

MARCH/APRIL 2014

BONSAI



in

SOUTH AFRICA



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CORAL TREES

Coral Trees, or Erythrinas are indigenous to South Africa with over 100 species

Article by Carroll Hermann

Photograph: Erythrina lysistemon (hybrid)

Photographer: Carroll Hermann



CORAL TREES

Erythrina is a large genus with over 100 species, most which are tropical or sub-tropical existing on every tropical continent around the world, and on dozens of islands in between. The name Coral Tree is somewhat misleading as very few species of Erythrina actually have what one would call coral-colored flowers. Red is by far the most common colors though some species have pink, orange, white, green, yellow and even coral flowers. The plants themselves also come in a large variety of appearances, from massive giants to small, shrubby, sparsely branched plants only several feet tall. Most are deciduous trees and many have spines, some even poisonous. As for cold tolerance, only a few can tolerate much frost (*Erythrina crista-galli* or Cockspur Coral). The hard, colorful seeds, which fill the typical legume seed pods of this genus are reportedly quite toxic, so before one plants one in their yard, those that have pets might want to place in far from harm's way.

But it's the flowers themselves that are the main attraction with this species. They are such a brilliant color and amazing shape, though many species have different shaped flowers. All the flowers are attractive to hummingbirds, so this should be a tree on the lists of those attempting to grow a garden that will attract such birds.

Most Erythrinas can be grown easily from seed except for the hybrid species, like the tree on the cover which was grown from a cutting. All seem reportedly straightforward in terms of propagating from hardwood cuttings and aird layering as well. Some species also seem to be grown readily from new growth cuttings (especially *Erythrina crista-gali*).

The following are some commonly grown Erythrina species in cultivation and used as bonsai, although very difficult to reduce the leaves.

Erythrina acanthocarpa (Tambookie Thorn): Very rare and occur in the Transkei only. It is a short (up to six feet tall) shrubby native of South Africa that flowers in late spring to early summer, but looks spindly and sparse the rest of the year. The leaves of this plant are small, ovoid and have hooked thorns on the back making it very difficult to work with. It is, like most Coral Trees, deciduous much of the year so it looks like a dead spindly bush from fall through winter. It is a frost hardy species, but not much below the high -6°C.)



Erythrina crista-galli (Cockspur Coral Tree): As the name suggests, this is a South American native with surprisingly good cold tolerance. Flowers consist of single beak-shaped red-pink to salmon colored structures in large, non-geometric clusters along several feet of a branch end. The beak-shaped flowers eventually open up to an ovoid to heart-shaped carpal with a tubular projection from the non-pointed end, and are quite ornamental. Seeds are multicolored and very easy to germinate. As are most Coral Trees, this species is quite drought tolerant. These are low growing very



densely branched trees that are somewhat unattractive when deciduous in winters. The leaves are very big and might be unsuitable to bonsai.

Erythrina humeana (Dwarf Coral Tree, Natal Coral Tree): This smaller African shrub/tree is one of the only Coral Tree that blooms in the late summer to fall. Inflorescences are made up of a dense cluster of upright orange to deep orange-red flowers that form a brilliant, slightly curved, narrow conical shape. The flowers look a bit like large, red-orange flying insects all flying upwards. This species tolerates some frost.

Erythrina latissima (Broad-Leaf Coral Tree): Also indigenous to South Africa, this short tree has several unique characteristics. The bark of this species is very corky and all new growth is wooly. Even the perfectly flat, stiff, nearly circular, large leaves have a prominent fuzzy layer on them, which eventually wears away leaving the leaves a drab green color. Flowers are borne in very tight clusters in late winter to early spring and are a deep red to red-orange.

Erythrina lysistemon (Common Coral Tree): Also originat-



ing from South Africa, is a large species that looks very similar to Erythrina caffra (fusca) except its flowers are tight clusters of curved, conical petals that make the inflorescences look like deep orange to red-orange shuttlecocks. This species tolerates some minimal frost.

Read more:

<http://davesgarden.com/guides/articles/view/2594/#ixzz2s9zrxYGd>



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SEED PLANTING

There lies some fascination in seed growing for bonsai. Numerous “seed” sites proclaim to sell “bonsai” seeds. There is, of course, no such thing.

(Photograph: Caroll Hermann)

For many of us, some of the allure of “growing” anything, lies in the fact that you feel like having “created” something when that little seed first sprouts its wondrous head through the soil.

In our house, we don’t check pockets for tissues before we wash, we check for seeds. The whole family ardently collects

seeds for mom. My husband regularly risks his life (and freedom) by having to climb a tree for that last elusive seed pod!

I do feel (even at my age) that I can grow seeds and control the growth of the bonsai better than any other method. Smaller pots are also easier to move around.

There are many different types of seeds around, and it is always good to know what you are dealing with. The easy distinction is that seeds with wings need to be cold stratified and hard shelled seeds need boiling water to “wake” up and soften the outer shell so that germination happens easier. (It is of course not always true for all seeds, but an easy way to remember).

Stratification is the process of pretreating seeds to simulate natural winter conditions that a seed must endure before germination. Many seed species undergo an embryonic dormancy phase, and generally will not sprout until this dormancy is broken. The time taken to stratify seeds depends on species and conditions; though in many cases two months is sufficient.

In the wild, seed dormancy is usually overcome by the seed spending time in the ground through a winter period and having its hard seed coat softened up by frost and weathering action. By doing so the seed is undergoing a natural form of “stratification” or pretreatment. This cold moist period triggers the seed's embryo, its growth and subsequent expansion eventually break through the softened seed coat in its search for sun and nutrients. You can easily simulate this process by placing your seeds in the freezer part of your fridge. Some people add vermiculite to the mix, you have to try what works best for you. Use of a fungicide, such as Virikopf or any other, to moisten your stratifying vermiculite will help prevent fungal diseases.

Mix your tree seeds in a clean plastic sealed or ziplock bag with thoroughly moistened vermiculite or peat and place in the bottom vegetable/fruit compartment of your refrigerator. **DO NOT PUT IN THE FREEZER!!!** It is important to thoroughly but only slightly dampen the vermiculite or peat. Excessive moisture can cause your seeds to mildew and grow moldy. You should not be able to squeeze any dripping water out of a handful of peat or vermiculite after thoroughly and uniformly moistening it. You can also completely moisten the peat then squeeze all the water out of it. I've also heard that placing the seeds in a damp paper towel will work also and placing them in the refrigerator. Also some people use moist white sand so they can keep an eye on the seeds and if any start to germinate in stratification they can be removed and planted.

Remember that you are effectively “making winter” for your seeds.

When a seed requires both a warm and cold stratification, the warm stratification is done first, followed by the cold stratification. A warm stratification is done to soften the seed coat or allow the seed embryo to mature. Only the mature seed embryo is capable of the cold stratification process.

The hot water treatment of your seeds, if cold stratification is not needed, is to boil water, Pour it into a jar/cup, add the seeds and leave over night.

If you have time and are keen to get into the nitty-gritty of growing from seed, then read:

<http://curis.ku.dk/portal-life/files/20712898/Chapter9>

Some seeds come clad in a protective coating that is particularly hard and water-resistant. In nature, weather, gritty soil, and even acid in the digestive tracts of animals abrade the seed, letting moisture in to spark germination. Gardeners can mimic this process at home by scratching the seed coat, which allows water to permeate the seed and prompts germination.

Scuff individual seeds by dragging them across a sheet of medium-grit sandpaper. Avoid making deep scratches that expose the underlying, lighter-colored embryo, and prevent damaging the seeds' growth points by sanding only their sides. Scarify large amounts of seed by placing them in a jar with coarse sand and shaking vigorously until the seed coats are dull and scratched. Sow scarified seed immediately.

Presoaking softens the coats of seeds that are slow to sprout and primes them for germination.

Soak the seeds in a jar filled with hot water for at least 4 hours and up to one day. Skim off any floating seeds. (Floaters are not viable and you are wasting your time - unless the seed is distributed by water!) Pour the remaining seeds into a wire mesh strainer and rinse well with fresh, cool water. Sow immediately. References:

<http://www.datreestore.com/cost.html>

<http://www.treeshrubseeds.com/treatingseed.htm>

<http://www.organicgardening.com/learn-and-grow/pretreatments-slow-germinate-seeds>



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BONSAI DREAMS CAN COME TRUE

I'm sure that for anyone passionate about bonsai a dream would be to travel to Japan and learn from some of the Masters. However for most of us when it might have been possible to go, prior to settling into a career and starting a family, it may not have been an option due to financial or other constraints. It was never something I considered till a few years ago, as nobody that I knew had done this. In some of the international bonsai publications an article appears every now and then about the trials and tribulations of full time apprenticeship in Japan and it was obvious to me that considering my personal situation such a commitment would not have been possible.

However after returning from Japan in 2012 having visited there for the Autumn or Koyo (Colorful leaves) season with my wife I fell in love with the country and decided to investigate the prospects of short term study in Japan. At the time Peter Tea was doing a fulltime apprenticeship in Nagoya, Japan at Aichi-en nursery. The nursery belongs to Mr Tanaka



who is a young, third generation bonsai professional who is known in Japan for his Pines and Maples. As these are my favourite species to work on I was very excited that through Peter, a short term apprenticeship program had been started. So I immediately submitted an enquiry and after a screening process was accepted for the 2 weeks which I had considered the most time I could commit to being away from my business interests and wife.

A few short months later I found myself back in Japan, in Nagoya, living in a traditional Japanese home at a Japanese bonsai nursery eating bricks of tofu the size of which I never knew existed! I had to pinch myself a few times before I accepted that I was truly! However the reality of a bonsai apprentices life soon took over, when work began at 07h00 and ended around 20h00 or later. Of course there were short meal times in between but all day, every day is bonsai. Although Mr Tanaka was around, apprentices speak very little if at all to their Oyakata, teacher or bonsai father figure, but rather to their senior apprentice at the nursery. So most of my

instruction came from Peter Tea which was great as he had already at that time spent almost 3 years one on one with Mr Tanaka, and before that was a student of Boon Manakitivipart for 10 odd years plus he spoke English which is a rarity in Japan.



It was quite unnerving when Mr Tanaka would place a tree on the bench for me to work on. Every one was so much more developed than anything I had ever worked on before. Spending two solid days wiring a maple or an entire day plucking the needles of a black pine was nothing out of the ordinary. Just when routine or monotony would begin to settle in a reality check would hit and you would look around and see where you are and just how privileged.

Those two weeks changed my entire bonsai world. Of course there was the initial stages of depression when I came to the realisation that despite having been around bonsai for most of my life, I knew NOTHING. However thanks to Mr Tanaka, Peter Tea and Juan Andrade's guidance my 'bonsai eyes' felt like they were opened for the first time.

Since then I have been to Japan twice in 2013 and in May 2014 I will be back at the nursery again. Unfortunately since Peter's departure from the nursery, the part time apprenticeship program has been discontinued for those of you who might have been interested. There are now 3 full time apprentices at the nursery but I am privileged that Mr Tanaka makes a spot available to me, so I cherish the opportunity to learn more of the techniques he uses to achieve phenomenal trees.

Should you wish to have a whole new world of bonsai opened to you and are able to spend anything from a week to several months in Japan then there are several programs which you might consider investigating. Not only will you be given intensive, hands-on instruction you may even be fortunate enough to work on material the likes of which you are unlikely ever to see in South Africa.

There are essentially two programs I can recommend. The one is near Tokyo and the other is in Osaka.



Outside Tokyo, in Shizuoka, one hour with the Japanese bullet train, the Shinkansen is the International Bonsai School which opened up to foreign bonsai enthusiasts in 2005. It is run by the well known Japanese bonsai master Mr. Nobuichi Urushibata. A limited number of students are accepted at a time, less than 4 and English assistance is available. Accommodation is also available in the nursery. A three months course is available with an extension if required. Shorter

courses are also available but best to contact the nursery and find out for sure. Mr. Yoshihiro Nakamizu who has become a good friend of mine can be contacted on nakamizu@J-bonsai.com.

The other program in Osaka is run at Fujikawa International School of Bonsai. The Fujikawa International School of Bonsai, located in Ikeda City (Osaka, Japan), is designed to provide the serious bonsai student an outlet for further expanding his or her knowledge of the Japanese Art of Bonsai. Participants will have the opportunity to study one-on-one with contemporary bonsai master Keiichi Fujikawa at his Kansai-based nursery, Kouka-en. The Fujikawa School provides students an enjoyable and intensive learning environment conducive to growth and understanding in the art of bonsai. Various aspects of bonsai culture and design will be incorporated into the curriculum under the direct tutelage of Mr. Fujikawa. Programs may be catered to individual students' needs, as based on the skill level and availability of time of each participant. You can contact Bjorn Bjorholm on bbjorhol@gmail.com. (If you have viewed any of the Bonsai Art of Japan videos on YouTube then you would have a good idea of what goes on at the nursery)

Unfortunately dreams don't come true cheaply in Japan. You can expect to pay around R11,000.00 for an economy return flight with Emirates. There is a one-time application fee of around R3,000.00 and a weekly tuition fee of around R4,000.00. Very basic self-catering accommodation would cost at least R1,500.00 per week and meals would be roughly R100.00 per day depending on what you buy. So for 2 weeks it would cost roughly R30,000.00 without spending money and you are going to need lots of that, trust me! These costs are estimated and should be confirmed with the individual schools.

To become a Nippon Bonsai Association recognized bonsai professional requires a 5 year full time study in Japan. You need to be VERY serious about bonsai in order to undertake such a physically and mentally demanding commitment and a major challenge will be to find a nursery willing to accept you. If however you are determined then I would suggest contacting Mr Nakamizu as he has been able to place international students with some famous Japanese bonsai masters in the past.

Terry Erasmus

082-8907927

www.bonsaitree.co.za



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SHANNON YOUNG

I first “met” Shannon through Facebook and I have always admired his trees on his page. We met “formally” in Japan in 2011 when on tour in Osaka at a formal dinner.

Shannon is an artist from Australia. He started out when he was 12 after attending a horticultural show with his parents.

The years of study and dedication have resulted in Bonsai Clubs International award for excellence in both 2011 and 2012, as well as being selected to display in the Australian National Bonsai and Penjing Collection in the Canberra Arboretum.



Suburo Kato and Mr Daizo Iwasaki where he was privileged to be given private tours and tutorials. Shannon also attended the Asia-Pacific Bonsai and Suiseki Convention and Exhibition in Takamatsu and gained invaluable information on ground grown bonsai stock from Kinashi on Shikoku Island.

Shannon has recently been appointed as the new assistant curator of the National Bonsai and Penjing Collection of Australia in Canberra. We wish him the best of luck in his new venture, as well as the soon-to-be addition to his family.

His web page on

He was given the first award at their local show in Brisbane by the secretary of BCI after he unexpectedly visited. The second one was given to him by the Vice President of BCI at

<http://youngbonsai.com.au/index.html> is well worth the visit.



a state show last year. Both for different trees.

(Queensland Small leaf Ficus (BCI Awarded 2012)

During his tour of Japan, he visited the famous collections of Mr Kuniko Kobayashi, Fujikawa Kouka-en and the late Mr



And of course, I missed the photo opportunity with Shannon! I knew he'd be famous!

The cover page photograph is the Swamp Cypress (BCI Awarded 2011).



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BONSAI NEWS

Bonsai news from all over the country. Keep up to date with people, products and functions, the gossip, the who's who and the what's where? Please send all your news snippets to info@bonsaisouthafrica.co.za

Oscar, (no, not our local one) from **Bonsai Empire**, runs a very entertaining Youtube movie this month on "Seven Inspirational Bonsai". If you have 7 minutes to spare, and I recommend you make time, go to: <https://www.youtube.com/watch?v=b5dexeO-l4>

At **Bishopsford Bonsai Nursery:**

- *Rare or unusual plant sale*

Sunday 30 March 2014 - 9am

White pines - various ages priced from R450 to R6,000

Cedrus brevifolia – VERY rare, priced from R800

Cedrus atlantica 'glaucua' – young grafts priced from R600

Cedrus atlantica 'green' - young grafts priced from R500

Carmona microphylla - Fukien Tea –about 2 years old, R95

Carpinus sp. hornbeam – about 2 years old, R95

- *Buddleja Progression workshop - 9.30am*

Sat 12 April 2014

Sat 14 June 2014

Sat 9 Aug 2014

Sat 8 Nov 2014

Hands on Buddleja bonsai workshop which will run over some months covering the different stages of Buddleja and action that needs to be taken. After completion of the workshop you would know how to collect, repot, prune, carve and work on your Buddleja bonsai. There has been a lot of bad publicity around Buddleja and hopefully this will be dispelled. It is truly one of our great indigenous trees for bonsai. Charge R1,000 including a tree. Numbers limited, registration essential via e-mail bford@cybersmart.co.za

- *Azalea Progression workshop - 9.30am*

Sat 28 June 2014

Sat 13 Sept 2014

Sat 24 Jan 2015

Sat 27 June 2015

Hands on Azalea bonsai workshop which will run over a year covering the different stages of Azalea and the action that needs to be taken. After completion of the workshop you would know how to propagate, collect, repot, prune and work on your Azalea bonsai. Azaleas are not the easier subject but with the correct handling can be very rewarding. Charge R800, bring your own material. Numbers limited, registration essential via e-mail bford@cybersmart.co.za

- *Workshops:*

Forest Workshop - Sat 30 August 2014 9.30am

Bring your own material, we will also have material available for sale. Create your own forest under the guidance of experienced bonsai growers. Charge R120. Numbers limited, registration essential via e-mail bford@cybersmart.co.za

Raft/clump style workshop - Sat 18 October 2014 9.30am

Bring your own material, we will also have material available for sale. Create your own raft/clump style under the guidance of experienced bonsai growers. Charge R120. Numbers limited, registration essential via e-mail bford@cybersmart.co.za

- *Create Your Own Bonsai Courses*

Saturday 25 January 2014 (fully booked)

Saturday 22 February 2014 (limited spaces left)

Saturday 29 March 2014

Saturday 26 April 2014

Saturday 31 May 2014

Saturday 27 September 2014

Saturday 25 October 2014

These courses are suitable for beginners or for people who have some experience growing bonsai. You may bring one tree to work on or buy a starter tree and pot at the nursery on the day of the course, your tree will go home with you at the end of the course. The Course starts promptly at 09h30. Cost R180, registration is essential as numbers are limited. E-mail bford@cybersmart.co.za for a registration form.



Shibui Bonsai Kai, together with the Embassy of Japan will be hosting a cultural day in the Fountain Court in Sandton City – near to Checkers Hyper on the ground floor and not in Nelson Mandela Square as previously advised. They will be doing a Bonsai demonstration and a mini show. Derry will have more details nearer the time.

11. All other Styles
12. Past winners

Boland Bonsai Kai gaan n piekniek hou in die botaniese tuine in Stellenbosch sodat mense kan sien hoe lyk die reause waterlelies se blomme. Bring jou eie eetgoed, maar jy kan ook by die Katjeepering-restaurant iets te koop kry. Daar sal begeleide toere na die bonsai tuine wees om die bome aan n groeter mark bloot te stel.

The year started off with the sad passing of Harry Thomlinson. And who does not have “The complete Book of Bonsai” and “Bonsai '10 tips” in his or her collection. Our condolence to his family.

CONVENTION THEME
Bougie, Spelkie & the Queen

VENUE
LOUVAIN

CONTACTS
Chairman
Tobie Klenk
083 433 1477
toblen@msweb.co.za
Vice Chairman
Euf Jellens
082 577 8781
euf@specialisedtravellers.co.za
Treasurer
Thinus Theron
082 892 1431
Secretary
Wendie de laager
082 418 8800
Committee member
Mark van der Merwe
082 822 0222
Website: www.katrivierkai.co.za

BONSAI-EN VISITS

INVITATION
Southern
Cape
Bonsai
Convention
2014
24 - 28 September
Kat Rivier Kai

The **Eastern Province Bonsai Society** will be hosting an intermediate course at Clifton Marais' place that has now been moved to the 15th of March due to various conflicts. Please drop Owen Ruppelt a mail or a sms to let me know if you are interested. Cost is R120 per head and you need to bring a camping chair, a tree or two and your own refreshments. The course will start at 9am.

Kierieklapper Bonsai Kai is hosting the next BRAT day. Apart from the 'any specie' exhibit table, and indigenous trees seldom used for bonsai table, (please use a 'plant marker' and write Botanical name, Common name and SA Tree no there on) and remember to prepare your bonsai for participation in the very exciting BRAT competition.

Bonsai will be exhibited in the following 12 categories. Note that the notes\guideline for each category will be forwarded to you as soon as Mack has received the list from their President Kobus van Der Merwe.

1. Tommy and Anne Flaxman for Formal and Informal Style
2. Tommy and Anne Flaxman for Cascade and Semi Cascade Style
3. Duncan and Llewellyn Wiles for Forest and Group Plantings
4. Tom Timlet for Literati Style
5. Secunda Bonsai Kai for Broom and Flame Style
6. Calvin and Esme Leader for Driftwood Style
7. Charles and Elsie Ceronio for African Style
8. Tawny Floating Trophy
9. Pieter Visagie for Collected Material
10. Doug Hall for Beginners

Bonsai Wholesalers

22 Lombard St, Pinetown, KwaZulu Natal
Contact Ed on Cell: 083 331 5510

**Suppliers of Wholesale Bonsai
Pots, Tools, Wire, Figurines and
accessories to Bonsai Clubs and
the Trade, for more information
check out our web site or email us**

Web Site: www.bonsaiwholesalers.co.za
Email: ed@bonsaiwholesalers.co.za



國際盆景藝術與文化雙年展

International
Bonsai Art & Culture Biennale
Yogyakarta 18-21 October 2014

— When Art and Culture Meet Through Bonsai —

We are organizing a colossal bonsai event called **"International Bonsai Art & Culture Biennale"**

(Theme : *When Art and Culture Meet Through Bonsai*) in Yogyakarta,
an old historical/ cultural city in Central Java of Indonesia, renowned as the centre
of classical Javanese fine art and culture.

The exhibition venue will be in an old historical Dutch fortress, the **"Vredeburg Fortress Museum"**
and the **"International Culture Night"** will be hosted by our Yogya Sultan in the **"Keraton Palace"**.

All are within walking distance to the city center, Beringharjo traditional market,
Malioboro night market etc.

After the opening ceremony, all guests will join the "andong" horse-carriage and "becak"
city parade to enjoy the unique bonsai display along the city boulevard.

There will be **"King Trophy"** from **Sultan Hamengku Buwono X**, **"Ismail Saleh Trophy"**,
"Saburo Kato Trophy", **"Iwasaki Trophy"**, **"Amy Liang Trophy"**, **"WBFF Trophy"**,
"China Trophy" from the **Chinese Penjing Artist Association**, **"Ryuga Dragon Trophy"**,
"The Best Bonsai Display Trophy" etc.

There will be also uncounted art & cultural activities during the event e.g. demo of batik
drawing, silver jewelries, ceramic making, painting, sculptures, traditional music (gamelan) & dance,
wayang (puppet) show; Gala Dinner with Ramayana Cabaret at Prambanan Temple,
touring to Borobudur Temple, Taman Sari Water Palace, Kasongan traditional crafts center;
we can also organize special tour to caving, hiking, diving or surfing adventures,
to Bromo Mt, Bali Island, Tanah Toraja, Toba Lake, or other specific trips, etc.

We will also organize a picnic-trip where all guests will participate in the
"Friendship Trees-Planting Picnic" as part of our green campaign activity; last but not least,
all international delegates will be requested to participate to perform their unique culture
in the **"International Culture Night"** with their traditional costumes.

It will be from **18 - 21 October 2014**, in concert with the celebration of
258-th birthday of Yogyakarta City;

so we will also celebrate together the **"258 Lanterns Night for Yogyakarta"**.

We are expecting hundreds of guests from around the world, with world famous headliners.

Please jot down and reserve your schedule, bring your family and experience the great fun.

For detail information, please visit our website : www.internationalbonsaibiennale.com

Warm regards,

Robert Steven
General Secretary



Secretarial Address : Museum Benteng Vredeburg Jl. Malioboro, Yogyakarta – Indonesia
Correspondence Address : Jl. Batu Tulis 8 No. 27-A, Jakarta 10120 – Indonesia
Tel. +62-21-34833358, 34833359 Fax. +62-21-3459486 Email : info@bonsaibiennale.com
www.internationalbonsaibiennale.com



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FOLIAR FEEDING

Foliar feeding for bonsai growers
– facts and fallacies

by

Kevin Kelly, member of

Cape Bonsai Kai

“Any success by bonsaists using foliar feeding
can be directly attributed to the mixture running off

onto the soil, not through absorption through the leaves. The common practice of watering from above and dosing the foliage puts the nutrients into the soil, even though the bonsaist believes they are foliar feeding.

Based on every single professional horticulturist statements on the subject that I could find, as well as studies from major universities, there is no other logical conclusion other than foliar feeding is ineffective, a waste of time, a waste of resources, and all claims to its validity are false.

The truth is that foliar feeding offers no advantages at all to the bonsaist.” (Will Heath, Of Bonsai Magazine, 2008)

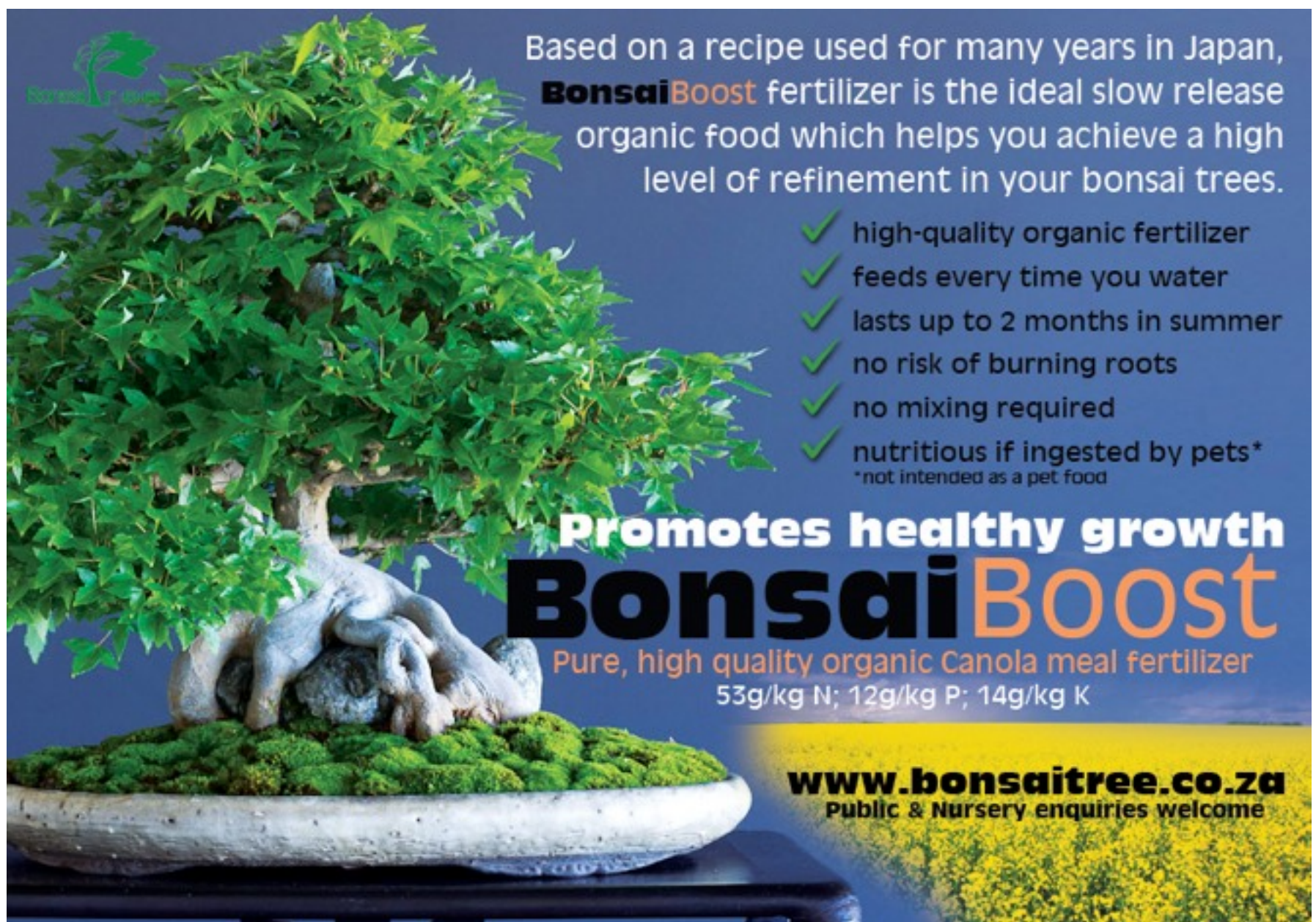
“I personally notice a huge difference in junipers. If I foliar feed tonight, I notice new growing tips by the end of the next day.” (Graham Potters)

Is foliar feeding necessary?

Leaves can absorb nutrients, although this is not necessarily a function derived from evolution; but likely a by-product of the design of leaves, which can be exploited as an opportunity by bonsai growers.

Similarly nasal sprays, suppositories, skin patches and drips can be highly efficient mechanisms for introducing needed substances into the human body for healing or nutrition.

What do we know about foliar feeding?



Based on a recipe used for many years in Japan, **BonsaiBoost** fertilizer is the ideal slow release organic food which helps you achieve a high level of refinement in your bonsai trees.

- ✓ high-quality organic fertilizer
- ✓ feeds every time you water
- ✓ lasts up to 2 months in summer
- ✓ no risk of burning roots
- ✓ no mixing required
- ✓ nutritious if ingested by pets*
*not intended as a pet food

Promotes healthy growth
BonsaiBoost
Pure, high quality organic Canola meal fertilizer
53g/kg N; 12g/kg P; 14g/kg K

www.bonsaitree.co.za
Public & Nursery enquiries welcome

Well-established plants are able to absorb essential elements as well as water through their leaves, and the mechanisms for this are largely understood.

It was scientifically proven in the 1950s that plants can absorb certain nutrients through their leaves; through studies of absorption and transportation of radioactive phosphorous and potassium applied to leaves.

Well-established plants are able to absorb essential elements as well as water through their leaves, and the mechanisms for this are largely understood.

An interesting fact that arose from this research is that leaf absorbed plant nutrients may travel at 30cm/hr. to all parts of the plant

State of knowledge about Foliar Feeding applications

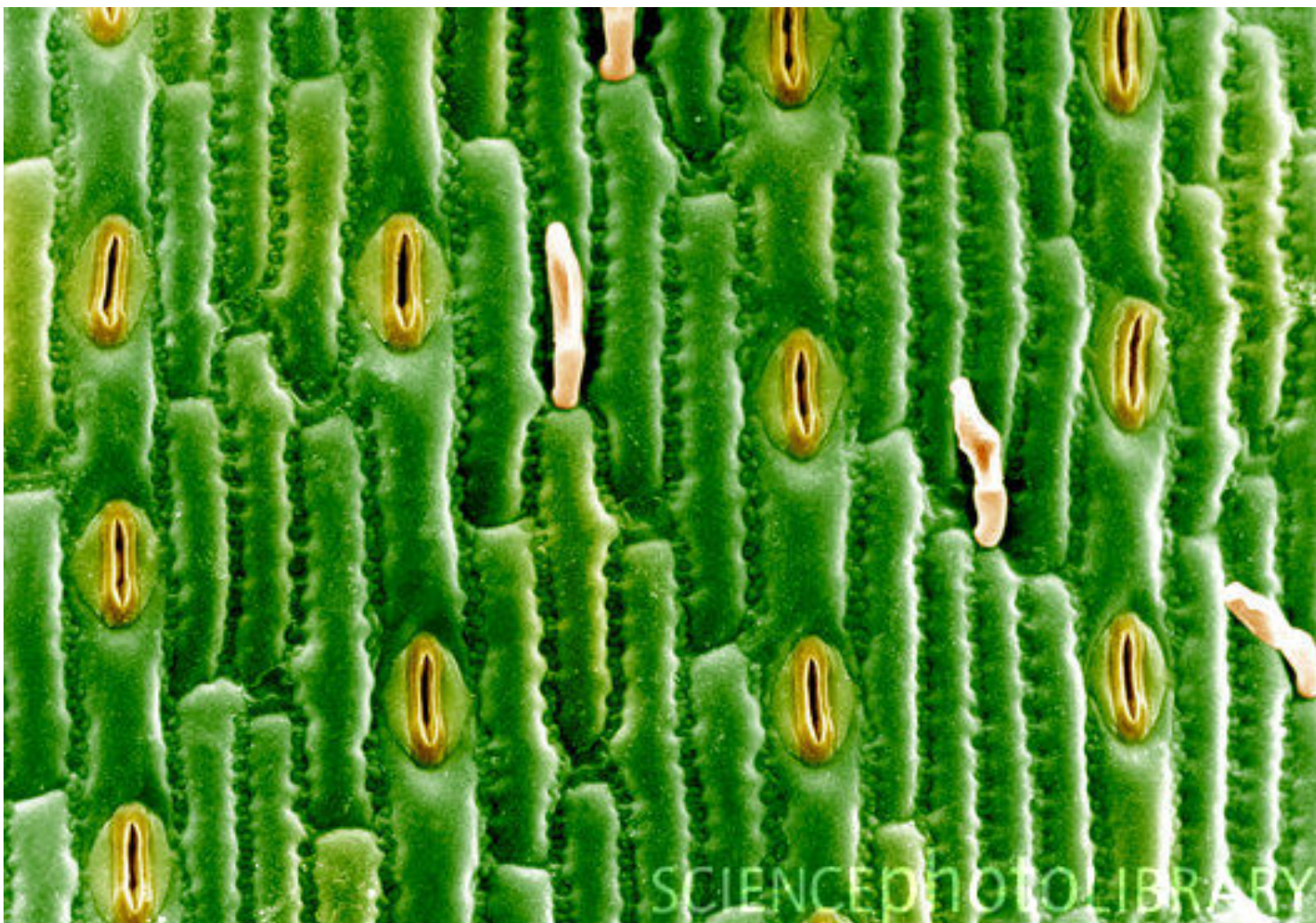
One has to have good understanding of agricultural applications. Marketing of gardening products contains much incorrect or misleading information whereas bonsai literature is thin on use foliar feeding for particular purposes.

Value and best practice likely differs according to species, age and size of tree, how recently the plant was repotted, root health and mycorrhizal culture.

Plant nutrition basics

For plant cell growth there is need for need for photosynthate (products of photosynthesis of leaves, mainly sucrose). Through photosynthesis plants feed themselves. But they need more than the products of photosynthesis for vegetative growth, reproduction, conduction, etc.

Primary nutrients of nitrogen, phosphorous and potassium are basic elements needed for photosynthesis and the plant must obtain these externally. But there is also a need for a range of other nutrients for photosynthesis, conduction, cell growth and cell differentiation.



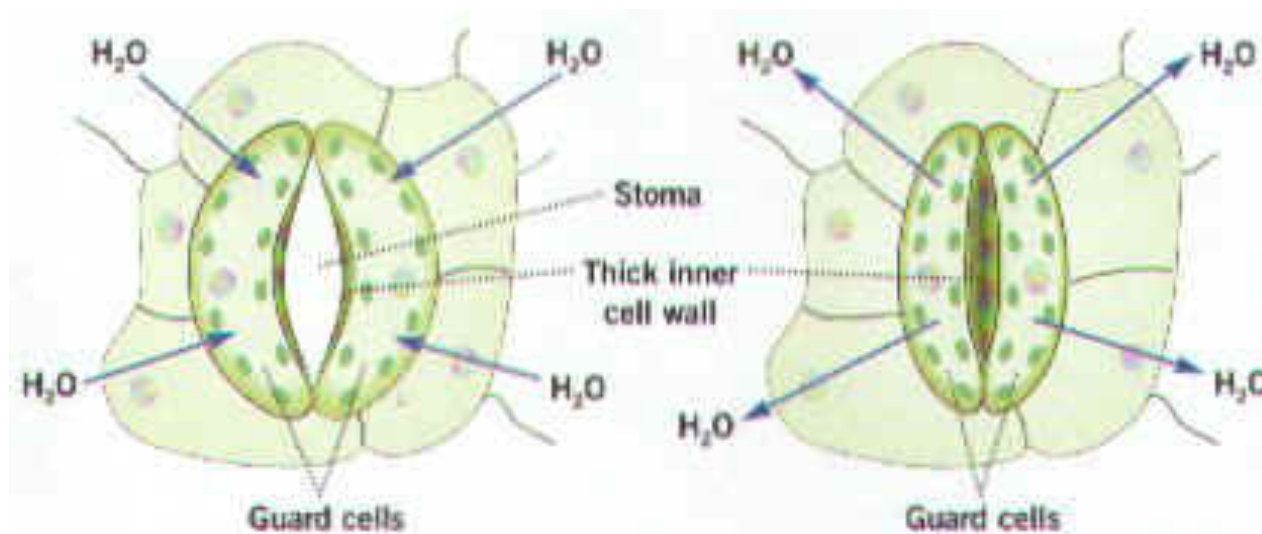
Most important among these are calcium, magnesium, and sulphur; followed by zinc, iron, manganese, copper, boron, chloride and up to 50 others. These ingredients need to be absorbed by the plant transported to where they are needed.

Does foliar absorption of nutrients have any value in all of this?

Physiology of foliar feeding

Absorption takes

place through the stomata of the leaves and also through the epidermis. The main function of stomata is to control movement



of gases making carbon dioxide available for photosynthesis, and controlling the loss of water from the leaf through evapotranspiration.

Conditions controlling stomatal opening are not completely understood and certain substances may cause closing. The stomata of most species open in daylight and close in the dark (differs in arid environment plants).

Movement of elements is usually faster through the stomata, but the total absorption may be as great through the intercellular spaces of epidermis. Liebig's law of the minimum: the nutrient in least supply to meet a plant's requirements is the one that limits growth.

Increasing the amount of plentiful nutrients does not increase plant growth. Only by increasing the amount of the limiting nutrient (the one most scarce in relation to need) increases growth.

Where scientific knowledge is thin

Value of Foliar Feeding for different stages of vegetative (stages of growth of the tree from germination to senescence), reproductive growth (flowering, seeding)

Limitations and problems with Foliar Feeding

Roots are much more efficient than leaves at absorbing essential nutrients of nitrogen, phosphorus and potassium. Material applied to the leaf does not travel through the entire plant as effectively as through root uptake.

It is not good to root feed where watering is patchy and drying out common; causes reduction in biomass and increase in proportion of material dedicated to reproduction as well as aphid weight and growth.

Foliar spraying is only a temporary solution to the larger problem of soil nutrient availability. Minerals (especially micronutrients) applied in amounts that exceed a plant's needs can injure or kill the plant.

The general advantages of Foliar Feeding

- ¥ Leaf surface absorption has a faster effect than root uptake to address mineral deficiency.
- ¥ Leaching, chemical reactions, microbial activity, root damage, repotting can limit root uptake of essential nutrients for root cell growth and this can benefit from foliar feeding. Foliar feeding is especially useful for introducing trace elements, or for 'emergency' feeding of plants which are found to have a specific shortage.
- ¥ Rapid response – good evidence of this.
- ¥ Trace elements are considered most fit for delivery by foliar feeding.
- ¥ Advantages for effective redistribution of nutrient in the upper reaches of trees.
- ¥ When roots are damaged by repotting or collection from wild, root growth and branch/leaf survival can be supported by foliar feeding thus aiding recovery.
- ¥ To prevent bract edge burn in some species, through calcium supplementation to the leaf as cells develop; especially when roots are inactive or damaged.
- ¥ To solve 'internal stress' problems such as occurs during bud formation, and maturation, or in flowering and fruiting which have a high demand for certain nutrients.

¥ May be valuable in bonsai culture where mycorrhizal development at root/soil interface is poor (especially when using artificial growing mediums which may be low in clay and or organic content)

It can be better for some species

¥ Not clear about conifers and related trees (neither dicot or monocot)

¥ Thick cuticle and succulent plants protect against water loss and likely also prevent nutrient exchange through leaves

When to foliar feed

¥ Best in morning or evening, since stomata tend to close during the day (varies by species)

¥ Avoid when leaves are dried out, as their stomata will more likely be closed

¥ Overcast or cool days

¥ Likely depends on species but believed that the relative advantage of foliar feeding is better in autumn, when root growth is weaker

¥ Generally more effective on young leaves

How to foliar feed

¥ Fine spray to completely wet leaves, and stop prior to dripping

¥ Late afternoon (not night) or early morning

¥ Both top and underside of leaves (particularly in dicots, as have higher concentration of stomata on underside of leaves)

¥ Lower pH water promotes better Foliar Feed uptake

Use of additives

¥ Additives are often already in formulated Foliar Feed products, and home-made concoctions may benefit from such additions.

¥ Additives to help the uptake of foliar products.

¥ Stickers – To enable the product to hold on the leaf during rainfall. Some use raw linseed oil as a sticker.

¥ Wetting agents – To enable the product to spread over the leaf area more efficiently.

¥ Absorption aids – For more efficient leaf uptake.

¥ Suspending agents – For consistent distribution of elemental particles.

A prospects arising from the facts - not proven or unproven

Focused feeding to a specific leaf pad may encourage localised leaf and branch development in that area. This may be a way of strengthening areas where there may be risk of die-back or which you want to outgrow competing areas.

Other fact vs. fiction topics

Although all proven as good for specific purposes, the following are other topics in bonsai culture that are worthy of review

¥ Wound sealant/dressing

¥ Rooting hormone (good for cuttings and promoting rooting from stems but harmful to established roots?)

¥ Vitamin B1 (thiamine) to prevent repotting shock

¥ Leafburn from watering in strong sun

¥ Prospects for bark feeding given some scientific evidence that plants may absorb substances through young bark, and may benefit of applications of nutrient rich applications to the bark

A useful reference

¥ Kozlowski, T. Growth and development of trees – Volume 2: Cambial growth, root growth, and reproductive growth.

¥ Available on internet for browsing but not downloading.



7

DIRECTORY

ALL bonsai clubs, nurseries and vendors are welcome.

Please send your updated contact details to:

info@bonsaisouthafrica.co.za to be listed in the Free Directory.

WESTERN PROVINCE

CLUB	TOWN/ SUBURB	CONTACT PERSON	PHONE NUMBER	EMAIL
Bishopsford Bonsai Nursery	Houtbay	Gail & Lionel Theron	021 790 3478	bford@cybersmart.co.za
Blaauwberg Bonsai Kai	Tableview	Dawn Collier	076 529 7848	mrjade@mweb.co.za
Boland Bonsai Kai	Stellenbosch	Coenie Brand	082 804 9195	cjjbrand@snowisp.com
Bonsai and Brass	Sedgefield	Mark	082 822 0222	markdvdm@gmail.com
Bonsai Society of South Africa	Goodwood	Ben van Heerden	082 870 6212	pekebonsai@vodamail.co.za
Bonsai Boyz	Starke Ayres Garden Centre Rosebank	Judi	083 493 9695	judi@diybonsai.com
Bonsai Tree	Somerset West	Terry Erasmus	082 890 7927	info@bonsaitree.co.za
Cape Bonsai Kai	Newlands	Tony Bent	083 230 5348	tony@nanoson.com
Ceres Bonsai Nursery	Ceres	Francois Loots	083 630 6290	francoislootsceres@gmail.com
Helderberg Bonsai Kai	Gordon's Bay	Ras Smal	084 655 0718	info@bonsaigarden.co.za
Katrivier Kai	George	Tobie Kleynhans	083 635 1447	toblen@mweb.co.za
Olive Grove Bonsai Nursery	Kraaifontein	Rudi Adam	021 987 4040	rabonsai@telkomsa.net
Overberg Bonsai Kai	Hermanus	Wynand Vermeulen	071 363 2169	wynandwurms@gmail.com
Oyama Bonsai Kai	Plumstead	Viky Peterman	082 493 1818	hsabc@iafrica.com
Pygmy Bonsai Nursery	George	Andre Krige	083 471 5415	pygmy.bonsai@gmail.com
Potter's Yard	Houtbay	Phil Levitt	021 790 0559	phil@pottersyard.co.za
Stone Lantern Bonsai Nursery	Durbanville	Steven le Roux	083 375 0446	stonelantern@hotmail.com
Tygerberg Bonsai Kai	Stellenbosch	Ben van Heerden	082 879 6212	pekebonsai@vodamail.co.za

LIMPOPO

CLUB	TOWN/ SUBURB	CONTACT PERSON	PHONE NUMBER	EMAIL
El Shaddai Kwekery	Phalaborwa	Willie Viljoen	082 923 8195	whv@lantic.co.za
Sikani Bonsai Nursery	Phalaborwa	George Vrey	082 325 3767	georgev@lantic.co.za
Tzaneen Bonsai Club	Tzaneen	Hennie Smit	083 259 2806	midas@inx.co.za
Waterberg Bonsaiklub	Bela-Bela	Ian Pringle	083 468 3578	pikkian@iafrica.com

GAUTENG

CLUB	TOWN/ SUBURB	CONTACT PERSON	PHONE NUMBER	EMAIL
Africa's Little Trees	Pretoria	Attie Louw	082 324 8779	ferox@mtnloaded.co.za
Bonsai Huisie	Krugersdorp	Andries Strauss	083 393 0188	info@bonsai.co.za
Brandmuller Kwekery	Vereeniging		016 428 3351	
Brenthurst Gardens	Houghton	By appointment only	011 646 1529	thegarden@brenthurstgardens.co.za
East Rand Bonsai Kai	Boksburg	Rudi Buys	084 575 8141	erbk@telkomsa.net
Eastern Bonsai Society	Highlands North	Hansie Bekker	082 820 4306	hansieb@lantic.co.za
Far West Bonsai Kai	Randfontein	Kathy Steyn	083 710 4243	pennantpress@y.co.za
JoDa Bonsai Nursery	Brandmuller Nursery	John & Frieda Haw	011 734 2765	joda0@absamail.co.za
Lieberman Pottery	Johannesburg	Adrian Lieberman	011 482 2215	
Magic Garden Center	Vereeniging		016 482 1116	info@magicgardens.co.za
Midway Bonsai Society	Midrand	Hennie Reynecke	082 4141171	hennie.ero@kingsley.co.za
Mikibu Bonsai	Randjiesfontein	Jonathan Cain	083 698 9069	jonathan@bonsaisa.co.za
Pretoria Bonsai Kai	Pretoria	Org Exley	082 809 2037	org@ntp.co.za
Sawasdee Bonsai Empire	Lonehill	Bill	083 307 1885	billruth@telkomsa.net
Serenity Scapes	Pretoria	Anthony Smith	083 437 1707	info@serenityscapes.co.za
Shibui Bonsai Kai	Emmerentia	Derry Ralph	011 788 6104	bonsaikebana@mweb.co.za
Southern Bonsai Society	Alberton	Jack Brophy	083 461 0776	sbonsais@gmail.com
Topson Nursery	Witkoppen	John & Frieda Haw	011 023 7733	topsomnursery@gmail.com
Vaal Bonsai Kai	Vereeniging	Deon Rynders	083 414 6472	orthorite@webhome.co.za

NORTH WEST PROVINCE

CLUB	TOWN/ SUBURB	CONTACT PERSON	PHONE NUMBER	EMAIL
Klerksdorp Bonsai Kai	Klerksdorp	Pieter Loubser	082 564 4878	mploubser@gmail.com
Rustenburg Bonsai Kai	Rustenburg	Koos Robbertse	083 273 2968	smarais@angloplat.com
Serenity Bonsai & Plant Park	Brits	Mason/Johan	072 713 7794/073 393 2574	johanandcelia@gmail.com

EASTERN PROVINCE

CLUB	TOWN/ SUBURB	CONTACT PERSON	PHONE NUMBER	EMAIL
Border Bonsai Society	Gonubie	John Jansen	083 448 3417	john.jansen@bipa.co.za
Eastern Province Bonsai Kai	Port Elizabeth	Robert de Witt	083 699 4570	robertdewitt@telkomsa.net
Fuji Bonsai	Port Elizabeth	Greg Blandford	082 417 1455	fujibonsai72@gmail.com
Red Leave Nursery	Port Alfred	Amir Paulse	082 786 6477	kowiebonsai@gmail.com

MPUMALANGA

CLUB	TOWN/ SUBURB	CONTACT PERSON	PHONE NUMBER	EMAIL
Moyogi Bonsai Kai	Witbank	Gustav Lubcker	076 443 8239	gustavinsimbi@gmail.com
Nelspruit Bonsai Kai	Nelspruit	Eddie Jenner	083 324 6671	earthmatters@mweb.co.za
Plasgrow Plant Nursery Suppliers	White River		013 751 2076	sales@plasgrow.co.za

NORTHERN CAPE

CLUB	TOWN/ SUBURB	CONTACT PERSON	PHONE NUMBER	EMAIL
Kalahari Bonsai Kai	Upington	Jandre Brink	083 388 8476	kalaharibonsai@gmail.com

FREE STATE

CLUB	TOWN/ SUBURB	CONTACT PERSON	PHONE NUMBER	EMAIL
Bloemfontein Bonsai Kai	Bloemfontein	Vian Herbst	083 458 7183	vian@fxsos.co.za
Platberg Bonsai Kai	Harrismith	Mariaan Pienaar	083 454 9174	batsch@dorea.co.za
Die Towerpot	Harrismith	Magda	058 622 3373	

KWAZULU NATAL

CLUB	TOWN/ SUBURB	CONTACT PERSON	PHONE NUMBER	EMAIL
Bonsai Boyz	Pinetown	Ed/Carol	082 771 5395	info@bonsaiboyz.co.za
Durban Bonsai Society	Durban	Farouk Patel	082 678 6573	farouk@faron.co.za
Kengai Bonsai Kai	Assegay	Lynn Theodoro	083 254 1022	mistymoonbonsai@gmail.com
Pietermaritzburg Bonsai Society	Pietermaritzburg	Jurgen Nuss	083 745 6078	nuss@telkomsa.net
Roots for Africa	Everton	Doug	082 412 1771	
The Castle Indigenous Bonsai	Hillcrest	Farry/Alan	082 801 8860	indigbonsai@mweb.co.za
Zululand Bonsai Society	Richards Bay	Barry Stofberg	083 324 9392	info@zululandbonsai.co.za

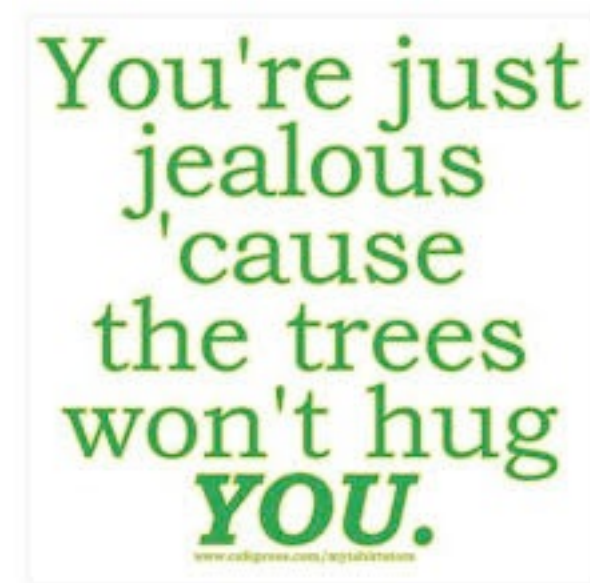


Bonsai Wholesalers

22 Lombard St, Pinetown, KwaZulu Natal
Contact Ed on Cell: 083 331 5510

Suppliers of Wholesale Bonsai Pots, Tools, Wire, Figurines and accessories to Bonsai Clubs and the Trade, for more information check out our web site or email us

Web Site: www.bonsaiwholesalers.co.za
 Email: ed@bonsaiwholesalers.co.za



If a tree falls in the forest and it isn't posted on Facebook, did it really happen?

More pics on www.LeFunny.net



8

BONSAI CALENDAR

This is your handy guide to most important bonsai happenings in South Africa. If you want your event to be included, please send your bonsai activities info@bonsaisouthafrica.co.za.

Bonsai in South Africa is not affiliated to any organisation and any person or instance is welcome to post and list their activities.

(Photograph: Gary Howes)

Date	Club	Address	Occassion
8 February	Pretoria Bonsai Kai	Pretoria	Beginners Course
1 March	Pretoria Bonsai Kai	Pretoria	AGM
8 March	Eastern Province Bonsai Society	Port Elizabeth	AGM
29 March	Bishopsford Bonsai Nursery	Houtbay	Create Your Own Bonsai Courses
29 March	BRAT	Kierieklapper Bonsai Kai	Meeting
30 March	Bishopsford Bonsai Nursery	Houtbay	Rare or unusual plant sale
12 April	Bishopsford Bonsai Nursery	Houtbay	Buddleja Progression Workshop
26 April	Bishopsford Bonsai Nursery	Houtbay	Create Your Own Bonsai Courses
3 May	Pretoria Bonsai Kai	Pretoria	New Talent Competition
17 May	Pretoria Bonsai Kai	Pretoria	Beginners Course
31 May	Bishopsford Bonsai Nursery	Houtbay	Create Your Own Bonsai Courses
31 May	BRAT	Far West Bonsai Kai	AGM
14 June	Bishopsford Bonsai Nursery	Houtbay	Buddleja Progression Workshop
12 July	Pretoria Bonsai Kai	Pretoria	Beginners Course
28 June	Bishopsford Bonsai Nursery	Houtbay	Azalea Progression Workshop
19 - 20th July	Oyama Bonsai Kai	Cape Town	Winter Bash
9 August	Bishopsford Bonsai Nursery	Houtbay	Buddleja Progression Workshop
30 August	Bishopsford Bonsai Nursery	Houtbay	Forest Workshop
30 August	BRAT	East Rand Bonsai Society	Top Ten
13 September	Bishopsford Bonsai Nursery	Houtbay	Azalea Progression Workshop
20 September	Pretoria Bonsai Kai	Pretoria	Beginners Course
20 - 21 September	Shibui Bonsai Kai	Florem	Annual Exhibition
24 - 29 September	Katriver Bonsai Kai	George	SABA Mini Convention
27 September	Bishopsford Bonsai Nursery	Houtbay	Create Your Own Bonsai Courses
18 October	Bishopsford Bonsai Nursery	Houtbay	Raft/Clump style Workshop
18 - 19 October	Eastern Province Bonsai Society	Open Day	Annual Show
25 October	Bishopsford Bonsai Nursery	Houtbay	Create Your Own Bonsai Courses
8 November	Bishopsford Bonsai Nursery	Houtbay	Buddleja Progression Workshop
15 November	Pretoria Bonsai Kai	Pretoria	Beginners Course
29 November	BRAT	Eastern Bonsai Society	
24 January 2015	Bishopsford Bonsai Nursery	Houtbay	Azalea Progression Workshop
27 June 2015	Bishopsford Bonsai Nursery	Houtbay	Azalea Progression Workshop



9 KOI - WHAT TO DO WHEN THEY GET SICK

It is going to happen sooner or later. Koi are living animals and all living things get sick occasionally. It is part of life.

When it comes to Koi you need to consider firstly why your Koi is sick. Is it a once off, or is it because there is something wrong elsewhere in your system?

The answer to this is easy. If it is just one fish that is ill, the chances are it is a natural occurrence. If

there is more than one sick fish, the chances are that you are at fault because there is something wrong. If this is the case you cannot fail to react fast enough. Speed is your greatest weapon. Use it.

In the event you have one isolated sick Koi in your pond the chances are very good it is not contagious. These include maladies that hit individual fish - genetic time bombs like heart attacks, strokes, degenerative diseases and the like. They are normally as fatal to Koi as they would be to us, and in most cases the sad truth is that there is little you can do about it.



It may be heart breaking but this is part of the hobby. If it happens to your most expensive fish it can also hurt your pocket considerably but this is also part of the hobby. An expensive fish doesn't mean it comes imbued with a greater health guarantee. Quite often the reverse may in fact be true.

Koi medicine is fairly primitive and expensive. Certain surgical procedures can be carried out, but as you might imagine, there are few Koi surgeons or vets out there suitably qualified to carry out these procedures and the likelihood of recovery is often small.

In the event that a Koi gets sick it is important to understand the following:

1. A Koi's immune system is its best defense. Optimise this and your chances of success increase enormously.

2. A Koi's immune system is intimately linked to three things:

1. Temperature. A Koi functions optimally between 22 and 26 C.

2. Water quality. This must be perfect to optimise a Koi's immune system. pH between 7 and 8. Zero ammonia, zero nitrites and nitrates below 25.

3. Stress. Probably the most overlooked factor. Chasing your Koi around and netting three times a day, anaesthetising and handling the fish, injecting willy nilly - all these add tremendous stress to a Koi and will compromise its immune system faster and more deeply than anything else.

We believe many Koi are lost due to being killed by kindness more than by bad intentions.

Do not however assume that if a Koi is sick that the way to go is to leave it to its own devices. Quite often by the time a problem is picked up it may well be that the only chance a Koi has is for extreme treatments involving some handling. It happens to even experienced hobbyists that sometimes a Koi is overlooked. Don't beat yourself up about it - Koi are quite tough if kept in good warm water and the chances are good you will be able to effect a full recovery.

It does mean that a hospital tank (which can double up as a quarantine tank for new arrivals) is a really useful thing to have on hand under these circumstances. They are easy to set up and it enables you to remove the potential problem and the Koi patient from your Koi pond immediately. Such porta ponds are worth their weight in gold.

<http://www.happykoi.co.za/home.htm>

happy koi



10 THE LAST WORD

I hope you find the new lay-out interesting, to say the least. It has been a long time coming. The “old” lay-out was so 2013. Haha.

Thank you so much for all the support and emails of encouragement. The members list is growing and growing - just like our trees. Each and every message is read, just not always responded to.

Please feel free to write an article or just send your photographs. Any contribution is appreciated. Please send your news and views to info@bonsaisouthafrica.co.za.

The “Funny Photo” Competition was not such a great success, maybe we will shelve that till later stage. We will run more competitions in future. Come up with some ideas!

We hope you enjoy this issue, the last one before very little happens in the world of bonsai in South Africa.