respond to the darker conditions and cooler temperatures (no Braheas or Sabals), together with my three Caryota 'Himalaya' seedlings, which had suffered from the previous winter's treatment. I hoped that this would at least keep them alive over the winter until the conservatory started to warm up again. Most of the seedlings have, so far, grown slowly throughout the winter, requiring more frequent watering compared with those plants that remain

in the cold conditions of the conservatory. Unfortunately, the leaves of the Dyspis decipiens shrivelled one by one, leaving just an emergent spear, which was either due to the compost drying out or an attack of scale insect. I am hoping that it will recover in the conservatory this summer.

Overall, I am not sure that trying to encourage winter growth, rather than leaving the plants to enjoy a winter rest, is productive in the long term. Paul Saunders concluded that, although he had achieved quite good growth over the winter, in many cases he was a little disappointed with the lack of accelerated growth the following summer. I will be able to judge this in the autumn but am hoping that the fact that I have not administered any feed during the winter will at least have afforded the plants some rest. Maybe over-wintering indoors is best left for rainforest species rather than for the temperate palms which the majority of us EPS members prefer. This method may also be useful for nursing sick plants through the winter until more favourable conditions for recovery arrive.

I hope that my experiences may be of use to other new members who may be tempted to make the same mistakes. I am beginning to realise that palm growing is all about reproducing as closely as possible the growing conditions in a palm's natural habitat, and having a good deal of patience along with it. Meanwhile, my latest batch of seedlings is an assortment of Trachycarpus species and a Chamaerops humilis var. cerifera, which spent the winter enjoying their cold rest in the conservatory.



Fussing Kills

C.S Jackson, Westcliffe on Sea, Essex, England

Having just read Issue 34 of *Chamaerops*, I believe Paul Saunders in his "Saunders Report" has raised an issue that many exotic plant growers may or may not be aware of. This issue is one that can mean quite literally the life or death of a cherished plant. It is the question of the annual rest period that is absolutely essential to the health of many plants, except those originating from the most tropical of latitudes.

All subtropical and temperate plants are growth-adapted in the wild to have a short or long rest and recuperative period during the winter. This rest period allows the plants' systems to take a break and repair or relax their mechanisms so that when the warmth and sunshine of spring arrives, they are fit and ready to work hard at growing during the coming season. Sadly, many of us, myself included, have panicked at the first cold autumn winds and rushed all the delicate plants inside the house to an artificially lit and heated environment to protect them against the worst of the cold winter weather.

By spring, these plants have either languished, or the fronds (or leaves) have turned brown-edged and pallid looking. Put outside again in the warm spring weather, these plants will sometimes fret; growth comes to a standstill, and ultimately the plants may succumb to mould and eventually die. This happened to quite a large juvenile *Nikau* palm of mine. I had left it out in cold greenhouse conditions every winter for a number of years, and it had survived fine, albeit with slight frost damage one year. However, for some inexplicable reason, one winter I thought I would overwinter it indoors...with disastrous results.

It survived most of winter indoors, growing slowly, and as spring approached it started to deteriorate. It was placed back outdoors in the

shade in April where it slowly died because I had fussed over it and it didn't need fussing. Fussing kills! Sadly, I had not learnt my lesson from many years of losing houseplants due to what I thought was the heating and dryness indoors. I have subsequently discovered, rather expensively, that it was not giving all plants a winter rest that had actually killed them. So I decided that from now on all outdoor plants are left outdoors and either put into the garden shed or pulled under the shelter of the veranda with some fleece thrown over them. This applies for all the temperate and subtropical palms, tree ferns, *Strelitzias*, ground ferns, citrus, Norfolk Island pine, *Bougainvillea*, etc.

This treatment works. As long as you can find a place for your tub plants that is sheltered from wind, frost, and rain, then they will almost certainly pull through the winter; take them indoors, however, and chances are you will kill them. As for the plants that I myself grow indoors in my conservatory, which are mainly cycads, they do not receive artificial heat, so a cool period for them is assured, with warm conditions on sunny days and cool nights. Inside my flat all my other indoor plants are in my north-facing lounge with little heat and a *Gro ñ Lux* lamp to supplement the winter light. All the plants in this room are tropical or subtropical and not hardy to very low temperatures. Even these plants deteriorate to an extent during the winter indoors, but with them there is no outside alternative.

The moral of the tale is to always give your palms and other exotic plants a winter rest. For subtropical plants, give two months of cool temperatures, let the potting mix dry out to only just damp, and place plants out of frost, wind, and particularly rain. For temperate plants, all

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Happy (or Crazy) Germination!?

by Jörg Schumann, Rathausplatz 2, 09247 Röhrsdorf, Germany

A few years ago I started growing palms. I had several species, but only one of each species which I bought in some nurseries. In 1990 I first collected some seeds of *Archontophoenix cunninghamiana* and *Syagrus romanzoffianum* in La Palma/Canary Islands. I didn't have any experience in germinating palm seeds at this time. The success was a germination rate of 100 %. It worked! I wasn't prepared for that, and found that I had more palms than I expected; and so, this when I started to think about selling palms. Now, ten years later, I can make a review of so many different experiences in growing palms and in germinating palm seeds. As such, I decided to share those experiences with others, and here I invite you to take a look at what I've discovered.

What is the most important thing you have to think about when you want to germinate palm seeds? They must be fresh! Or not? Most of you may say - what else?

Well, you may be right for nearly all palm seeds, because most of the seeds will lose their viability after a few months, some even after a few weeks. In my opinion most of the tropical palm seeds will lose their viability faster than the seeds from cold hardy palms. The reason for this could be that the sprouts are damaged by cold temperatures when they grow more quickly. But is fresh best all the time? My experience says not necessarily.

In 1997 I got some seeds of *Acrocomia totai*, a species I was very interested in. No seedlings or young plants were available at this time, so I bought some seeds from Toby Spanner. I had a look at the seeds every week for a year after sowing. Nothing! Then I lost my interest and put

the seeds in a far corner, and after some time I forgot about them. The seeds did not have any humidity and were completely dried up by December 1999. By chance I rediscovered the seeds after Christmas 1999, and since I felt sorry for the dry globes, I poured some water over them, but I never really thought that there was still life in them.

I don't know why, but after three weeks I had a look in and - to my surprise - some seeds were germinated! I couldn't believe that, after such hard times, the seeds were still good. But one after another started to germinate. Apparently they liked it!

I remembered this event after sowing some seeds of *Licuala spinosa* in winter 1998. Most of them germinated well after some weeks, but some of the seeds didn't do anything. There was a germination rate of 80%, and this was ok for me. After potting the seedlings, I mixed the germinating substrate together with another substrate without giving it much thought. After repotting a large *Pseudophoenix sargentii* some time later, I saw that some sprouts had come up from „Down under.“ What was this? A couple of weeks later it was clear: This was *Licuala spinosa*! After 20 month! Really!

Now I won't be surprised when some sprouts come up next to my *Carpentaria* or next to my *Johannestejismannia*. I'll wait a while and then it is clear. Here a seedling of *Coccothrinax miraguama*, there a seedling of *Arenga porphyrocarpa*, and here a seedling of *Beccariophoenix*...it's full of suspense. From these

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Letters

Special edition of „Chamaerops“

I would like to suggest that every member of the EPS send pictures of the palms which they have planted outside to Martin Gibbons, so that they can be published in a special edition.

Only palms which have some chance to survive in Central Europe (Trachycarpus, Washingtonia, Phoenix etc.) should be published, and no extravagant plants which need huge expenditures of protection in winter.

With every picture, the technical data should be briefly mentioned. For instance: exact position (town, metres above sea level); date and height at which it has been first planted out; present height; male or female plant; first blossoming at a particular height; lowest survived temperature, with or without damage; estimated age of the plant and special tips. However, there should not be too much information, or it would become too voluminous.

My aim is merely to have a collection of as many beautiful plants as possible, with short information, in one publication. It's always nice to show something like that to friends, especially when one of the plants is your own. Maybe there are some particularly nice pictures (illuminated at night, or decorated as a christmas tree) which especially deserve to be published. I have some palms in parks in my neighbourhood which almost nobody knows of.

As an alternative, a special homepage could be created, analogous to this special edition, which could be continuously updated with new pictures. If somebody wants some more information about a palm, he or she could ask directly the owner via e-mail.

Bernd Schnell, Germany

Here is my method to get palms safely through the winter: I take a large umbrella, cut bubble plastic to the right size and fix it with a staplegun onto the umbrella (that means, on top of it). Then I put the umbrella up and attach it with wire to the trunk of the palm. Like this, no humidity from above (snow, rain, ice, etc.) can find its way into the heart of the palm and its fronds stay always bright green.

Hans-Peter Kölblin, Efringen-Kirchen, Germany

It is my opinion, that since 1995, when I joined the EPS, even the last bit of hardiness has been squeezed out of the poor Trachycarpus, and countless Rapidophyllum and Sabal rotted away in european gardens (two or three in my garden too).

Unless anybody comes along with reports on genetically manipulated palms, the subject has been treated quite comprehensively, and even such mutations would be rather questionable news.

On the contrary I always take very much pleasure in articles treating a specific variety of palm or introducing a botanical garden. I would like to mention especially the following reports: Saving an Endangered palm (Ch. No 30), Costa del Chamaerops (Ch. No 27), Land of the Long White Cloud (Ch. No 26), *Thrinax morrisii* (Ch. No 25), A Himlayan Phoenix (Ch. No 23), etc.

If in course of time I can gain the necessary specialized knowledge, maybe I myself can write such articles. Till then I for myself am much more interested in a *Clinostigma* in the tropical mountain forest than in a Trachycarpus in the Harz which has just about escaped death.

Heinrich Böhm, Bremen, Germany

Trachycarpus wagnerianus with stripes

Some weeks ago I sowed a lot of Trachycarpus wagnerianus seeds and got a great germination rate of nearly 100 %. All seedlings are growing very well and fast, but there was one mysterious seedling among them. This one leaf seedling shows a broad white-yellowish stripe on one side, from the top to the base. I never saw this before. It looks like the stripes on the leaves of a Rhaps excelsa „Variegata“. Has anyone seen something like that before? Please contact me - info@palms.de.

Jörg Schumann, Röhrsdorf, Germany

This discoloration is indeed a variegation like in the Rhaps excelsa you mentioned, normally induced by a virus or genetic aberration. It can occur in virtually any palm species though I have not yet seen it in Trachycarpus wagnerianus. This could grow into a very attractive plant! T.S.



Fussing Kills

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the above applies but give them three months of cool temperatures. You will be amazed at how much better they grow in spring and the following summer simply because they have had time to recharge their "batteries" for another busy year.

So remember:

Subtropical = 2 months

Temperate = 3 months

Don't take them indoors as the central heating will kill them, and lastly don't fuss over them because they don't appreciate it - you are probably killing them with kindness.

Happy (or Crazy) Germination!?

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experiences I can tell you never to throw away your used germinating substrates! The experience I had with Acrocomia should be the same for Phytelephas or Parajubaea: It seems that they must dry out for a longer time (Phytelephas for instance up to 3 years!).

Let me tell you two of the important things I learned through all this: Don't believe all that is written in books about germination times, and don't throw away the seeds until they are really gone. Note these rules, and you will experience pleasant surprises from time to time, and maybe even increase your germination rates like I have. Maybe some of you have had the same experiences, or completely different ones. Take a pencil or your computer and write it down for CHAMAEROPS. We'd like to hear about it. Happy (crazy) germination to all of you!

