



HIBISCUS INTERNATIONAL



Pages 1 - 3
AIR-LAYERING & GRAFTING
Peter Moll's experiments

Pages 4 - 5
FUNGUS GNATS & SHORE FLIES
Exterminate!



Page 14
STORING POLLEN
Denis Bojdic shares his secrets



Page 16
MY FIRST HIBISCUS!
Mohammad Sadegh Bagheri celebrates



Page 17 - 18
ROOTING
Wendy Williams describes using coir pellets

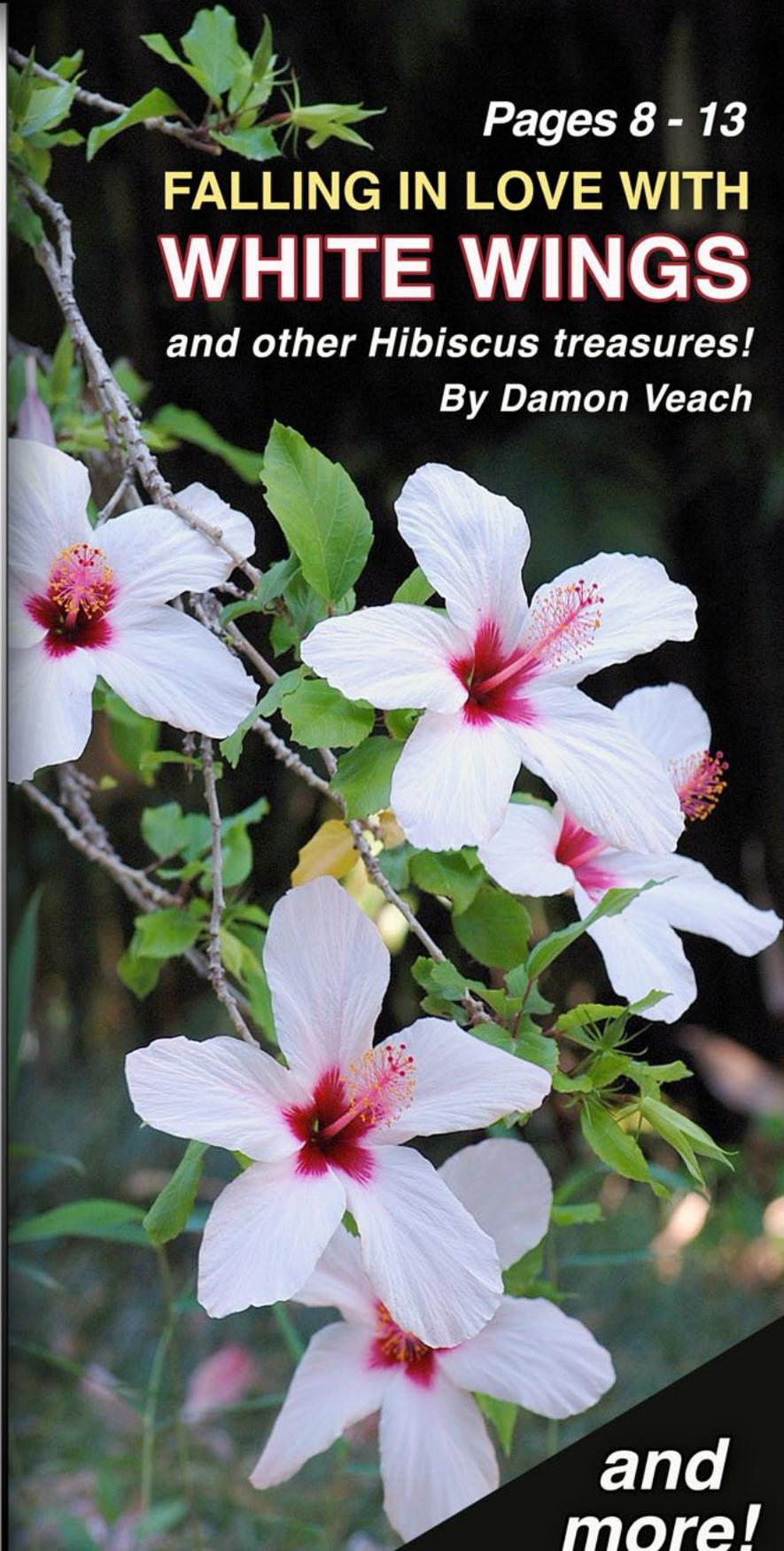


Pages 8 - 13

FALLING IN LOVE WITH WHITE WINGS

and other Hibiscus treasures!

By Damon Veach

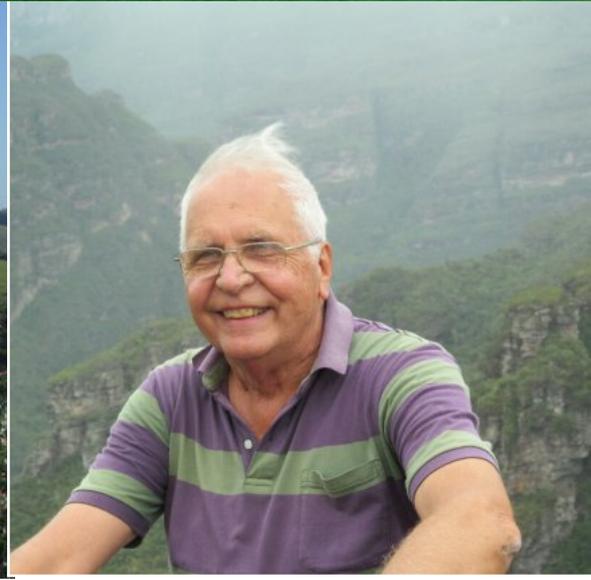


and more!

An Experiment with Air Layering and Grafting

By **PETER MOLL**

Jambeiro, Brazil



Originally from Switzerland, Peter Moll now lives in Jambeiro, Brazil, a municipality in the state of São Paulo. The elevation is 695 m. and the climate is classified as warm and temperate with a significant amount of rainfall during the year. The average annual temperature is 18.4 °C. Peter is Vice-President of the International Hibiscus Society.

Peter says: "This year for the first time, in March, which was the beginning of our cold season, I made "air-layering" of my rootstock. In July, four months later, I noticed the first roots in the moss, so I made the first grafts. I am most impressed by the fast and strong growth of them, especially as we are still in our winter."

AIR - LAYERING



1) The stem is girdled to induce root formation above the cut.



2) The girdled stem is covered with damp moss



3) Aluminium foil or plastic sheeting is wrapped around the moss and tied at both ends. This cover is removed after several months or when roots can be seen.

Illustration: Hortipedia



After four months the air-layered rootstock has produced roots, been cut, and is ready for grafting.



A scion has now been grafted onto the rootstock.



Planted in individual pots, the rootstocks are developing their new root systems. Each grafted scion has been covered with a plastic bag to prevent it drying out.

Peter Moll has 38 registered Hibiscus and these are just a few of his beauties.



PM AMRITAPURI
(Rum Runner x Lady Love)



PM IN THE MEMORY OF BOB CARRAN
(Scarlet Angel x Zauberflote [Not Registered])
x Great Gatsby



PM MIDNIGHT FANTASY
(PM Grayish N' Blue x Cherry Appaloosa)



PM MISS GOYAS
(Moorea Tanzanie X Tahitian Imperial Blossom
[Not Registered]) x Persian Rug



PM SHYAMALA'S BIRTHDAY
(White Diamonds x Persian Rug)



PM TROPICALIA
(Evelyn Howard x Grace Goo)



VISIT THE INTERNATIONAL HIBISCUS SOCIETY'S WEBSITE TO FIND 'HOW-TO' VIDEOS!



(Click on the 'web link' symbol for a direct link!)

PEST CONTROL

Fungus Gnats and Shore Flies

By WENDY WILLIAMS



Adult fungus gnat

ladybirdplantcare

Depending on where you are in the world, your precious house plants or greenhouse may attract the attentions of either fungus gnats (sciarid flies) or shore flies/brine flies (ephyridae). These tiny flying insects can reach plague proportions in ideal conditions.

The adult sciarid fly lives on and around moist compost, generally inside rather than outside. The adults themselves are simply a nuisance and most of the damage is actually caused by their young. The tiny, almost transparent larvae live in the compost and feed on the tender roots of plants and cuttings. They will even nibble on seeds, damaging them and preventing germination.



Fungus gnat larvae

UW-Madison Department of Entomology

Shore flies live in, or on, algal scum or very wet, decomposing organic matter and are common in greenhouses and outdoor areas where conditions are damp. They are commonly found buzzing around compost heaps. Their larvae do cause damage but they are not nearly such a threat as the sciarid fly larvae. Adults are thought to carry pathogens such as fusarium, a type of fungus.

All photos highly magnified.



Adult shore fly

© Ron Hemberger



Shore fly larvae

Valley City State University

Shore flies - all life stages can be found on or near algae so reduce moisture and puddles of water on floors, benches and greenhouse surfaces. The greenhouse floor should be level and drain properly to prevent the pooling of water. Allow the surface of the compost to dry out between waterings. Use disinfectant as part of any cleanup program for routine control of algae on greenhouse surfaces and walkways.

Fungus gnats - these present a greater problem and can breed all year round in the house and greenhouse. The female fly lays eggs in the surface of the potting compost which hatch within 4-6 days in warm conditions. The larvae feed on fungal growth and decaying plant material but can also damage the roots of seedlings or tunnel into the base of soft cuttings. After about two weeks the larvae pupate in the soil and in the summer months the whole life cycle can be completed in about a month.

NON-CHEMICAL CONTROL

Fungus gnats become a problem when they do damage to seedlings or cuttings - established plants are not generally at risk. They are usually more numerous in moist conditions so allowing the compost to dry can reduce infestations. Drying out must be done carefully because lack of water can stress the plant. If the adult flies are a nuisance, then place some yellow sticky traps nearby. These are widely available from garden centres.

Biological control is also an option. There are pathogenic nematodes (*Steinernema*

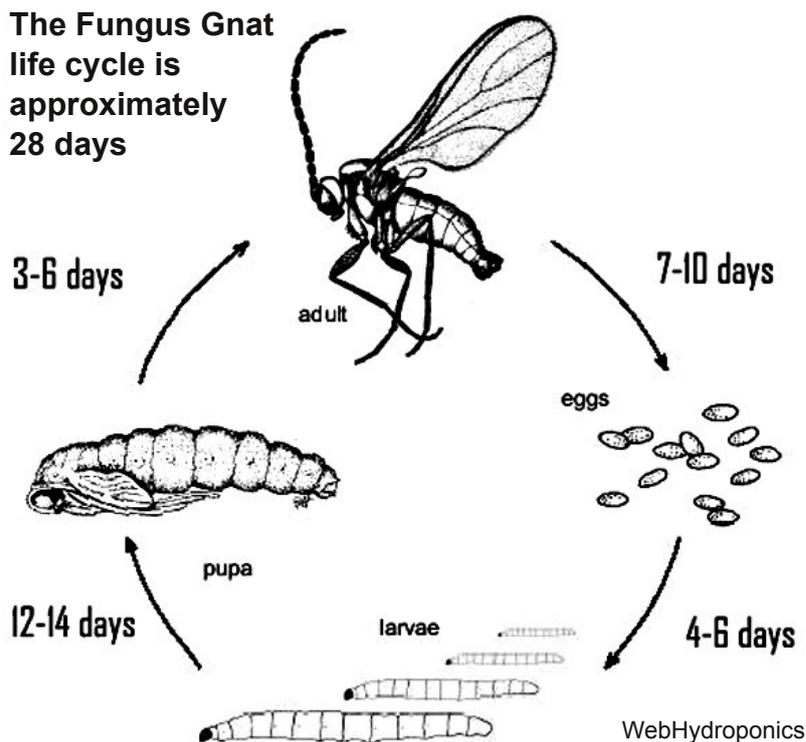
feltiae), predatory mites (*Hypoaspis miles*) and a predatory beetle (*Atheta coriaria*) which are sometimes available by mail order from various biocontrol supply sources. These biocontrols are added to the potting compost where they help control the eggs, larvae and pupal stages in the fly's life cycle.

Gardeners around the internet have also suggested the following:

Adding a tiny drop of washing up liquid (dish soap) when watering may help.

Hoover up as many adult flies as possible with a vacuum cleaner.

The Fungus Gnat life cycle is approximately 28 days



Some people have had success using products that control mosquito larvae.

Look out for products containing thymol, a component of thyme oil which works as an insecticide.

CHEMICAL CONTROL

(As advised by the Royal Horticultural Society.)

Contact insecticides such as pyrethrum, deltamethrin or lambda-cyhalothrin will control the adult sciarid flies but may give only temporary respite if more adults emerge from pupae in the compost.

QUESTION AND ANSWER

Why can flowers on the same plant vary so much?



High Voltage showing summer/winter variation.

QUESTION from Séverine Dubel, Montpellier, France

I find it very interesting, especially as a naive beginner, to see the results you can get.

The idea of looking for similarity is interesting, but I guess one has to do these comparisons when the flowers are grown in the same environment. It seems to me that the culture conditions also play a major role in the way genes will express, as I see many different renditions of the same CVs. I have also found that my plants will repeatedly give different flowers in winter and summer, so maybe some genes are temperature sensitive. Also, for CVs like Rosalind or Gator Pride, sometimes two

flowers come out at the same time and still look very different. I once had two flowers on Rosalind at the exact same time (that's when I did a cross pollination and got some seeds!). One flower was a single, and the other one was a double. As that cannot be explained by culture difference, how come the flowers look so different?

Also, I wonder for grafted plants, how much does the genetic make-up of the rootstock affect the gene expression in the flowers? Has anyone ever tried grafting wood from a seedling onto two different rootstocks and found that the flowers could be slightly different?

ANSWER by Richard Johnson, Tahiti

It is very true that CVs change colors with the seasons. This has long been known and winter flowers are often unidentifiable. The standard for color is based on the summer rendition. In addition to that,

growing conditions, and especially climate, have a lot to do with color rendition. Potassium nitrate (KNO_3) is the chemical equivalent of Photoshop in bringing out colors - in addition to increasing flower size

and floriferousness. Even micro-climate, i.e. growing a plant in one corner of the yard, perhaps in the shade, as opposed to growing it in a different area can make a difference in flower renditions. Some varieties are quite stable over a wide range of conditions while others can change considerably in varying conditions.

As to doubles vs. singles, in winter many will be double while in summer single and in some cases like yours they can have flowers of both types on the same bush at the same time.

Rootstock has of course been used for many decades and, with rare exception, it does not seem to have any effect on the scion other than providing optimum nutrients. The genetics of the bush and flower are governed by the scion, not the rootstock. There are cases were some CVs will not do well on certain root stock, but these kinds of things are considered quite uncommon.

Even growing a plant as a seedling and then growing it as a propagated plant, either as a rooted cutting, graft or marcotte can make a big difference. All three cloning methods produce similar flower renditions, although the plant characteristic and bloom can change considerably after having been propagated. A seedling has a carrot like tap root, while a propagated plant has diffuse roots. A seedling might seem to be a giant, mildly branched plant but when propagated can turn into a compact bush, sometimes with increased flower size.

So you are very correct, i.e., there are lots of variables as to flower and even bush renditions, but in time by observing the many different posts over varying seasons and from different countries, we can come up with an idea of the range of variability one might expect. Of course the only way to really know how it will do for you is to grow it under your cultural and climatic conditions.



Eye of the Storm showing summer/winter variation.



FALLING IN LOVE WITH White Wings

By DAMON VEACH

*Downtown Baton Rouge, Louisiana,
Damon's home town.*



Damon describes his introduction to Hibiscus and how he fell in love with the beautiful White Wings.

I have been interested in Hibiscus for many years, actually prior to 1983 when I joined the American Hibiscus Society. I had invested in a guest house called *Wind Chimes* with a friend at the *Morning Advocate* newspaper in Baton Rouge (where we both worked at the time), and this really started my interest in this flower.

He resigned his position on the copy desk of the *Morning Advocate* and took on the editor's position at the *San Juan Star* in Puerto Rico. He purchased *Wind Chimes*, and when the time came to get it open to the public after all the renovations, he didn't have enough money to buy the furnishings, so I loaned him the money. It was a good investment for me. I had a free place to stay when I visited the Caribbean and I also fell in love with all the beautiful Hibiscus that were on the property and around the island, especially in the El Yunque Rain Forest.



White Wings
Photo by Damon Veach

After coming back, I took a trip to Florida and visited the Fairchild Gardens below Miami. In their information area, they had brochures for membership to the National Hibiscus Society, and the rest is Hibiscus history. I had become hooked on Hibiscus, and I'm still collecting, sharing, showing, and hybridizing this beautiful flower.

It was only fitting that I start off this adventure with the very first Hibiscus I ever purchased. Having lost the name tag during house cleaning, I called it Brandon's Beauty (because

my youngest son liked it so much), but later I learned that it was White Wings, a plant that is classified as a garden variety, but to me it will always be a favorite bloom.

Maybe that's why I like the white blooms so much. I'm especially partial to Madonna, Meior, Meior's Passion, Bridal Veil, Byron Metts, Dainty White, and even White Versicolor, although this last one is perhaps my least favorite because many nurseries sell it as White Wings, something that was started most likely as an honest mistake.

The red pads identify White Wings, and the deep red throat which is much more prominent than in the misnamed variety. At any rate, this was the beginning.



'White Wings' is considered to have been one of the earliest of the hibiscus hybrids. According to Ross Gast, a hibiscus expert from the 1950s, the cultivar we call 'White Wings' in the United States is probably the Hawaiian cultivar 'Wrightii,' commonly called "narrow petalled Fijian white." With Fijian and Hawaiian roots, it's possible that 'White Wings' is not a *Hibiscus rosa-sinensis* hybrid at all, but a descendant of the Fijian native species *Hibiscus storckii* and possibly also the Hawaiian native species *Hibiscus arnottianus*. It is impossible to determine at this point in time, although in the future, as more species of plants have their genomes mapped, we may be able to know much more about this old hibiscus hybrid.

'White Wings' is still a beautiful hibiscus today. Its bush is large and full, growing up to 15 feet tall, and constantly covered with the bright white "windmill" flowers.

This information is reproduced from the Hidden Valley Hibiscus website:-

<http://www.hiddenvalleynaturearts.com>



"You need to study your plants, keep track of their needs whether it be water, fertilizer, or shelter from the sun. Just like your beloved animals, they are helpless without your loving care. If they are happy, you are happy, so get out and enjoy the beauty of what you have set about to accomplish. It is a great way to start your day." ~ Damon Veach



White Wings at the Botanical Garden of Lisbon
Alvesgaspar/Wiki Commons

THE EL CAPITOLIO FAMILY

MORE OF DAMON VEACH'S TREASURES



The El Capitlios

Photo by Damon Veach

I am especially pleased with the El Capitolio family. They brighten my garden with El Capitolio (the red one) leading the way with multiple blooms daily followed by El Capitolio Sport and then El Capitolio Sport of Sport (yellow one), which was a gift from Marc and Mel in Houma.

In my garden yesterday, I found something that I had not seen before. Two blooms on my El Capitolio Sport (photo on page 11) showed the regular bloom but on another branch there was a single version which looked similar to the coloring of Sprinkle Rain. If this branch keeps blooming as a single I assume I have another sport. I'll make sure this is not included in the trimming that will be taking place later on this year.



Variation in blooms on the same plant

By Damon Veach

ABOUT EL CAPITOLIO

Originally discovered in Cuba, El Capitolio's parentage is unknown. However, it resembles *Hibiscus schizopetalus* enough to suggest that it is the offspring of *H. schizopetalus*. El Capitolio in its red form is the original red "poodle flower." At Hidden Valley Hibiscus we also grow its two sports, one that blooms with a yellow flower and the other with a soft orange flower. The flower size is 3-4" for these delicate beauties. The El Capitolio varieties, like all the Hibiscus ancestor plants, are vigorous, strong, fast-growing, large plants that flower all the time in good conditions. Outside they can reach 8' in a large pot, although they can be trimmed to the size desired if they start to get too big. Like the other ancestors of the modern hibiscus, El Capitolio is well suited for sunny and hot growing conditions.

The El Capitolio Hibiscus have the potential to flower throughout the year under good conditions and with enough warmth and sunlight. The large blooms often have a streak of white and may even revert to single Hibiscus flowers during the short days of winter. Their unique form, flower size, vigor, and flower power all make the El Capitolio Hibiscus types some of our favorites for large tropical specimens. They can also be used as formal or informal shrubs for hedging and screens, as tree forms, or even trained into large espalier.

This information is reproduced from the
Hidden Valley Hibiscus website:-
<http://www.hiddenvalleynaturearts.com>



FIJI ISLAND

ANOTHER HISTORIC HIBISCUS IN DAMON VEACH'S COLLECTION

I always think of Bob Rivers-Smith when I have a bloom on my Fiji Island plant. It is currently regarded as an early *Hibiscus rosa-sinensis* hybrid, but it is considered by some to be a species type or near-species type. However, there is little information on the history of this Hibiscus.

Geoff Harvey of Queensland Australia wrote in 2010 that it may not be a hybrid but rather a species or form along with White Wings, Fijian White, Fijian Pink, and Ruby Rose found only in Fiji. Whatever the case may be, it is different from other *rosa-sinensis* with leaves having finely serrated margins. The flower is a single, propeller-shape with pink petals and dark center. The staminal column is also quite prominent as in *Hibiscus archerii* and other older varieties. If only I could discuss this with Bob who for me was the authority on all Hibiscus in Fiji. I have lots of material that he shared with me years ago, and I need to get this all typed up before it is lost. I really miss him and all the fine historical knowledge he shared with me.



Fiji Island
by Damon Veach

FIJI AND THE ORIGINS OF HIBISCUS ROSA-SINENSIS

Hibiscus rosa-sinensis is found all over the tropics and sub-tropics, but by far the greatest diversity of cultivars is found in India, China and Southeast Asia as well as the South Indian Ocean islands. It is thought that these areas may hold the key to the origins of our favourite flower. It is even possible that the original, primitive forms may still be found in these areas. In 1941 the Danish cytologist A. Skovsted, who made a chromosome count of the species, suggested that *Hibiscus storckii*, which was once found on the island of Fiji, is actually a primitive form of *Hibiscus rosa-sinensis*.

See also the in depth article on Hibiscus in Fiji by Bob Rivers-Smith
http://www.internationalhibiscussociety.org/HI18_file/hiv1n181-2.htm



Hibiscus storckii

Wikimedia Commons

Hibiscus storckii is one of the original species or native hibiscus plants whose genes contributed to the modern hybrid *Hibiscus* varieties. *Hibiscus storckii* was discovered and named by a botanist visiting the island of Fiji in the 1800s. Expeditions to the island since then have not located any surviving examples of this species of *Hibiscus* still growing on Fiji. The flowers vary from pale pink to bright pink. The bush grows very quickly, and is said to be small with cascading branches. Kew Botanical Gardens in England received cuttings of this species directly from the botanist who discovered it and fortunately has been able to grow it continually ever since.



This information about *H. storckii* is reproduced from the
Hidden Valley Hibiscus website:-
<http://www.hiddenvalleynaturearts.com>

*Helpful
tips*

How to Store Pollen

BY DENIS BOJCIC

Split, Croatia



Denis says: "This is my way of making sure I have fresh pollen for one month, maybe more because I always refresh with new pollen when I have it so that I have a constant supply in my kitchen fridge."

Denis lives in Split, a historic city on the shores of the Adriatic which is centred on the Roman Palace of the Emperor Diocletian. Split enjoys a warm Mediterranean climate which is borderline humid subtropical.

The pollen is collected on individually labelled cotton buds. The sticks are then neatly sorted into a plastic box with a lid and stored in the fridge for up to a month.



Denis has a website which is in Croatian: <http://www.bugenvila.com>





MEET THE ARTIST

Brenda Dee Cook

• LEMON TREE WORKSHOP •

In Hibiscus International No. 63 we featured a beautiful hand-painted wine glass (right). At the time we did not know that the artist is actually a member of the IHS. So please meet Brenda who lives in Culver City, California!



"I got my first job as an illustrator and graphic designer at the age of seventeen. After receiving two art scholarships, I studied fine arts & design in Illinois and San Francisco. My entire career has revolved around fine and commercial art, from running my own design and illustration business to selling commissioned watercolor portraits, designing websites and corporate logos ... you name it. When I'm not at my day job giving dating advice or playing Hawaiian music with my ukulele band, you'll find me painting something in the back studio out by the Meyer lemon tree."



LemonTreeWorkshop.com

"All of my pieces are meticulously hand painted to order. Painted glassware is air cured and then baked for durability, which generally makes it dishwasher safe. However, gentle hand washing with non-abrasive cleaners is always the better method. Non-glass surfaces are sealed multiple times for protection as well.

The possibilities are endless. For ideas, check out my gallery page or the occasions page."

<http://www.brendadeecook.com/index.htm>

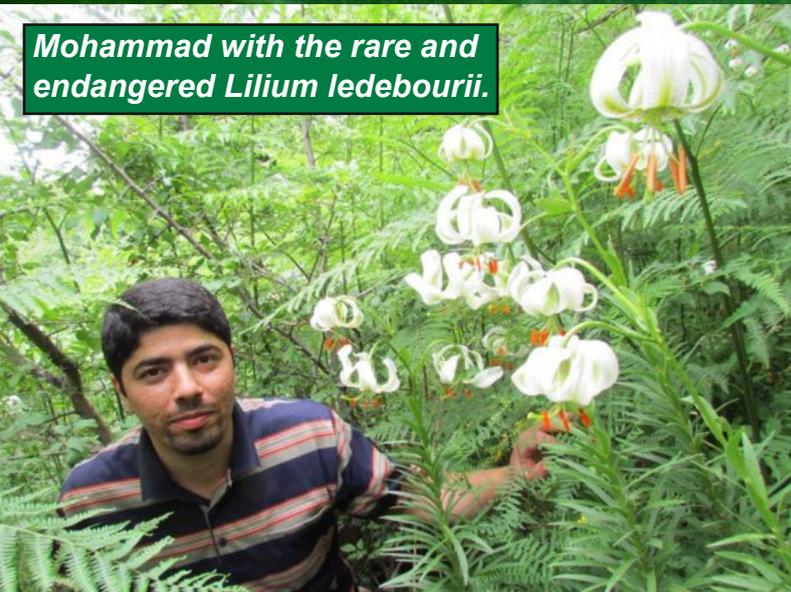


NEWS FROM IRAN

My First Hybrid Hibiscus

MOHAMMAD SADEGH BAGHERI

Mohammad with the rare and endangered *Lilium ledebourii*.



In the mountains near Ardabil



Mohammad lives in Ardabil, an ancient city in north-west Iran. Ardabil is located on an open plain 1,500 metres (4,900 ft) above sea level. The city is known for its silk and carpet trade tradition. Indeed, the ancient Ardabil carpets are considered to be some of the best of the classical Persian carpet creations.

It is here that Mohammad pursues his first love, flowering plants and, in particular, Lilies. Mohammad is an expert in plant

tissue culture and micropropagation and his present goal is to save the endangered native *Lilium ledebourii* from extinction.

Several years ago, Mohammad discovered the *Hibiscus rosa-sinensis* hybrids on the internet and, like the rest of us, felt the need to add some to his collection of rare plants. His first attempts, with both wood and seed, ended in failure. The climate proved difficult and the winters very cold. The seedlings that survived did not thrive ... except for one ... and it has taken three years to produce its first, long awaited bloom. The seed came from his friend Aaron in the USA, but the parentage is unknown.

Mohammad says: *"I will wait for future blooms to see how it can look like at its best and then try to register it. I know that it is not mine, I am just the grower :D.*

I will name it as first Hibiscus seedling named from Iran and maybe with a name that I love."

Mohammad has a website which is in his first language, Farsi (Persian).

<http://www.ishs.ir/>





WHAT WORKS FOR ME Rooting in Coir Pellets

By WENDY WILLIAMS

You have just received a packet of precious Hibiscus wood which may have spent days, or even weeks, travelling around the world. The question now is whether to graft or root.

Whichever option you choose, the first priority is to re-hydrate the wood. I make a fresh diagonal cut below a leaf node at the bottom of each scion and then immerse them in clean water containing a few drops of horticultural fungicide and a little hydrogen peroxide. Depending on how long they have been travelling, I might leave them soaking for anything from an hour up to overnight.

If the scion is big enough, I will usually cut it into two pieces so that I can graft one and root the other. That way I double my chance of success!

This year I decided to try rooting in coir pellets. These are usually readily available at garden centres and on Ebay. They arrive looking like flat buttons but, as soon as you drop them in water, they swell up and make perfect little pockets for your cuttings to root in.





By now the scions have already had any extra leaves either snipped off or cut in half, leaving just enough foliage to encourage growth. The bottom ends are then dipped in a rooting hormone gel. I use Clonex (active ingredient: Indole-3-Butyric Acid (IBA)).

Once the coir pellets have plumped up, I make a hole in the middle of each one so that I don't have to push the scion too hard to get it 75% of the way through. I find a gentle twisting motion works best. Finally, the scions are stood upright in cells in a seed tray.

It is important to keep the coir moist at all times. In my climate I do not need to cover them with a plastic dome for humidity, but I do need to check them every couple of days to make sure that the coir has not dried out.

Each time I water the coir I add a few drops of fungicide and hydrogen peroxide. I also sometimes add a tiny drop of washing up liquid to try and discourage fungus gnats.

It takes about 3-4 months for me to start seeing roots. As soon as they appear, I simply insert the whole coir pellet into a pot and, hey presto, I have a new plant!



TAHITIANS GALORE

PHOTOS BY RICHARD JOHNSON

One of the delights of Tahiti's tropical climate is the profusion of Hibiscus blooms. When they bloom in multiples they simply take your breath away!



Above - Tahitian Lavender Rainbow (Grand Hyatt x Tahitian Rainbows) 7-8".



Left - Tahitian Star-spangled Red (Lotta Lorraine x Tahitian Grenadine) 8-9".



Right - Tahitian Brown Sunset (Tahitian Gabonaise x Jolanda Gommer) 7-8".





**Tahitian Sahara Star
(parents unknown) 8-9".**



**Tah. Udi's Sunset (Tahitian Lavender Storm
x Tahitian Black Rainbow) 8-9".**

HIBISCUS IN ART

Kirsty Lorenz

Contemporary artist Kirsty Lorenz is well known for her flower paintings, ranging from tiny watercolour studies to large scale oil paintings.



Working from her unusual studio on Platform 2 of Ladybank Railway Station in Fife, Scotland, Kirsty creates large and small scale flower paintings, runs classes and holds open studio events.

Kirsty also sells some of her work online via her website:

<http://www.kirstylorenz.com/index.php>



Commissions are welcomed.

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