HIBISCUS INTERNATIONAL

CANINE STYLE UNLEASHED

Pages 1 - 3
Tatyana Sokolova

IS IT ALBO OR DAINTY PINK?

Pages 10

MYCORRHIZAL FUNGI EXPLAINED

Page 9

MAKE A HIBISCUS CLOCK!

Page 21

CELEBRATION OF BEAUTY
Members Photos

Pages 15 - 20

PROPAGATING FROM SEED
By Todd Alvis

Pages 11 - 14

and more!
Tatyana lives in Odessa, Ukraine, a beautiful and historic city sometimes called the 'pearl of the Black Sea'. The climate here is hot and humid in the summer and the winters are dry and cold. They are, however, relatively mild compared to the rest of Ukraine and temperatures rarely fall below -10°C (14°F). There are a number of public parks and gardens in Odessa and the city also has a university botanical garden. Tatyana has been growing Hibiscus for ten years.

We have featured lots of photos of Tatyana's wonderful Hibiscus collection in the past, but this time we have been captivated by her gorgeous dog. Ali is a 13-year-old Rhodesian Ridgeback who is certainly one of the Hibiscus world's most stylish models. And he just loves the attention!
Whenever Tatyana picks a flower and gets her camera out, Ali knows what is expected of him and poses like a pro. You can see more photos of Ali by clicking on this link.
QUESTION 1:
I have a few seedlings I started April 22 of last year. I’m ready to transplant them into a bigger pot but I’m not sure what size pot to put them in. I would like to put 3 to 6 in one pot. Any input would be appreciated.

Jeffrey Robinson

ANSWER:
The rule for repotting is to only pot up one size larger each time you repot. The reason for this is that if you overpot, the roots always grow to the outermost dimensions of the pot, essentially wasting the soil in between. Potting in only slightly larger pots each time creates close "layers" of roots, with each repotting making full use of the soil provided. Once you have reached the full size of pot you want to stop at, you begin trimming off root layers each time instead of repotting.

Arthur Schick
Cape Canaveral, FL USA

QUESTION 2 (for Dick Johnson):
Have ever grafted hibiscus and, if you have, what was your most successful method?

Jeffrey Robinson

ANSWER:
Yes, I graft a lot. As to the method, it depends upon the size of the wood and scion. I usually use an end graft on the side where the root stock is cut about the width of the scion (on the right side in the photo). With that method, most scions will work. Sometime I use the end “V” graft (left side in the photo). If you Google grafting hibiscus you will find a lot of different methods. My success rate varies and is best in our warm season. I get anywhere from 0 to 100% of a given group of grafts, but I think the average is only something around 60% or 70%. Actually, my most common graft is a modification of the end graft on the right, where I cut one side of the scion very long and the other very shallow. The idea for me is that I can increase the surface area of the inner side of the scion to a maximum for best contact.

Dick Johnson
HIBISCUS INTERNATIONAL
On the 30th December, hybridizer Ursula Lengdobler who lives in Germany announced that she had harvested 44 seeds of a very unusual cross.. Hibiscus cooperii x Hibiscus amottianus.

Expert Dr. Lex Thompson commented: "It will be most interested to see the progeny. This cross was undertaken in the early Hawaiian breeding program (reported in 1913 Bulletin) and produced two of the very best garden hibiscus ever - Dawn and Apple Blossom. Both Dawn and Apple Blossom incredibly tough and resilient. Apple Blossom will get covered in flowers all summer, even through long droughts with no watering ... exceptional."

Below: H. amottianus, the father, which is a native of Hawaii. There are now many sub-species of H. amottianus.

Above: H. cooperii, the mother.
NB cooperii, with its unusual variegated leaves, is an example of a hybrid that came from early European hybridizing.

HIBISCUS INTERNATIONAL
Expert Dr. Lex Thompson commented: "It will be most interested to see the progeny. This cross was undertaken in the early Hawaiian breeding program (reported in 1913 Bulletin) and produced two of the very best garden hibiscus ever - Dawn and Apple Blossom. Both Dawn and Apple Blossom are incredibly tough and resilient. Apple Blossom will get covered in flowers all summer, even through long droughts with no watering ... exceptional."

Dr. Thompson went on to show the three photos below "of some selfed seedlings of variegated cooperi...lots of variation in pigmentation, including one which shows no red pigment (anthocyanins). The original H. cooperi is probably the white petalled form, as well described by George Rumphius in Herbarium Amboinense in 1743 (along with two forms of H. rosa-sinensis).

Right: This one has very dark pigmentation with variegated flower bud.

Above: Note the absence of red pigment in this seedling.

All photos on this page ©Dr Lex Thompson.
SENDING CUTTINGS ('WOOD')
Making sure they arrive in the best condition
Curt Sinclair

Hard wood works well for grafting while hard green wood is for rooting.

Seal the open ends with wax or pruning tar, dip them in a mild bleach solution, wrap them in wet (bleach solution) paper towels and place in a plastic bag. Wring out the paper towels so they are just wet.

Leaves: If they will arrive at their destination within 5 days, leave them on to help support the wood. You can also cut the leaves back by 2/3s if you like. Definitely cut them back it the trip is likely to take more then 5 days.

Through the whole process keep thinking bleach (hands, bags, etc.) so that the whole kit is sterile and should not rot en route. If you can, use a white shipping container if the weather is hot to help keep the cuttings cool. Good luck!

Curt Sinclair
Exotic Hibiscus and Butterfly Farm
www.exotichibiscus.com

Pusha Suresh commented: 'Try to send the healthiest cuttings/wood!'

POTTING MIX - A WARNING!
Handle with care!

In December 2018 77-year-old New Zealander, Myles McIntyre, a keen gardener, died from complications of Legionnaires' disease about six weeks after falling ill. It was reported in the press that he had contracted the disease from a bag of potting mix.

According to friends and family, as an experienced gardener he was well aware of the recommended safety measures when handling the stuff. He would split the bags open, wet them down well with the hose and leave them exposed to the air for a while before using. He always wore gardening gloves .. but no mask.

Bacteria can easily grow in potting mix and Legionella is one species that enjoys the warm, moist conditions inside the bags. Inhaling the spores can cause Legionnaires' disease, a potentially fatal form of pneumonia that can be more easily contracted by older people, particularly if they have existing health problems or poor immunity.

The best precautions are to open potting mix carefully, wear gloves and a mask, dampen down the product, use in a well-ventilated area and wash hands thoroughly.
HIBISCUS KOKI'O ULA' ULA'
Hawaiian species - members' photographs

Above: Hibiscus Kokio, one of the four unique species of Hawaiian reds. Posted by Justin O'Bryan.

Left: Hibiscus saintjohnianus. Posted by Jeremy Corvin.

NB - Hawaiians refer to all of these as Hibiscus Koki'o Ula' Ula'

An article by Jill Coryell about the unique native Hawaiian Hibiscus species can be found in issue 70 of 'Hibiscus International' which you can access by clicking here.
Mycorrhizal Fungi
They do everything plant roots do, but better
Wendy Williams

Mycorrhizas are beneficial fungi which form an association with plant roots and effectively extend the root area. They are important to most wild plants, but less so in gardens where the use of fertilisers can both disrupt and replace them.

The strands of the fungi act as an extension of the plant’s root system which means that the plant is able to reach more nutrients.

Plants are able to photosynthesize with their above-ground leaves, but fungi can't, so the plant feeds sugar to the fungi, and the fungi transfer nutrients and moisture to the plant, making both organisms working as a team healthier than they would be separately. Interestingly, mycorrhizas also seem to offer protection against diseases of the roots.

**There are two main categories of mycorrhizas:**

Ectomycorrhiza are those that live on the outside of the roots and which form a thick mass around the fine feeder roots.

Endomycorrhiza live inside the plant between the living cells. These are found mainly in association with herbaceous plants.

**HOW TO USE MYCORRHIZAL FUNGI:**

When planting, rub the powder on the root ball or throw a pinch into the planting hole. The fungi need to be in contact with the roots in order to work. There are also now soluble versions which you can water in. Mycorrhizae germinate in the presence of root exudates and this is the key to successful inoculation.

While plants can be treated at any time during their life cycle, it is best to inoculate them with mycorrhiza as early as possible in a plant’s life cycle.

It is worth bearing in mind that certain fungicides will kill these beneficial fungi.

Mycorrhizae remain in a symbiotic relationship with the plant throughout its life. If, however, a treated plant goes through a bare-root phase, it will need to be re-treated before being re-planted.

Your plant will not associate with more mycorrhizae than it needs, so more is not necessarily better. Having said that, there have been no adverse effects of over-inoculation documented.

Two Hibiscus plants. Left plant without and right plant treated with mycorrhiza.

Photo ©University of Hawai‘i at Manoa Botany Department

What is Mycorrhizal Fungi?

Watch a short video by clicking here

Over 80% of plants live in a symbiotic relationship with a remarkable organism called mycorrhizal fungi.
'Albo Lacinatus' is thought to be one of the very earliest of the hibiscus hybrids. Some speculate that it could have been a filial first or second generation cross between the Hawaiian species 'H. amotianus' and the Malagasy species 'H. schizopetalus.' Whatever the cross, it is likely to have been hybridized no later than the late 1700's or early 1800's.

'Albo Lacinatus' remains today one of the fastest growing, tallest, and most vigorous of all tropical hibiscus species and cultivars. It makes a beautiful, blooming wall, hedge, or screen, growing up to 20 feet tall in about 5 years. Its pink flowers are the first to bloom in the spring and the last to stop blooming in the winter. Because of its vigorous root system, it is also a favorite hibiscus to use as rootstock for grafting.

'Dainty Pink' (and its sport 'Dainty White') were either collected or hybridized in the early 1950s by Florida growers NNorman Reasoner and L.K. Thompson who were known recipients of Hibiscus specimens sent back to the USA by Ross Gast in his journeys around the world in search of native Hibiscus species.

*(Information reproduced from the Hidden Valley Hibiscus website)*
I decided to rewrite a post I did a few years ago on seedling propagation. I still do it exactly the same way with one exception - I now plant the seed with the nicked side up. This was suggested to me by Richard Johnson and I tested it and had slightly better results.

1) I use Jiffy pods and I soak them in water until they swell up.

2) I open the top of each pod in readiness for the seed.

3) A nicked seed.

4) I soak the nicked seeds in a cup of water which is about 10% bleach. I swirl them around to make sure the water gets all over them (note that some will float).
5) I plant them about an 1/8" down remembering to plant them nicked side up!

6) Lightly cover them with soil - do not compress them. If I have a seed that does not look viable I will plant it off center in the pod with a good one so that if it makes it, it's a bonus but I'm not wasting a pod on a bad seed.

7) I mark each row so I know what they are.

8) The second batch of seeds.
9) I stand the trays on a heating pad set at 80°F (26.7°C). I have found this to be the most important thing. DO NOT LET THE TEMP GO ABOVE 85°F (29.4°C) or you will lose them during germination. Once they sprout they can handle it a bit better, but 70-80°F (21-26.7°C) is ideal.

10) I cover my trays to hold in the humidity.

11) This is the setup I have with grow lights, heating pad, thermostat, and shower curtains that I can open or close to adjust the heat.

12) They are now sprouting. If the seeds have been nicked, I find they will sprout in 3-10 days. If you don’t nick them then expect 7-45 days before you see anything!
13) They are now growing strongly and I had to replace the covers with a 7” humidity dome.

14) Some lovely healthy babies here!

15) And this was taken the day I moved them up to 4” pots. Good Luck but remember it’s like any other skill, the more you do it, the better you get at it.
A CELEBRATION OF BEAUTY

A selection of fabulous photos shared by members of the International Hibiscus Society

A IT'S A DOG'S LIFE

Moorea Nouveau Scenario (x2) (Moorea Anastasya x Moorea Tuanake) hybridized by Charles Atiu
Moorea Phoenix Reborn [unregistered] parentage unknown, hybridized by Charles Atiu
Jeanette Eliff (Al Schlueter x [Trademark x Orville Davis]), hybridized by Barry & Susan Schlueter

Photo of 'Ali' by Tatyana Sokolova
ELECTRIC PLUM
(Hypnotic x Neon Plum)
Hybridized by Sonny Stollings
Photo by Thomas Narolewski

CARIBBEAN RAGING BEE
[Not registered]
(Moorea Rainbow Day x Moorea For Ever)
Hybridized by Charles Atiu
Photo by Adil Demirboga

HIBISCUS INTERNATIONAL
FIFTH DIMENSION
(Lily Howard x Old Spot)
Hybridized by
Howard Gordon and Evelyn
Photo by Aneela Lee

TAIWAN SILVER ICE
[Not Registered]
Hybridized & photographed by Aneela Lee
LOVE STORY

(Rosalind x Candy Manners)
Hybridized by Charles Black
Photo by Edwin Portalatin Mercado

SALLY'S MYSTIC DRIFT SAND

[Unregistered]
(Parentage unknown)
Hybridized and photographed by Sally Chen
MOOREA DELPHINA
(Moorea Hui o Hana x Moorea Silver Storm)
Hybridized by Charles Atiu
Photo by Linda Lee
TEEN IDOL
(Unregistered)
(Parentage unknown)
Photo by Lee Ming

MOOREA BROWN PEARL STAR
(Unregistered)
(Parentage unknown)
Hybridized by Charles Atiu
Photo by Tatyana Sokolova
Pushpa Suresh posted this photo of her colourful clock (see left) which you can find on eBay if you search for ‘Hibiscus clock’. It got me thinking though .. why not make my own using one of my favourite photos?

Above: choose a clock mechanism on eBay. They come in a variety of sizes and colours, and are not expensive.

All you need is a photo, something circular to stick it on and some suitable glue (I like a PVA glue). There are lots of clock face stencils on Amazon, Etsy and eBay in all different styles and sizes (see below) as well as clock mechanisms. These arrive in bits and you have to slot them together and add a battery .. it’s very easy.

Above: dab the paint through the stencil with a brush or sponge, keeping the paint fairly dry so that it doesn't ooze under the stencil. Outline with a fine marker pen if necessary.
Welwitschias (also known as 'tree tumbo') are strange and unique and, surprisingly enough, belong to the cone-bearing conifer family. They are found only in the very specific climate along the coast of Namibia and Angola where coastal fog and desert meet.

To capture moisture from sea fog the plant has evolved specially adapted leaves. These become tattered and frayed as the years go by and the plant ends up looking rather 'octopus-like'. It also has very long tap roots that reach for water deep underground. They also anchor the plant as it is buffeted by desert winds. It is said by some to be able to live without a drop of rain for five years.

Its strange appearance caused the botanist, Friedrich Welwitsch, who discovered it in 1859, to 'do nothing but kneel down and gaze at it, half in fear lest a touch would prove it a figment of the imagination.

The most unusual feature of Welwitschia is that it produces only two true leaves which are the original leaves that it grew as a seedling. These two leaves just grow and grow and are never shed.

Over the life of the plant, which is thought to be 1,000 - 2,000 years in conditions of extreme drought, these odd leaves can grow to a length of 8 to 14 metres, before splitting and fraying into many strap-like segments.

There are both male and female plants and the cones produced by the female are edible.
Praying mantis by Rodrigo Joseph Bautista

ALL RIGHTS RESERVED
OFFICE BEARERS
President: Darren Eminian : Vice-President: Wendy Williams : Sec./Treasurer: Dick Johnson
BOARD MEMBERS
Eurasia (EU): Taner Turt : Petar Tiholov : Eurasia (Russia): Elena Tabuntsova
Indian Subcontinent: Pushpa Suresh : Oceania: Joseph Bautista
Africa: Waldi van Rensburg : Orient: Bi Yu Jin
N. America: Damon Veach : S. America: Elizabeth Jordan : Australia: Chris Noble
Wild Card Reps: Sue Lansdown : Doyle Williams
ICRAR: Kes Winwood
PRESIDENT EMERITUS: Richard Johnson  PAST PRESIDENT : Kes Winwood
Web Address - www.internationalhibiscussociety.org
E-mail Address - InternationalHibiscusSociety@yahoogroups.com
I.H.S. PATRON - DAVID FRANZMAN