The Plumeria Society of America, Inc.

July 2012

Plumeria Potpourri

The next meeting of The Plumeria Society of America will be held
Tuesday, July 10, 2012, 7:30 p.m.
at the Houston Garden Center in Hermann Park
1500 Hermann Drive, Houston, Texas
Anyone with an interest in plumerias is invited to attend!

Come to the July meeting!

We will have a question and answer session.

***TOPIC*: Surviving Summer Heat and Hurricanes**

Hurricane

YARD TOUR

August 11, 2012
9:00 AM – 4 PM
John Carroll's Home
757 Blueberry Road
Cove, TX 77523

For more information or directions, call 832-414-9394

In this issue ...

President's Corner

by Mark Wright, Texas
email: wright5447@sbcglobal.net

What's in a name? To some people, it means a lot.

There is one constant occurrence at all the society plant sales. People come in with flowers—all kinds of flowers. They all want to know the name of their flower. I wish it were that easy.

As you know, not all plumeria have proper names, but lots of people own them. Home improvement stores and chain nurseries bring in plants to sell with labels of "white," "pink," "red," "yellow," and "rainbow." To tell you the truth, most of the time you're lucky to get the same color they're labeled with.

I pick flowers to take to the sales every year. By the time I get them there, some of their names stump me for a minute, and I just picked them!

Many environmental factors affect plumeria blooms. Fertilizer, temperature, sun (or the lack of), and water are all culprits in making blooms look differently.

Recently, I was lucky to be the recipient of Bud Guillot's generosity, as Bud sent a very large cutting of *California Sally* back from California with Emerson and Nancy Willis. It was given to me in early May. After a little curing, I put it in traction and potted it. To protect the cutting against flooding rains, it was positioned to root on a covered patio.

The photos below were taken only one week apart. The only change is sun and our water. The cutting rooted quickly so I moved it into the yard. *California Sally* has always been primarily pink here, and you can see the transition of the almost rainbow effect of the first flowers to a much more uniform pink in just one week.

Plumeria identification is not an easy task. More than the color of the flowers is needed to complete the process. Leaves, growth habits, and fragrances are all needed for correct identification. If it blooms a lot, smells good, and keeps well in water, you have a winner.

Our next plant sale is at the Fort Bend County Fairgrounds on July 14th. The growers' meeting will be held after the general meeting on July 10th in order to allow time for people to arrive. Please contact German Collazos with any questions at **713-670-4064** or **german.collazos@tic.toshiba.com**.

Fort Bend County Fairgrounds Sale—July 14	
June 26	Commitment to sell on July 14
July 4	List of plumerias to be sold on July 14
July 10	Sellers' meeting (after general meeting)
July 14	**Sale at Ft. Bend County Fairgrounds**

Jim Clark

by Bud Guillot, California

This is a belated note of the death of a very famous and much-respected plumeria enthusiast and a dear friend of mine, Jim Clark, of Fallbrook, California. From the hard work of Jim's earlier days of prospecting and long hours working in the hot sun of Fallbrook in his beautiful plumeria grove, Jim was tall, slim, rugged, and his skin resembled an old, well-worn leather boot. Jim was 98 years young when he died. He fell down the steep stairs in his home and received severe head injuries. Jim spent several days in the hospital, then a nursing home for several days, and died the day after Christmas. Jim is the only plumeria grower I ever met who had been growing plumerias longer than I. Braggingly, I would like to think Jim was the only man who knew more about raising plumerias than I. Jim's theory on growing plumerias: they are a tough, resilient plant, so keep it simple.

The picture on the left is Paula Furtwangler and Jim Clark. The picture on the right is Jim Clark on his plumeria hillside—his greenhouses in the center of the picture and the corner of Jim's home on the right. The house in the distance is a neighbor's house.

Rare Plumeria Obtusa

by Steven Prowse, Australia
Sacred Garden Frangipanis

This is a photo of a rare plumeria obtusa with pale pink flowers and rainbow underside. It is a big tree with large flowers, and the perfume is the same as common Singapore obtusa. This rare cultivar was smuggled into Australia from Singapore by Aussie expats in the 1970s. The original seedling tree was well known in Singapore amongst plant enthusiasts but jealously guarded and not shared. The original tree no longer survives, and is supposedly extinct in Singapore. After years of persistence, we managed to obtain two cuttings from the original imported tree which is overgrown with vines and seriously neglected.

More on the Optimal Cutting Angle for Rooting Plumeria

by George Hadjigeorge, Texas

In my May, 2012 article in *Plumeria Potpourri*, I stated that in time plumerias develop more roots on the bottom of the cutting and more roots from the side of the bark. This wrong conclusion was reached based on pictures of the root system of two older plumerias (one and three year old). It turns out there is an optical illusion that makes those pictures appear as if the plumerias are developing new roots from the bottom and from the side of the bark. This article will show that plumerias do **not** develop many new roots over the roots that initially develop in the rooting process. Thus, the importance of rooting square-cut plumeria cuttings cannot be overstated. It is of paramount importance to root square-cut plumeria cuttings in order to develop the best root system possible.

Initially, when plumeria cuttings first root, they only develop roots around the perimeter of the cut (square-cut cutting), on the bottom side of the cut bark. Very few roots develop in the center soft white center. In addition, no roots develop on the side of the bark. Angle-cut cuttings initially only develop roots at the tip of the cutting. Let us examine some cuttings from the callus stage all the way to seven-year old plants to better understand what is happening.

An important aspect of rooting plumerias is how the cuttings callus before root development. The pictures below show a cutting and its cut-away view a week after healing in mulch. Just a small amount of callus is formed after a week (in summertime). Judging from the thickness of the woody part, this is a relatively young cutting. The center white core pulled back a little, but it is not a problem. The picture below on the right shows a close-up cut-away view of this cutting. At the cambium line at the bottom we can see growth has begun between the bark and the wood. As will be shown later, this is where roots begin and new wood develops and anchors the new roots.

The next pictures show a relative mature cutting (very thick wood) after healing in mulch for three weeks. The left picture shows that a nice callus has formed at the bottom of the cutting. The picture on the right (cut-away view) shows that there is a callus growing independently at two different places, namely at the cambium line and at the soft white center core. Because the wood is very thick, it is easy to distinguish the two calluses.

The next picture of the above cutting, with some of the bark peeled back, shows the initiation of new wood growth at the cambium

line (wood corner line is wavy and not smooth).

The callus at the cambium line later develops into strong wood and anchors the bulk of the roots. The callus at the soft white center core, which initially is as thick as the callus at the cambium line, as will be shown later, develops into wood very slowly over many years and does not develop many roots. If all the sap flow is at the cambium, how then does the soft white center core develop a callus at the same rate as at the cambium line and why does this callus not develop many roots? The next pictures show the cross-section view of two different older plumeria branches (three to four years old). These pictures answer this question. The soft white center also contains sap and sap does not just flow around the cambium line. In the pictures below, the sap in the center white core is oozing out of the center white core, and it did not spill over from the cambium line (very thick woody part separating the two). This sap flow in the soft white center forms the callus.

Now let us look at how angle-cut plumeria cuttings develop roots as a function of time. The left picture below shows a cut-away view of a rooted cutting, cutting through the center of a root. The right picture shows the same cutting after it dried overnight. Drying the cutting enhances the wood part and makes it easier to see. This cutting is about six months after rooting. The cutting was healed in mulch for three weeks before planting. Roots consist of solid wood with bark over them. Roots are anchored to new wood that develops at the cambium line. The new wood grows over the old cutting wood. The bottom ¼" of the original cutting wood is dead and appears black in the pictures (wood died in the drying process before rooting the cutting). The new wood growth at the cambium line is what causes the bottom of the cutting to flare out (to make room for the new growing wood). These pictures also show that there are no roots in the center soft white core and that wood and bark developed at the bottom of the soft white core

(right picture shows it clearly). Apparently, the soft white center has to first develop wood and bark to anchor the roots before roots can grow there. This explains why, eight weeks after planting, rooted cuttings do not contain many roots in the soft white core.

The next picture shows another rooted angle-cut cutting about six months after rooting. This cutting was also healed in mulch for three weeks before planting. This picture

shows the bottom view of the half shown below in the cut-away views. Two strong roots

are growing at the cambium line. A few very small roots are growing in the soft white core.

Below, the left picture below shows a cut-away view of the above-rooted cutting. The right picture shows the same cutting after it was dried overnight to enhance the wood. The cut-away view is right through the middle of one of the big roots. These pictures verify all the findings from the first cutting. The big roots grow at the cambium line and are anchored to new wood that grows over the old cutting wood. This new wood causes the

cutting bottom to flare out. In the March 2012 issue of *Plumeria Potpourri,* it was shown that healing plumeria cuttings in mulch causes

the bottom of the cutting to flare out. This proves that the flaring out means the initiation of the rooting process is well under way. Thus, healing cuttings in mulch is very beneficial, and the cuttings get a head start in rooting. A small part of the cutting wood (about 1/8" long) is dead and shows as black in color. The cuttings were dried overnight in air before healing in mulch. Air-dried cuttings for a few weeks would probably show a lot more dead wood because they are dried for so much longer. The roots at the bottom of the soft white center are anchored on wood that developed in the bottom of the soft white core. The bottom of the soft white center is covered with wood and bark.

The next picture below shows an angle-cut rooted cutting, which developed roots only at the tip of the cutting. Amazingly, six months after rooting, no roots have developed around the perimeter, only a few small roots in the

center soft white core. A very large callus has grown around the cambium line but no new root development is visible. Six months after rooting, except for the roots that developed originally, no new roots have developed (all new roots appear in lighter color and all are growing on the side of existing big roots making a bigger root ball.

A cut-away view of the above cutting, cut through a root at the end of the root formation, is shown here. The picture on the right shows damage to the old wood (as before) and that the growing callus is solid wood with bark over it. New root development in this cutting is very slow.

The next pictures show a three-year-old rooted angle-cut cutting. The roots and the callus around the cambium line have grown very thick. There are roots only at the tip and no new roots have developed around the perimeter. In addition, no roots have developed in the soft white center core or on the side of the bark. I always wondered why some of my plumerias were not as vigorous as others; they must have originated from angle-cut cuttings like this one. I did not pay much attention to the cutting angle, and my plumerias were rooted with both square-cut and angle-cut cuttings.

The next pictures show a cut-away view of the above plumeria. The top picture shows a quarter round cut-away view. Clearly, the original cutting wood is dead to a depth of about ¼" and appears black in the pictures. Wood and bark growth from the cambium line has grown over the dead original cutting wood all the way around the perimeter and has totally encapsulated the dead wood. A thick layer of wood and bark covers the whole bottom of the soft white center. Yet, even though there is strong wood to anchor new roots around the whole perimeter of the cambium line of the bottom cut and the bottom of the soft white center, no new roots have developed in either place. This is really remarkable. Apparently, the angle-cut rooted cuttings do not develop more roots besides the roots that developed originally at the tip of the cutting.

Now let us look at square-cut rooted cuttings. The next pictures shows two different angles of a two-year old rooted cutting (square-cut). Some very strong roots pointing downwards are visible and the bottom appears to be full of roots, but still not a single root has developed on the side of the bark.

In order to see clearly, the roots were trimmed back to about one inch in length. The next two pictures show two different views of this plumeria. It appears that the whole bottom is full of strong roots, but still there is no sign of a side root from the bark.

The next picture is a bottom view of the above plumeria and it is very telling. Not a single root has developed in the soft white core—all the roots emanate from the cambium line around the perimeter. The previous pictures are an optical illusion because of the orientation of the roots (some turn inwards), and the fact that the roots are relatively thick and cover a large area of the cross-section. Rooting square-cut plumeria cuttings rather than angle-cut cuttings is even more important than previously thought. Square-cut cuttings have superior root system, period.

The left picture below shows a cut-away view of the above two-year old plumeria. The picture on the right shows a cut-away view of a quarter round of the above plumeria. Again, these pictures clearly show how the roots around the perimeter are anchored to new wood that grows over the old wood of the cutting. It also shows the soft white center developed wood and bark at the bottom but few roots. The bulk of the roots are the original roots that developed around the callus formed at the perimeter of the cambium line. This callus is solid wood covered with bark. It is interesting to note that the very bottom of the original cutting has a soft white core that is smaller in diameter than the soft white core above, about one inch from the bottom. This demonstrates that in two years, the diameter of the plumeria has gotten much larger than the original cutting and the soft white core has increased in diameter, except at the bottom one inch. The original cutting wood diameter has also increased (visible in pictures) although the wood thickness has not (also visible in enlarged pictures). The old cutting wood has really stopped growing (getting thicker). Only the new wood, which anchors the roots around the perimeter, is growing. Another interesting point that these pictures show is the flaring at the bottom of rooted cuttings. There are four dark spots on the bottom of the cutting, two on each side. There are two dark spots between the bark and the new wood indicating the present location of the original cutting bark. There are also two dark spots between the soft white center and the new wood indicating the present location and thickness of the original cutting woody part. Look at how the growing roots at the cambium line have pushed far apart the original bark and original wood of the cutting. Again, the damage to the old cutting wood during the drying period is relatively small. Even though wood and bark have grown at the bottom of the soft white center and can anchor new roots, no roots have developed at the bottom of the soft white center core.

The next pictures show a three-year-old plumeria, which originated from a square-cut cutting. The soil line is where the bark color

changes from brown to green. After three years, there is no sign of any root developing on the side of the bark. The roots have grown so thick it appears that the whole bottom has filled with roots. This is just an optical illusion.

The next picture shows the bottom view of the above plumeria. All the strong roots are located around the perimeter and come from the cambium line. There are only a few very minor roots in the soft white center core. Since this is one of my valuable plants, I replanted it instead of cutting it.

The next pictures show a four-year-old plumeria, which originated from a square-cut cutting. The trunk diameter is 1.4". Again the soil line is where the bark color changes from brown to green. After four years, there is no sign of a single root developing on the side of the bark. The roots have grown so thick and so crowded it appears that the whole bottom has filled with strong roots.

The left picture below shows a close-up of the side view of this four-year-old plumeria. Most roots point outward. However, there are some roots pointing downward and inwards, making it appear they are bottom roots. There are also two different double roots (on top of each other).

The picture on the right shows the bottom view. All the roots emanate at the cambium line, and there are no roots in the soft white center area.

The next pictures below show a cut-away-view of this four-year-old plumeria. The cutting for rooting this plumeria was air dried before it was planted. About a half inch of the cutting wood off the bottom of the cutting died back and appears black in the pictures. The dead wood is completely encapsulated by new growth. No wood developed below the cutting bottom, just bark developed. The bottom 0.6" of the soft white center of the original cutting was replaced with solid wood. I believe no wood grew below the cutting bottom because the cutting bottom rotted. Both roots of the double root on this half piece seem to be emanating from the wood of the cambium growth. All the strong roots are anchored in the wood of the cambium growth.

The next pictures show both pieces in cutting through the double roots. These roots


are coming from the side of the wood of the cambium growth and are original ones from when the cutting was rooted. The roots just grew outward instead of pointing downwards like the root on the other side.

The next pictures below show the other half of this four-year-old plumeria. This piece


also contains a double root, one of which emanates from the side of the bark very close to the bottom of the cutting, from the wood of the cambium growth. However, this piece shows two roots next to each other pointing downwards. The left root appears to be growing out of the wood at the soft white center. The right picture shows the reverse side of this piece. Clearly all the roots emanate at the cambium line and no major root emanates from the soft white center.

The picture below shows this piece after it was dried overnight. The wood of the root that appears to be coming from the soft white center is visible so is its bark. The root is pointing

inward, originating at the cambium line, and its wood does not connect to the soft white center (its bark is visible on the front side).

The next pictures show a five-year-old plumeria, which originated from a square-cut cutting. It has a trunk diameter of 1.56". Where the bark color changes from brown to green is where the soil line was. After five years, there is no sign of a single root developing on the side of the bark. For some reason, three major roots of this plumeria died and appear black in the picture to the left (bottom view). There are no major roots coming out of the soft white center area.

The next pictures show a cut-away-view of this five-year-old plumeria. All major roots are anchored to new wood that grew at the cambium line. A 0.7" thick wood grew at the bottom of the soft white center of the cutting. There is no wood above the bottom of the soft white center. The right picture shows that the new cambium wood died with the dying roots and turned black. It also shows something amazing—new roots growing, anchored on newly formed cambium wood over the old dead cambium wood. It is easier to see in the close-ups on the following page.


The close-up pictures below show a remarkable thing. Part of the original cutting wood is dead and appears as two black dashes about 3/8" long on both sides of the soft white center (starting at the bottom of the right picture). The original cutting woody part extends to the left of the dead original cutting wood and is visible in both pictures; then we see the dead new cambium wood that anchors the dead root above the old cutting wood. Next we see new cambium wood growing, which is encapsulating the old dead cambium wood (better visible in the lower picture). The bark is following the new cambium wood in encapsulating the dead cambium wood. Here we see a new root growing from the side of the bark and a new root growing from the bottom of the new bark. These roots are white and are much lighter than the old roots. This is the only time I have seen a new root grow in an older plumeria. This was probably triggered by the fact that three major roots of this plumeria died, and the plant was trying to grow new ones to replace them. Also note that these new roots did not just grow from the side of the bark off the old wood. New wood is growing at the cambium line anchoring these new roots.

The next picture shows the above piece after it was dried overnight and clearly shows the wood of the new side root attached to the new cambium wood. Since the cambium wood is new and growing over the old dead cambium wood, this undoubtedly proves that the root is indeed new.

The next picture shows a seven-year-old plumeria, which originated from a square-cut cutting. The trunk diameter is 2.1". This plumeria was grown in a 20-gallon pot. The root system is vigorous, and it is hard to clearly see what is going on. The roots were trimmed back to about one inch. As the picture below shows (side view), after seven years, there is no sign of a single root developing on the side of the bark. This is quite amazing.

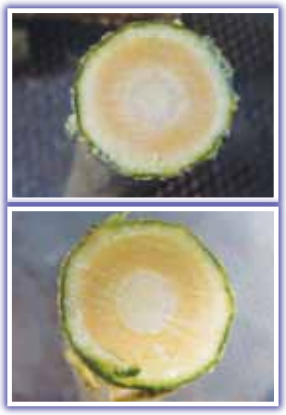
The next two pictures below show two different views of the bottom. All the strong roots are located around the perimeter at the cambium line and are pointing outwards. No strong roots have developed at the bottom; just a few little minor roots.

There are some roots that are on top of each other and do not appear to be coming from the cambium line. As the picture on the

right of a newly rooted cutting shows, multiple rows of roots at the cambium line are possible (top of picture there are three to four roots on top of each other). As they grow large with age (about 0.5" diameter in this case), they push other roots, change direction and falsely appear to be coming from the bottom. This is just an optical illusion.

The new pictures below show a cross-section of the trunk cut at 4" and 12" above the bottom (at beginning of roots). The wood is 0.54" thick and the soft white center is 0.80" in diameter. However, the soft white center contains a brown core of 0.56" in diameter that appears like wood. When poked with a knife, it was soft just like the soft white center. Another interesting point about these pictures is that the wood is much thinner (0.37") on one side of the cross section and 0.56" on the opposite side. In the right picture the cut was made right below a three-branch joint. One of the branches was severed off at the joint about two to three years ago. As a result, more sap was flowing towards the remaining two branches and very little towards the cut branch resulting in the uneven wood thickness. The whole length of the trunk to the first joint is like that. More evidence for this will be shown in a future article about healing plumeria cuts.

The next two pictures below show a cross-section view of the two remaining main branches of this seven-year-old plumeria cut at the base of the joint. The wood is uniform in thickness around the perimeter on both branches. The soft white center is white and looks normal.



The next pictures below show a cut-away view (both sides) of the above seven-year-old plumeria. The black spot shows the bottom of the original cutting (dead wood). The whole bottom is covered with hard solid wood, about 1.25" thick. There is 0.75" thick wood below the bottom of the original cutting and 0.5" thick wood above it. Here new wood not only grew below the soft white center core but also part of the original soft white center has become wood. The center of the remaining soft white center is brown and appears to be forming into wood (currently it is soft). What

is really amazing is that even though massive new wood (1.25" thick) has encapsulated the whole bottom of the original cutting and could anchor some very strong roots, no roots have formed. There is no sign of a single new root developing! All roots are located around the perimeter at the original cambium line of the cutting.

The next pictures below show this seven-year-old plumeria where the two cut pieces were dried overnight to enhance the

wood. As you can see, the soft white center shriveled and pulled back. The bottom of the original cutting's soft white center is covered with 1.25" thick solid wood. All the roots seem to be pointing outward. They have grown quite thick over seven years. It seems that either the bottom wood is an extension of those roots or that is has grown out to facilitate those thickening roots. There is no sign of any growing new roots on the bottom.

These findings seem to contradict conclusions reached in the article published in the May 2012 *Plumeria Potpourri* that after a few years, vigorous roots develop in the bottom of the cutting and on the side of the bark. The left picture in the next column shows the picture of a three-year-old plumeria shown in that article. It appears that the picture supports the conclusions reached in that article. However, there is a picture with another view of that same plumeria taken at the same time. It is shown on the right picture below. This picture clearly shows the original cutting bottom line.

It was a square-cut cutting before rooting. The big root that appears to be coming from the center of the cutting is visible in the right picture. This big root emanates at the cambium line. It is directed inwards and, because it is so big and covers most of the bottom, appears to be coming out of the bottom in the left picture. The smaller root that appears to be coming out about one inch above that central root is also visible in the right picture. Both of these roots emanate at the cambium line. The conclusions reached based on the left picture are obviously wrong because they are based on an optical illusion (roots get crowded as they grow bigger with time). Based on the right image, most roots in that plumeria originate at the cambium line. Thus, even after three years, no roots developed on the side of the bark. Also, most of the plumeria roots originate at the cambium line, and one cannot tell from these pictures if there are any roots at the center white core. These results are in agreement with the results of the various examples shown in this article.

Based on the information I have today, it appears that cuttings do not develop many new roots from the bottom of the soft white center and certainly no roots from the side of the bark, as they grow older. I have seen new

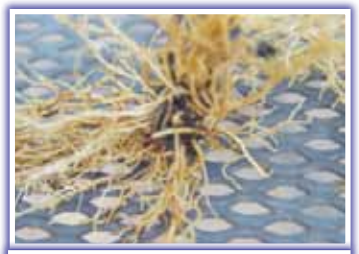
root development only in one case where some major roots rotted and the plant was developing new roots to replace them. But in tandem with new root development, the plant also grew new cambium wood to anchor the new roots. Instead of growing new roots with age, the plumeria root-ball grows bigger with age by the roots increasing in diameter and by branching out and developing many side roots on the existing major roots as the picture below shows. Root development initially from the side of the bark seems to be a rare event for cuttings (need more evidence).

Evidence shown in this article shows that besides the cambium line, sap also flows in the soft white center core for plumerias. This allows plumerias to heal the soft white center of cuttings being rooted by forming calluses. I believe that the reason the soft white center of cuttings does not develop strong roots, like those developed at the cambium line, is because the sap flow in the soft white center is relatively small compared to the sap flow at the cambium line, where the main sap flows. This low sap flow is also the reason why it takes many years to develop strong wood at the bottom of soft white centers of cuttings.

Is developing roots only around the perimeter of the cambium line unique to plumerias? Not really. Many other plants, that have a soft center core, develop roots the same way. The pictures below show an adenium (aka desert rose) cutting eight weeks after planting. Adenium is in the same plant family as plumerias. Most strong roots are located at the perimeter of the cambium line with a single

root in the soft center core and no roots on the side of the bark.

The next pictures below show a one-year-old alamanda cutting. Alamanda is also in the same plant family as plumerias. Most strong roots are located around the perimeter of the cambium line with no roots present in either the soft center core or on the side of the bark.



The next pictures below show an angel wing begonia cutting, about ten weeks after rooting in water. Angel wing begonias belong to a different plant family than plumerias. Most strong roots are located at the perimeter of the cambium line with no roots in either the soft center core or on the side of the bark.

Note how in all cuttings above

(adenium, alamanda, and begonia) the bottom of the cuttings has flared out due to growing new wood that anchors the roots around the perimeter of the cambium line, just like in plumerias. In addition, the soft center core has callused and has grown out and a callus has formed over the woody part and the cut bark, just like in plumerias. Note that not all plants that have a soft center core develop roots like this. For example, fig trees develop most roots on the side of the bark.

In summary, it has been shown that essentially no new strong roots develop, as plumerias get older. All strong roots develop during the rooting process. Also, no new roots ever develop from the side of the bark, with the exception of a few rare side roots that might develop during the rooting process. Solid wood gradually builds over the soft white center of the cutting, getting very thick in older plumerias. However, no major strong roots ever develop from the wood that develops over the soft white center of rooted cuttings. It was also shown that angle-cut plumeria cuttings develop roots only at the tip and with time develop no more roots to cover the cambium perimeter that contains no initial roots. Thus, it is very crucial to develop a vigorous and even root system when a cutting first develops roots. The only way to achieve this is by rooting square-cut plumeria cuttings, which initially develop vigorous roots all around the perimeter of the cambium line. The previously stated conclusion in my May 2012 *Plumeria Poturri* article that long term it really does not matter how a plumeria cutting was cut is incorrect. In order to develop vigorous and even roots it is of paramount importance to use square-cut plumeria cuttings for rooting. Vigorous and even roots mean healthier and stronger plants.

Trish and Roy Weeks visiting Dick Wheeler at Molokia Plumerias on Molokia, Hawaii

Trish and Roy Weeks visiting Koko Crater, Oahu, Hawaii

Naples Botanical Garden Collection

by www.naplesgarden.org

If you've ever been to Hawai'i, chances are you were greeted upon your arrival with a lei made from plumeria flowers. It is a wonderful welcome that creates a magical memory of beauty and fragrance that persists long after your visit.

Plumeria are also known as frangipani and are originally from Central America and the Caribbean Islands. Today, however, they can be found growing throughout the world's tropical and subtropical zones. In Southeast Asia they were first known as Temple Trees, and you will find them planted near cemeteries, temples, and churches throughout the region.

We don't know how they came to be such a favored tree in an area of the U.S. that has a far from ideal climate for them—Houston, Texas—but the fact is that in 1979 three ladies, Elizabeth Thornton, Nadine Barr, and Nancy Ames, who were captivated with the beauty of their flowers, founded The Plumeria Society of America (PSA) and set about spreading their passion for plumeria. They initially attracted 75 members, held regular meetings, and had their first plumeria sale that year. It was a great success: 120 plants and many leis brought in from Hawai'i were sold within 20 minutes. A few years later, the PSA was given authority for the registration of named plumeria varieties worldwide.

Fast forward to 2008, when the Collections Committee at the Naples Botanical Garden got wind of the fact that Elizabeth Thornton's personal plumeria collection, including many of her own cultivars such as the beautiful Mardi Gras, was going to be sold by her heirs. Through many communications with her daughter, the Garden was eventually able to secure cuttings from all of Elizabeth's trees, thus ensuring that the collection would stay together. This did not go unnoticed by the PSA, who realized that in our area the climate for growing plumeria is virtually ideal—certainly a big improvement over the Houston area where gardeners have to protect their plants from the cold, wet winters each year. When the Board of the PSA heard of our planned expansion project, they made a proposal to place one of each registered variety here in our Gardens. Of course we ran with that idea!

The fact that during that same summer two local aficionados generously made their entire collection available to us—more than doubling the number of plants we had at that time—found us suddenly in possession of a most enviable range of plumeria species and cultivars, not only officially registered ones, but also rarely available varieties from Australia, Singapore, and Thailand. This latter country has recently embraced plumeria culture in a big way, and some very exotic blooming specimens are finding their way over here.

It was at that point we realized we quite possibly had accumulated the largest plumeria collection in the country .... and all in the span of a few years! The Collections Department decided to apply for National Status of our Plumeria Collection with the North American Plant Collections Consortium, a branch of the American Public Gardens Association. It was a daunting prospect for a garden as young as ours. Through a lot of hard work from staff and volunteers alike, we were able to show their representative, who came for a day-long site visit to assess our collection and the conservation practices put into place to protect it, that we were worthy of holding this status. In November of 2011, we became the youngest garden to be the holder of a NAPCC recognized plant collection!

At this time of year, the plumeria are all coming out of their "bare" phase and covering themselves with blooms, so be sure to check them out when you visit the Garden next! And don't forget to take a deep breath near the especially aromatic cultivars such as Aztec Gold, Celadine, and Riviera Rainbow.

Broomstick Rainbow

by Emerson Willis, Texas
www.emersonsplumerias.com

About ten years ago, Kathy Mras of Anaheim, California and her son Jimmy were cruising the neighborhoods trolling for plumerias. They each had a hamburger and one extra for the road. Kathy spied a large beautiful rainbow sporting a green-handled broom high in the branches.

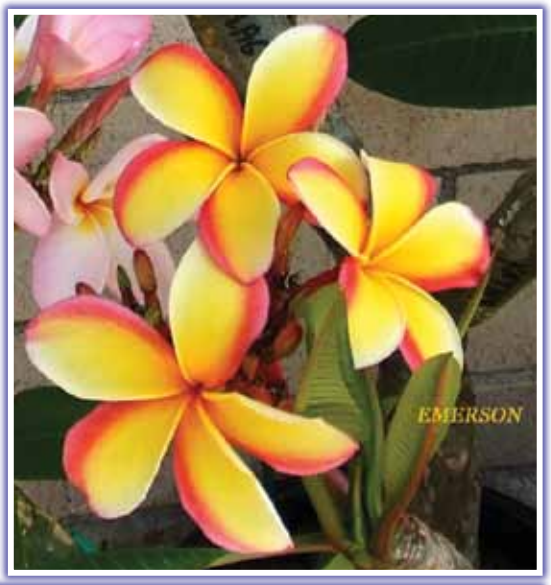
The house had a fenced yard with an unlocked gate. However, a large barking dog presented a problem of ringing the door bell. The extra hamburger put that quandary to rest. They were admitted and pressed the bell.

A very nice Hawaiian lady answered the door but was somewhat perplexed on how they got past the dog. After explaining pooch was enjoying a Carl's Jr. burger, everyone had a big laugh. You must admit this is an interesting ploy to obtain a cutting. And yes, the name *Broomstick Rainbow* stuck. I must say I love it. Thick branches, large blooms, and ease of rooting are but a few of the attributes of this prized specimen.

When images of this rainbow were posted on several Yahoo!® sites, quite a bit of interest was shown. The plumeria section of my brain went to work, and I thought I would enjoy assisting in spreading this cultivar around other areas of our great country. To brag a bit, this isn't the first Southern California plumeria I've shared with collectors from near and far.

Kathy told me where the house was located. Nancy and I found it in short order, but the nice lady Kathy knew was no longer living there. The fellow who answered the door spoke very little English, and after seeing the picture in my hand, made it clear he would not sell me ten cuttings. "Too many" he cried. After this bold statement, he picked up a saw and gave us three huge branches. California people, bless them, have a totally different definition of "cutting" than I.

When these tips and the ones Kathy so kindly gave us are rooted, the joy will begin.



The Plumeria Society of America Website

Additional information concerning The Plumeria Society of America and culture of plumeria plants may be found on the World Wide Web at the following address:

http://www.ThePlumeriaSociety.org

A listing of currently registered cultivars — Research Committee Bulletins — PSA By-Laws
Plumeria Care Bulletins — Photos from past events — Map links to meeting and sale sites
Photos of plumeria plants and flowers — past color insert pages in PDF format

Purpose of The Plumeria Society of America

(1) Promote interest in and increase knowledge of plumeria hybridization, propagation and culture of plumerias.

(2) Share this knowledge with hobbyists interested in plumerias.

(3) Provide a register for recording, identifying and classifying by name new types and varieties of plumerias.

(4) Encourage and unite plumeria enthusiasts around the globe, throughout America and across the seas.

PSA Calendar — 2012

January 10 .....meeting

March 13 .....meeting

May 8 .....meeting

June 9 ..... Show & Sale I (Seabrook/Clear Lake)

July 10 .....meeting

July 14 .. Show & Sale II (Fort Bend County Fairgrounds)

October 9 .....meeting

open ..... Fall Social

- All regular meetings are held at the Houston Garden Center in Hermann Park, 1500 Hermann Drive, Houston, TX. Meetings begin at 7:30 p.m., workshops begin at 6:45 p.m.
- Bring your blooms. Bring your friends.
- Bring plants, cuttings, etc. for door prizes!! These can be anything, not just plumerias.
- Visitors are invited and encouraged to attend.

The Plumeria Society of America, Inc.

P.O. Box 22791
Houston, TX 77227-2791, USA
Dues are $25 per year

Copy this page for all your friends who love plumeria or just want to know more about them.

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PSA Sale in Seabrook, Texas

Photos by
Jennifer Anderson
and Tex Norwood