HENDRY HERALD

JAMES E. HENDRY CHAPTER
of the AMERICAN HIBISCUS SOCIETY

WHEN YOU GARDEN, YOU GROW

hendrychapterhibiscus.com JANUARY 2023

HAPPY NEW YEAR!

2022 HOLIDAY PARTY WAS ENJOYED BY ALL. FOOD AND FRIENDSHIP ABOUNDED. THE EVENING WAS A GIANT SUCCESS!

photo by JERRY McINTYRE

This is our photographer JERRY! Taken by a non-photographer!

HY'S WAY FOR JANUARY

Do not prune hibiscus until the last week in February except for damaged or diseased branches. Pruning results in new growth and new growth could be killed by a frost or cold spell in January. Remember, **blooms arise on new growth**, not old growth, so you don't want to kill new growth by pruning too early. February notes will contain pruning information. Keep watch on your plants at least weekly. For up-to-date information regarding INSECT MANAGEMENT on hibiscus see Lee County Extension Service. http://sfyyl.ifas.ufl.edu/lee

FOLLOW HY'S ADVICE AND YOU WON'T GO WRONG!

Potassium ~ The Least Understood Plant Nutrient

And the Most Neglected! from HIDDEN VALLEY HIBISCUS

Potassium is the least understood of all plant nutrients, plus it is expensive to put into fertilizer. So it has been the most neglected nutrient in plant fertilizers. Other plant nutrients end up forming part of the actual molecules and cells that make up plants, but potassium is not found in any molecules anywhere in plant tissues! So why is it important? We never really knew before. Only experience over time taught farmers that plants go downhill, stop producing, and eventually die without potassium. Finally now plant science is advancing, and little by little we are learning more about this unusual nutrient.

All Plants Need Potassium, Not Just Hibiscus

For years we have been telling hibiscus gardeners about the extreme importance of high levels of potassium for hibiscus, but it turns out that potassium is just as important for other plants too! It is the most neglected of all plant nutrients for growers and gardeners of all kinds of plants. Scientists and growers are discovering that many (possibly most!) plants need to have more even more potassium than nitrogen in their fertilizers.

So what does potassium do? Why is it so important? There's still a lot we don't know, but one thing we do know is that plants suck up huge quantities of potassium if it is available in the soil. The more a plant grows, the more potassium it needs. The more the roots grow, the more potassium it needs. The more it flowers and fruits, the more potassium it needs. This applies not just to hibiscus, but to most, or perhaps, all plants. Potassium must be extremely important in all aspects of plant growth because of the huge need plants seem to have for it. So with the help of recent scientific research, let's see if we can pin down a little bit more about what exactly potassium does.

Potassium is the Key to Building Cell Sap

Potassium is found in the *cell sap* of plants. This is the nutrient-filled water that hangs out in the empty spaces inside cells. Cell sap can take up to 80-90% of the space inside cells. Potassium is key to the creation and maintenance of cell sap. Plenty of potassium keeps the cell sap spaces, or *vacuoles*, plump, full of cell sap, and able to hold all the nutrients that do so much to make plants healthy. We don't yet know all the important things that cell sap and potassium do, but here is what we do know:

Cell sap makes strong wood, stalks and branches:

When all plant cells are full of cell sap, the plant stands up straighter, taller, with heavier, fuller stalks and branches. The pressure of the cells against the outside of the plant helps build stronger wood. When a plant is deficient in potassium, it will start to look more stunted with weaker, floppier wood and branches. Eventually cell sap will diminish to the point where the plant starts to look limp, and in severe cases of deficiency, the plant can slowly collapse and die.

With insufficient potassium, flowers don't develop these colors. With high amounts of potassium and super healthy cell sap, the blues, browns, and deepest reds become much darker and brighter.

Glucose is stored in cell sap: The main food that plants use for the energy of growing and blooming is glucose. Glucose is stored in cell sap, and like all other nutrients in cell sap, the healthier and plumper the cell, the more glucose it can hold, and the more fuel there is for the plant to grow and bloom.

Cell sap helps drive away predators:

Healthy plants break down old, dying cells in cell sap. This process releases a bitter taste throughout the plant that bugs and animals don't like, so it makes them stop eating the plant. It's a sad fact that a plant that has been stressed by heat, drought, flooding, cold, or any other environmental stressor almost always ends up getting a bug attack right at that moment. This is because a sick plant can't break down its dying cells to create the protective bitter taste. A stressed plant needs extra potassium to help turn dying cells into the bitter taste that will deter predators.

Cell sap recycles plant parts:

When plant waste is broken down, the cell sap stores the different molecules so the plant can use them for new parts. So healthy cell sap functions as a sort of recycling center for plants, making sure that waste does not build up but gets reused to make new healthy plant parts instead.

Cell sap stores toxic substances that fight off predators:

Toxic substances that enter a plant are moved into the cell sap and stored there. This prevents damage to the plant primarily, but it has the secondary function of making the plant toxic to different types of predators.

Protein and amino acids are stored in cell sap:

Cell sap stores proteins and amino acids that plants use to build everything - wood, leaves, flowers and pigments. More and healthier cell sap is able to hold more of these building blocks for more and better plant parts. Plenty of potassium makes plenty of cell sap, which in turn makes a healthier plant with lots of lush green leaves and large, fully developed flowers.

Flower pigments are stored in cell sap:

Cell sap contains flower pigments that make all the different colors in flowering plants. The more potassium and cell sap a plant has, the more pigments it is able to store and use to make flowers with the widest variety of colors and the most color-saturated pigments. The anthocyanins that make blues, browns, and the deep reds are water soluble and fragile, so these are the colors that completely depend on cell sap, and hence potassium.

Potassium is the Switch that Turns on Many Plant Processes

Potassium is a little chemical switch, called a *co-factor*, that switches on processes all over the plant, from photosynthesis to building of proteins, creating sugars, transporting nutrients, storing energy, storing sugars, and many more. It is a co-factor in more than 60 different processes in plants ~ way too many to list here. Scientists will surely soon discover many more that we don't yet know about! In order for plants to grow, get nutrition, use energy for flowering, and everything else plants need to do, they have to have plenty of potassium at hand, all over the plant, to switch on every one of these processes.

Potassium is the Transport Supervisor for the Whole Plant

Potassium is involved in every aspect of transport in a plant, moving food, nutrients, and chemicals all through every part of the plant. Plants don't have little pumps in them to move nutrients around - they don't have a heart that pumps like animals do. So they move nutrients by a passive process called *osmosis*, aided by potassium. Potassium floats as *free ions* in the water all through the plant, and pulls water and nutrients in its direction. Where there is more potassium, more water and nutrients are pulled - into cells, up into the plant from the roots, wherever water and nutrients are needed. Potassium is necessary to keep every single part of the plant properly fed and hydrated, from roots, stems, and stalks to leaves, flower petals, and each individual cell that makes up a plant.

Potassium Controls a Plant's Breathing or "Transpiration"

Plants "breathe" or transpire through tiny holes all over all the leaves called *stoma*. When a plant is plump and full of water, the stoma are wide open, pulling in maximum amounts of carbon dioxide to use to make food. When water levels are too low, potassium makes the stoma close up to seal off any loss of water and prevent the plant from dying of thirst. When water levels are high again, potassium opens the stoma back up so the plant can start to make food again. It is because of potassium that our plants go limp when we forget to water them, then pop back up again when we remember to water them. This does stress our plants, but thanks to potassium, they don't die!

Potassium Provides Some Frost Protection Potassium helps protect a plant from frost in several ways. First, it helps plants make more sugars, and sugar is a natural anti-freeze. When the cell sap has plenty of potassium, the plants can store more sugars, packing more of this sweet anti-freeze into each cell of the plant. In addition to this, potassium itself functions as an anti-freeze! So a cell that has a lot of sugar and potassium both will have the strongest possible anti-freeze protection and can survive light frosts easily.

Potassium makes plants healthier in every way ~ lush green growth, more blooming, bigger flowers with more colors.

Hidden Valley Hibiscus **news@hiddenvalleyhibiscus.ccsend.com**

UF - IFAS EXTENSION, UNIVERSITY of FLORIDA **January**

What to Plant

Annuals/Bedding plants: Plants that can be added to the garden during the coolest months include begonia, browallia, lobelia, dianthus, dusty miller, and nicotiana.
Bulbs: Winter is a great time to plant bulbs that will bloom in the spring. Some examples include Clivia lily, crinum, and agapanthus
Herbs: Many herbs will thrive now that temperatures are cooler, including tarragon, thyme, dill, fennel, and any of the mints.
Vegetables: Many vegetables can be planted this time of year. This the last month to plant Irish potatoes, beets, broccoli, brussels sprouts, cabbage, cauliflower, collards, kale, mustard, and turnips

What to Do

Landscape: It is a good time to plant woody shrubs. Water frequently to get new plantings off to a good start
Irrigation: Water plants if temperatures remain higher than normal and rainfall is scarce.
Shrubs and trees: Prune non-spring flowering shrubs and trees this month to improve form.
Arbor Day: Celebrate Florida Arbor Day (the 3rd Friday of January) by planting a tree in your yard or community.
Crapemyrtle: Remove seed pods, crossing branches, and small twiggy growth to improve the appearance and form of the plant, if desired. Hard pruning is not required.
Cold protection: Bring sensitive plants like orchids inside if a frost or freeze is predicted. Thoroughly water and cover sensitive plants in the landscape 12–24 hours before a freeze.
Pests: Apply horticultural oil to citrus, shrubs, and deciduous fruit trees while plants are dormant to control scale. Apply copper spray to mangos after bloom

MESSAGE FROM PRESIDENT JACK BERNATZ

Happy New Year!!!!

2023 is here !! Love this time of the year, promoting the gathering of Family & Friends. A huge thank you to our Holiday Party put together Group, Barb Yekel & Cathy Dunn. Everything about our new venue “The Whiskey Creek Golf Club”, was wonderful! Our waitstaff were so very prompt with our beverage requests, serving our food, then takeaway of our dishes and waste (packaging), always pleasant and asking if we needed anything else.

Totally uplifting experience.

Cathy introduced us to, gift in exchange for your gift of choice, only to have it become someone else's must have gift. Some clever negotiating developed, its worth going to the Party to be witness to some of our cunning gift gatherer’s! Strategy even some discord was presented by our one and only Master of Developing questionable motives for gift swapping, Paul Zinzser kept our temperament on the light side, thanks Paul.

Along with the Merry Christmas/Happy Holiday, We wish all of you a Happy and Blessed new year.

Pictures of the events can be found on our website (Hendrychapteribiscus.com), I urge you all to visit the site frequently.

Hope to see you all soon, JACK

Growing Bulbs in SW Florida CATHY DUNN

What flowers come to mind when you think of bulbs? Probably blooms such as tulips and daffodils, which are such familiar harbingers of spring in colder climates. But these types of bulbs are problematic in SW Florida because they require an extended period of cool dormancy to trigger their blooms. It IS possible to have tulips in Florida if you purchase bulbs that have been 'pre-chilled' for 2 to 4 months and plant them in the winter, but chances are that the hot Florida sun will cause your flowers to decline rapidly, and the bulbs rarely bloom again.

Rather than trying to force a non-tropical plant to flourish in the wrong environment, you should try your hand at growing bulbs that thrive in SW Florida. There are many varieties of bulbs that can be added to your gardens that will provide not only a colorful addition to your landscape, but blooms that can be used in indoor arrangements. And the bulb's long, strappy foliage also provides an interesting contrast in your garden.

What exactly is a bulb? A bulb is basically a thickened underground storage organ which allows a dormant plant to survive unfavorable environmental conditions. Bulbs provide nutrient and water storage during dormancy and in stressful periods such as cold, heat or drought. In SW Florida, most bulbs thrive in sunny locations but some bulbs, such as caladiums, will tolerate partial shade. Gardeners can choose from a wide variety of tropical and subtropical bulbs including Agapanthus, Amaryllis, Cannas, Crinum Lilies, Crocosmia, Hurricane Lily, Rain Lilies, and Spider Lily.

To ensure success, your garden site should be well-drained and improved with organic matter such as peat moss or compost. Make sure your bulb is right side up when you plant it; the bulb will have a smooth tip and a rough underside, which is the root area of the bulb. Follow the cultural instructions for the proper depth and distance between bulbs, and the fertilizer requirements for your bulb. Some bulbs, such as amaryllis, will produce seed heads after flowering; if these seed heads remain on the bulb it will take some of the bulb's energy and you will have less flowers the next year. It's always a good practice to 'dead head' your blooms after they fade; this will help the bulb preserve energy for the next blooming period. But don't cut off the yellowing leaves of your bulbs; the leaves are providing food and energy for the bulb and removing the leaves before they are completely brown and withered will deplete your bulb's storage capacity.

When should you plant bulbs? Some bulbs can be planted now in the fall, including gladiola, which will produce blooms about 3 months after planting. To extend the blooming period try planting the bulbs at 2-week intervals to enjoy the colorful spikes of bright blooms longer in the late winter/early spring. Amaryllis bulbs are widely available at the holidays for indoor blooms; you can find these bulbs at the big box stores as well as at specialty nurseries. I have had success growing these bulbs in pots for blooms indoors at Christmas, and then I just transfer them to the garden where they will multiply rapidly and bloom in the spring (though usually not the first year after you plant them.)

You can get a head start on summer flowering bulbs by starting them in pots in the spring; caladiums, cannas and blood lilies are easily started in pots for transplanting into the garden. Use well-drained potting medium and 6 to 8 inch pots to start these bulbs, placing one bulb in each pot. The pots should be kept in a warm spot outdoors with good sunlight. As temperatures begin to rise you should move the pots to the garden for acclimation before placing them in your landscape. This technique will provide fuller plants with beautiful blooms sooner!

I order bulbs directly from growers to ensure a broad selection of the highest quality bulbs. Two of my favorites are Brent and Becky's Bulbs in Gloucester, VA (https://www.brentandbeckysbulbs.com/), and White Flower Farm in Litchfield, CT (https://www.whiteflowerfarm.com/). These growers offer a wide selection of unique bulbs that are well suited to our sub-tropical climate, and you will have beautiful specimen plantings that are the envy of your fellow gardeners!

As residents of the Sunshine State, we are truly fortunate to have an unsurpassed resource for extensive online gardening information. The University of Florida has excellent information on growing bulbs, with recommendations on the various bulbs that thrive in our climate as well as planting tips and detailed publications on bulbs. (https://edis.ifas.ufl.edu/topic_bulbous_flowers) I hope that you have been encouraged to try some bulbs in your landscape; they are low maintenance additions to your gardens that will reward you with spectacular and unusual blooms for many years!

Cathy Dunn, Florida Master Gardener Volunteer,Member Garden Club of Cape Coral, JEH MEMBER

This hibiscus image was copied from the New Orleans Newsletter. Its name is Gladys O'Saka and it is a beauty in miniature. Father Robert Gerlich, S.J.writes:

"Many years ago, when I first became fascinated with hibiscus, I fell in love with this diminutive cultivar. It produced the smallest flower that I had ever seen; it was no bigger than a silver dollar.

If I remember correctly, the foliage was a healthy dark green and the flower had a small "tear drop" of nectar at the base of the pistol. Despite being compact in size, the plant was relatively free-blooming.I no longer have a source to replace the one I lost in a cold snap. I did share the plant with a couple of other people (always a wise precaution), but they too lost their plants around the same time that mine died, probably for the same reason. I've been looking for another plant for years, but without success.

Flowers like Gladys O'Saka remind us that it is important to share cultivars.

Indeed, this is one of the goals of our society — to make rare cultivars more widely available. All cultivars begin with just a single plant raised from seed. To secure their survival and to make them available for others to enjoy, we must multiple them asexually, either through grafting or cutting. That is why I think it so important for our members to learn these techniques, for while professional growers play a vital roll in propagating cultivars, they can't do it all.

LORI ANDREWS	1/4/
WES ROWE	1/7
CANDACE RYAN	1/31

We come from the earth, we return to the earth, and in between... we garden." □ Author Unknown

JANUARY 8th, 2023 JEH CHAPTER MEETING

Berne Davis Center, 2166 Virginia Avenue, Fort Myers, FL 1:30 for bloom entry

Guest Speaker & Florida Certified Master Naturalist

TONY MAURIELLO

Tony Mauriello retired to Florida and within a short time became a Florida Certified Master Naturalist . Tony's early experience bloomed as a volunteer at various plant nurseries at Lovers State Park and the Sanibel Captiva Conservation Foundation, where Tony gained extensive knowledge in horticulture. Tony is the past president of the Lee County Chapter of the Florida Native Plant Society and has led nature talks at several local State Parks and will be speaking to us on the topic of POLLINATOR FRIENDLY GARDENING.

The presentation promises to be informative. So bring your pens/pencils and get ready to learn something new or sit back and enjoy the presentation. We hope to see you all there on January 8th, 2023! *Submitted by Micki Dougherty*

HOPE TO SEE YOU JANUARY 8 @ 1:30 FOR A GOOD MEETING
BRING BLOOMS FOR THE MINI CONTEST

barbara oster, editor ELAINE & TERRY MARTIN-mailers