DARE TO DREAM

By the time you read this the holiday season will be over for another year and a new year will have begun. I hope that your holiday festivities were full of friends and family, that your days were full of laughter and joy as well as good food shared with loved ones.

If you had young children, grandchildren or even great-grandchildren as part of your holiday celebrations, I hope you were able to see the look in their eyes as they were caught up in the excitement of holiday dreams. As we grow older the ability to dream seems to fade away for many of us in the pressures of our busy everyday lives. Yes, some of us do persue our dreams but not many.

As we embark on the journey through this new year, all we know for sure is that there will be changes in store for all of us, both good and bad. We can’t predict what might happen but perhaps we can influence it if we dare to dream.

In the past both Dick Johnson and Joseph Dimino had a dream of an online registration system to register new hybrid hibiscus cultivars. They dared to dream and with a lot of work, Joseph made it happen and created what we have today, an online registration system with in depth search functions.

However, due to illness Joseph was unable to complete the task completely as would have been liked. Now thanks to the BOD decision and their ability to dream, we now have the opportunity to continue Joseph’s work and finally realize the dream that Dick and he started. The BOD has voted to hire professional programmers to do a complete redesign and repair of all portions of the IHS website over the next few weeks. We are not replacing the work that Joseph did but building on the solid foundations that he created. You will not see many changes during that time as the site will be brought online when the work has been completed and approved by the BOD.

Continued on next page
As might be expected, this is perhaps the largest and most costly undertaking that the BOD has ever undertaken but there is a strong belief on the part of the BOD that this is a task that needs to be done. Within a few days, we will show you how you can help us in this project.

So join us and DARE TO DREAM.

Kes [President]

EDITORS REPORT

In this issue we were to see Jill Corywell’s Nursery in Hawaii but Jill has put it off until later in the year as she is too busy at the moment selling for Christmas and training new staff and hybridizing so we will look forward to seeing Jill’s place later.

Instead I have put up a few different items for your enjoyment and I hope that you and your family and friends enjoyed a Merry Christmas and a great New Year and that in 2011 you will be able to show us some more beautiful blooms from your place.

I have entered an article written by Larry Johnson on the use of Rootstocks and a graph showing how the pH is affected by the pH of the soil in which we grow our plants, Nutrition by R Anning, The use of Dolomite and Lime by Col Campbell, Phytophthora by Wayne Hall, Hybridizing by Allan Little, 2 articles written by me on fertilizer and preparing the soil for your garden, interspersed with bloom photos and the last 2 pages are of the winners of the 2010 SOTY [Seedling of the Year] competition and the 10 winners which are to be grown by the evaluators for 3 years, out of which the HOTY [Hibiscus of the Year] winner will receive $500.00 for their prize.

In the next issue Kes Winwood our President has agreed to write an article on how he grows his plants up in Canada in the cold weather and plenty of photos of his new basement set up, so that is something to look forward to.

Kind Regards JIM PURDIE [Editor]
HAPPY NEW YEAR FOR 2011

I HOPE THAT EVERYONE IN THE WORLD IS GOING TO HAVE A VERY GOOD YEAR IN 2011 AND THAT YOUR HIBISCUS BLOOMS WILL BE THE BEST EVER, PLENTIFUL AND BRILLIANT COLOURS, AND THE WEATHER IS KIND TO EVERYONE.
PHOTOS FROM PURDIE’S PLACE

Garden along the front of our house here in Brisbane Australia

Key West a great bloom from Beth Jordan

Good Times bred by Allan & Elaine Little
Rootstocks

Both Albo and Pride of Hankins are good rootstocks and both are widely used, Pride of Hankins is preferred by folks that grow most of their plants in containers as it doesn't grow as fast nor make the amount of roots as quickly as Albo.

There is a lot of argument about these two cvs and their value as rootstock much of which is simply subjective. A lot of the claims are not conclusive but believed by many. One such claim is that Albo can not take the amount of water that Pride of Hankins can. Albo grows exceptionally here in Southeast Florida where we have the highest rain fall in Florida and Tx or La. It is a very fast grower and requires a lot more water than Pride of Hankins but can feed any scion wood that is attached better than any cv on the planet.

Two of the largest commercial growers of grafted Hibiscus (now both retired) have used Albo over any other rootstock for many years because of its resilience and hardy attributes. One grew 25,000 or more each year and the other grew 80 - 100,000 each year.

To most of us, I am not so sure that it matters all that much. Either will provide a great plant that can be enjoyed for many years. Ten to fifteen years is not uncommon and some make it to 20 years or more. Fungus is the main problem with plant loss and a prevention program is very important no matter which rootstock is used or if the plants are on their own roots.

Hibiscusly, Larry J. In Miami

Graph Showing the pH Scale for Most Plants

The pH scale is based on neutral being at 7 and below is acid and above is alkaline, but it does not fall by 1 to 6 but by a factor of 10 and 5 is 100 times more acid than 7, 4 is 1000 times more acid and the same thing for the other side in the alkaline range. The best growing for hibiscus and most plants is between 6 and 6.5 as shown by the graph below. The pH is raised by the use of lime or dolomite, and lowered by sulphur.
In 1993 I put an article in the AuHS magazine, which I received from Mr. R. Anning of Maroochydore, about the Cationic Exchange in the soil, in which we try to grow our Hibiscus, and I think it is worth repeating, after all this time, to remind our older members and also to inform our newer members, what goes on down there in the ground.

CATIONIC EXCHANGE

A healthy plant will resist disease more so than an unhealthy one. To achieve this the following are required. Sunlight, Water, Oxygen, Soil, Humus and Microbes are the obvious ones, and a plant can survive under these conditions. However, under these circumstances the plants would suffer, due to the bacteria using up the Nitrogen to produce food for the plants. Additional food is required in the form of animal manures and the so-called artificial fertilizers. Up to here all this would be common knowledge to all, but the following may be of interest to the few who may not have this knowledge.

Composts, manures and artificial fertilizers cannot be absorbed by the plant’s roots as such. They need to be converted first to atomic size with an electrical charge on their surface. This job is done by the bacteria in the soil. They convert the manures and artificial fertilizers to positive charged “cations” and negative charged “anions”. To keep this article short, we will discuss only “cations”. These positive charges elements are —— calcium, ammonium, magnesium, potassium, manganese, iron and hydrogen, all are important in plant nutrition. These particles are held in place by the soil, humus etc. with a negative charge produced by the soil. The plants roots search for the particular element cation it needs, say nitrogen, and when found orders the delivery of the cation by releasing a cation of hydrogen from the root hair cell. The positive electrical charge on this cation of hydrogen, neutralizes the negative charge on the particle, and the nitrogen cation is released for absorption by the plant’s root.

In time, these hydrogen delivery cations build up on the hair roots of the plant, and the plant starves and becomes sick. Now is the time to apply calcium to the soil, as one cation of calcium will release two cations of hydrogen from the hair roots of the plant, allowing it to feed again. Positive charged cations are the main macro and minor elements of food which the plant needs, depending on the PH. Negative charged anions are nitrates, chlorides, sulphates and phosphates, and these are not available to the plant in this way.

R. Anning.
USES OF DOLOMITE, LIME & GYPSUM

Written by Colin Campbell, 1993

Recently I was asked about Dolomite and Gypsum: A retailer had told the reader the only difference was that Gypsum was full of sand.

I was horrified; There is a huge difference.

Gypsum is simply calcium sulphate, used to open up heavy clay soils. The only similarity to Dolomite is that they both contain calcium.

Gypsum is pH neutral, so it can be used around acid loving plants without raising the soil pH. It is used in the nursery industry to provide essential nutrients calcium and sulphur in potting mixes.

Most Gypsum in garden centres is a fertiliser by-product and relatively cheap. Heavy clay soils need it on lawns and garden beds.

Working the gypsum into the soil will give best results, but this is only practicable in a vegetable garden or before planting shrubberies, flower gardens and lawns.

Dolomite is sometimes sold as a clay breaker. Because it lacks the balancing factor of sulphur, it alters the soil pH. Dolomite is calcium magnesium carbonate, so it raises the pH. The amount of magnesium depends on the source of the dolomite.

Dolomite is a mineral and the fineness of grinding affects the release rate regardless of the concentration of calcium and magnesium. It has the same ability to raise the soil pH as lime, so it is preferred because of the magnesium content.

Lime commonly sold as garden lime, also helps to break up clay, but not nearly as effectively as gypsum. Lime is calcium carbonate and, like dolomite is used to raise the soil pH.

Remember lime contains no magnesium.

Lime or dolomite should be used at least 6 weeks before planting any legumes and trees such as poinciana.

Because of the reaction between calcium and some fertiliser nutrients, never apply fertiliser at the same time as dolomite or lime.
This is some of the info I have on Phytophthora. There seems to be no apparent cure for this disease and most recommendations seem to agree that isolation of plants away from other plants is the only way to keep it from spreading.

It is a soil borne pathogen. A lot of these pathogens are water activated and use water as a transfer medium. Some of these diseases can remain in the soil almost indefinitely. You might try a soil drench using Captan on all your plants to keep it from spreading.

**Soil Preparation:** Regardless of whether the pathogen is present in a soil it is important to add quantities of organic matter such as mulches, manures and composted material to the area [if this is appropriate to the plant species]. These components increase the level of soil microorganisms, such as fungi [eg. Trichoderma], actinomycetes and bacteria, which suppress the activity of pytophthora and retard disease development. Mulches also minimize the contact between soil and foot wear so there is less potential for the transport of soil. Maintain nutrient levels so that root growth is promoted, but however do not use inappropriate nutrient mixes that may be deleterious to the plant [ie. Take care with phosphate sensitive plants]. Ensure that drainage is adequate to prevent water logging, which promotes disease incidence and severity. All water run off from known affected sites should be contained and directed to the storm water channels. Remember that water can very easily transport the swimming zoospores of pytophthora cinnamomi.

**Prevention and Caring of Infected Plants:** Fungicides containing potassium phosphate are registered for control of this disease in certain situations. Information on these fungicides can be obtained from your local nursery or on the websites of the manufacturers. It is however important to ensure that application occurs when the plant can be expected to be actively exporting from the leaves to the root system ie. In summer [once in early summer and then 4-5 weeks later] so that the chemical is transported to the roots where it is required. Plants should be sprayed for quite a wide area around the infected site. If you have to move or replant material, never move an infected plant site to an uninfected site. If the species is required in these circumstances, re-propagate by cuttings. As is the case in original plantings, the preparation of the site, the addition of organic matter and the attention to drainage are all essential when re-planting material.

When removing plants it is essential to remove as much of the tissue, including roots, as possible. The pathogen may persist in dead tissue for many years. Dead roots and any pruned material should be disposed of carefully. Do not replant in the same plant hole, where possible plant away from the dead plant, preferably upslope as plants down slope from any site of infection will be at greatest of risk from the disease. Remember that unassisted movement of pytophthora up a slope is very slow, while downward movement may be quite rapid.

**Hygiene:** Sanitation of tools, machinery and boots is probably the most effective means by which the spread of Phytophthora cinnamomi can be limited. Spades and other tools should always be washed free of soil before and between plantings. In addition, tools should be regularly drenched in a solution of detergent or disinfectant. A large drum containing this solution should be placed in a convenient place in the depot and tools should be regularly brought back, washed to remove soil and drenched. The more frequently this is done the better the control of any soil borne diseases, particularly Phytophthora, will be. In situations where you are planting a number of plants take a container of disinfectant with you and disinfect tools between replanting. Boots and tyres are also an important means by which Phytophthora may be transported, as soil containing the fungus may cling to the boot or tyre. Wherever possible remove soil from boots and tyres and limit the movement of soil and the fungus. Vehicles should move towards known infected areas and be washed down after working in these areas before use in clean areas. It may not always be feasible to remove all soil, however limiting the movement of large amounts of soil by washing off with water will suffice in most situations. Sanitation procedures may seem time consuming and annoying, but prevention and limitation of a disease such as Phytophthora is the most effective means of disease control.

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Keep ’em Green
Semper Fi
Wayne-Gilbert, AZ
HYBRIDISING
By Allan Little

When I hybridize, I firstly look for cultivars that have good growth characteristics, i.e. Rosalind, Ronda D, [and others]. I have discarded many cultivars with very nice blooms [like Touch of Class] which bloom rarely on poor growth bushes, although I realize that there is still a slight chance of a good result if crossed with a cultivar of better growth habit.

I next look for a prolific bloomer when selecting parents. New seedlings which do not bloom frequently will soon fall by the wayside. With the above in mind, I now look for different colours, other than pink and reds which seem to be more common. That is why I have been trying to add some mauve, purple and brown blooms to my stock of hybridizing plants.

Multi-colour blooms always stand out from the crowd, and I am always happy to see this in the new seedling blooms. Colour is not always easy to predict, however, as this can be influenced by the Grand Parents and the Great Grand Parents, as well as from the mother and father. A family tree of your hybridizing plants can be very useful.

I personally look for doubles [although I still like singles or a good miniature] and that is why I continue to use cultivars like Anna Elizabeth & Rosalind which oblige more often than not.

On any competition bench here in Australia, the singles usually outnumber the doubles by a large margin. In the next few years I would like to see this trend halted with many more doubles on the bench. I also lean towards larger blooms rather than small, as there always seems to be more acceptance by the general public.

In my opinion, a miniature has to be really special to stand the test of time, although I realize they may bloom more frequently than larger blooms. Texture always plays a part in my selection of parents and commonsense tells me not to cross breed with two weak textured plants, I like blooms which do not re-curve and strong textured plants help in this regard. I also find that strong textured plants generally last more than one day.

Having said that I still remember my first seedling bloom, and by today’s standards, it was pretty ordinary, but for sentimental reasons, it took me a full 2 years to trash it.

Jim Purdie was bred by Allan & Elaine Little from the parents of Emerald Isle X Tigerama. HOTY 2010 in Australia.

Georgia’s Pearl X Jason Blue was bred by Allan & Elaine Little.
WHEN TOO MUCH FERTILIZER IS HARMFUL
Written by Jim Purdie

When you apply too much fertilizer, this can be harmful to your plants, because some fertilizers when used too heavily will produce too much salt for the plant to handle, and what happens is the concentration of salts in the soil solution surrounding the roots exceeds that of the concentration in the plant, the fluid or sap within the plant is drawn into the soil as a result of osmotic pressure.

Similarly the nutrients contained in fertilizers are drawn into the plant by that same principle, osmosis.

The principle, when the sap is taken from the plant into the soil, is usually referred to as plasmolysis, and is the reason why plants die, when an excess of fertilizer is applied.

All fertilizers contain various salts, even organic fertilizers break down into the soluble salts of nitrogen, phosphorus, potassium and other elements.

The recommended rate of fertilizers is designed so that the concentration of salts around the plant roots will not exceed the concentration within the individual cells. While this balance is maintained, the plant will take up the nutrients and continue to grow.

When you are heavy handed and apply too much fertilizer you risk plant damage. Many of you will avoid plant damage because there will not be enough moisture in the soil to dissolve the plant nutrients, especially when you have conditions of less rain. Problems rarely arise until such time as there is enough moisture to dissolve the nutrients. As soon as moisture is applied, an excess of salts accumulates around the roots, and plasmolysis starts.

If the excess is not great, the sap will be reduced just enough to cause the leaf margins to break down due to insufficient sap reaching their extremities. In this case a drenching with water will generally leach out enough of the salt to ensure there is no further damage.

In extreme cases, there will be so much sap removed from the plant that all the metabolic functions will cease and the plant will die.

For this reason you are advised to follow the recommended rates on all fertilizer labels, whether they are organic or inorganic.

This process is sometimes used to remove weeds from lawns.

BALI SUNSET won Hibiscus of the Year for 2010 here in Australia and was bred by Alfred Westerman from the parents of June’s Joy X Masterpiece

CECELIA WYATT was awarded a Highly Recommended Certificate in the HOTY competition for 2010 and was bred by Phil & Mavis Barry from the parents of Frilly Knickers X Tarantella
PREPARING THE SOIL FOR A NEW GARDEN
Written by Jim Purdie

When I decided to start a hibiscus garden at my place, I found the ground was all shale and clay, and this is not an ideal medium to try and grow plants of any sort. The trouble is when you dig a hole to put your plant in, when it rains the water cannot soak away and the plant is sitting in water, and the plants drown and you lose your plant to root rot, you may have just as well planted it in a bucket of water.

So I cleared the grass, and built up the sides with timber planks, to about 14 inches above the ground, and brought in some good sandy loam, and filled the gardens to just below the top of the boards, and then I added some manure, compost and blood and bone, and dug all this in.

Then I added some dolomite to bring the pH up to 6 to 6.5, which is the ideal range of pH for the plants to be able to take up nourishment from the soil, as if it is below or above this range the elements in the fertilizer become locked up in the soil, and is not available for the roots to absorb.

To explain pH a little more, the range is from 0 to 14, with 7 being classed as neutral, anything above 7 is alkaline and below 7 is acid. But 6 is not just one degree of acid, as each number below is multiplied by a factor of 10, so 6 is 10 times more acid than 7, 5 is 100 times more acid, 4 is 1000 more acid, and so on. The same applies to above 7 in the alkaline range.

Dolomite or lime, are used to raise the pH in the acid range, and sulphur is used to lower the pH in the alkaline range. I like to use dolomite as it contains both calcium and magnesium, which is beneficial in the growth of hibiscus, while lime only contains calcium, but both will raise the pH. I usually find that dolomite takes two to three months to raise the pH, so you need to use it well in advance of planting your plants to have the soil at the right condition for your plants to make a good start.

I think one of the very necessary tools that every gardener should have is a pH tester, and the one I use has a blue liquid and a white powder, and the way you use it is to get a sample of soil and apply a few drops of the blue liquid to the soil, mix it together, and sprinkle a little of the powder on the soil mix, and you will see it change colour, they supply a card with a range of colours on it, and you check your colour of your sample against the card and this will tell you what the pH of the soil is, quite simple really, and this applies to all plants not just hibiscus, you must have your pH right or you will run in to all sorts of shortages of the necessary elements, and your plants will have a range of faults, such as small leaves, leaves that have yellow veins, and the plant will not flourish etc..

People who grow their plants in sandy soils do not have to worry about raising their garden beds, but need to dig in lots of organic matter and keep on adding it, to make the sand hold more moisture and fertilizer, because in sandy soils the water just soaks away very fast and you cannot keep the water up to the plants, and the same with fertilizer, it just soaks away down below the roots and the plant starves, with the result you do not get good flowers or none at all, but this is overcome if you follow the above of digging in copious amounts of organic matter which the plant roots can access.

Bonnie Judy won the Sunshine Coast Branch Trophy for “Seedling of the Year” for 2010
A Miniature bred and won by Walter & Judy Willcox, from the parents of Bonnie X Unknown
Winners of the SOTY/HOTY 2010 Competition

Bob Carran entered by Pushpa Suresh winner of the Seedling of the Year [SOTY] for 2010

Tahitian Superb entered by Richard Johnson won second place

Moorea Sahara entered by Richard Johnson won 3rd place

Tahitian Magenta King entered by Richard Johnson won 4th place

Tah. Imperial Queen Richard Johnson won 5th place

Tah. Dragon’s Lair Richard Johnson won 6th place
SOTY/HOTY WINNERS CONTINUED

Eku’u Morning Dew entered by Kerry Mitchell won 7th place

Tihy entered by Nina Bjelovucic won 8th place

Tahitian Lovely Lilac entered by Richard Johnson won 9th place

Tahitian Imperial Mountain entered by Richard Johnson won 10th place