

TAIS Newsletter

Our 55th year

Tucson Area Iris Society—established 1965

An Affiliate of the American Iris Society



'Heat is On'
(Johnson 2013)

Kary Iris Gardens,
Scottsdale, Arizona

Photo by Sue Clark, 2020

Acting President's Message

Finally a TAIS gathering! - Long time member Kristee West is donating the contents of her iris bed to us. We will meet at her Green Valley location and dig the rhizomes. Even though this is an outdoor activity, please wear a mask. As we will not have a rhizome sale this year, consider a donation to TAIS for the digging privilege. I'm looking forward to seeing you there. Thank you, Kristee. 9/12 at 8 AM, Plot #52 in Desert Meadows Park, 999 La Huerta near corner of Continental and Abrego, south Green Valley.

- Kevin Kartchner

"Let this be your motto, have it engraved on your soul. Beauty is wealth." - Rev. Charles Harrison, author of *A Manual on the Iris*, 1909

Inside this issue:

<i>Iris Growing Tips from the Horticulturalist at the Tucson Botanical Gardens</i>	2-3
<i>Treasurer's Report</i>	4
<i>Species Iris: Louisiana Irises - article & photos</i>	4
<i>3rd Annual Photo Contest Guidelines and Voting</i>	5
<i>What to do in the Iris Garden for September</i>	6
<i>Iris Haiku, Did You Know?</i>	6
<i>Tips, Bit of Botany and Iris History</i>	6

Upcoming Events

Rhizome Dig for Donation: Sept 12, 8 AM, Desert Meadows Park Community Garden Plot, Green Valley. Kristee is retiring a big plot. She has 36 varieties and approximately 130 rhizomes to give to members who will dig them. Donation to TAIS. Bring mask, shovel, Sharpie, bags.

TAIS Plant Trade Days: If you have excess rhizomes, seeds, or plants to trade or give away to fellow members, please email a list of what you have to taisnewsletter@yahoo.com. Place items on your front porch September 12-13 or bring to the Dig.

TAIS Rhizome Sale: Cancelled due to pandemic.

October 10: TAIS Zoom showing Photo Contest winners. See p. 5.

Birthday Wishes to:

Mike Elliot Jane Parks
Roger Osgood Lenore Mackey

We note with sadness the recent passing of long-time member Paul Bessey at age 95. And we send healing thoughts to members Shirley Andrews & Diane Tweedy.



Wm Curtis Botanical Magazine



Iris Growing Tips from our Zoom Session with Adam Ferrell-Wortman, Horticulturalist at the Tucson Botanical Gardens (TBG)

8 Aug 2020 - Nineteen iris fans enjoyed a Zoom presentation by Adam Ferrell-Wortman of the Tucson Botanical Gardens. We had two guests from our sister club in Prescott, as well as other friends who joined us to learn why TBG has some of the best-looking irises around!

Adam's Iris Growing Tips

Adam approaches gardening as a practice of ecology and has converted TBG to organic methods. His main focus is on developing the soil, as healthy soil ecology is crucial. The microbes in soil provide what plants need for healthy growth.

Mulch: If mulch is not your best friend, it should be! Besides helping soil retain water, it also wicks away excess water and provides a layer of protection against UV radiation which can harm soil microbes as well as our rhizomes. Mulch reduces dust and soil erosion. It reduces the amount of watering needed and makes it easy to find driplines when they need their inevitable repairs. Mulch will lower the soil temperature by 10-15° in mid-summer, and raise it by 10° in winter, creating a more stable growing environment for plants. Although mulching is KEY to gardening, it is seldom done in Tucson!

Pecan mulch is Adam's choice. Since it is acidic (low pH), it helps neutralize our alkaline (high pH) soil and water. A 2" to 3" layer of mulch is best (3.5" maximum).

A bit more on mulch from Adam's answers to my emailed questions:

Wood chip mulch is a good second choice. Avoid fine-grained mulch, which holds too much moisture and can mat at the top and bottom, preventing adequate oxygen and moisture from reaching the plant. If rhizomes are buried, keep mulch an inch or two away from the leaves. If rhizomes are exposed, it is fine if the mulch touches the leaves.

Shade: Every plant in Tucson appreciates afternoon shade, even if its label states otherwise! Even dormant plants can undergo stress. If you cannot add shade, then mulch the plants to reduce the temperature of the root zone. Iris foliage is going to burn a bit in summer, but keeping the roots happy and healthy is essential.

Fertilizing: Most gardens, even xeriscapes, need more organic matter in their soils to best support plants. Adam prefers the following non-processed organic amendments: bone meal, feather meal, blood meal, humic acid, and fish emulsion. These can be applied at any point during the year - the plants will access the nutrients when they need them. A top-dressing of compost will provide a consistent source of nutrients.

Adam applies fish emulsion as a foliage feed when the irises are

putting on new foliage. This is the only case in which he feeds the *plant* and not the soil.

Work on improving garden soil *before* new growth appears on irises. Aerate soil and fertilize with the various materials mentioned previously.

Humic acid and fish emulsion will add organic material without the need to dig up an established garden bed, since they percolate down through the soil. Adam also uses greensand (sparingly because it is mined), and mentioned that it adds important micronutrients.

Rhizome depth: Although tradition dictates that we plant our rhizomes with their surfaces above ground, Adam recommends that they be planted 2" beneath the soil surface and then mulched. He researched the best practices of iris breeders and growers, since their livelihood depends on successful growing and not on following conventional "wisdom." They are the ones doing the science and tracking growing protocols. And what do they say? Ultraviolet radiation from the sun damages exposed rhizomes, and reduces bloom in three ways - time, size, and frequency.

Asking Why?: If you have to do something to help one type of plant that is failing, stop and ask why. Adam related a story of some blueberry bushes in his charge that were on a decline. Why? Well, blueberries like acidic soil. Why? Because they have a hard time taking up nutrients. Mycorrhiza (a symbiotic relationship between a plant and a fungus) helps plants absorb nutrients when attached to the plant's roots. So adding some mycorrhizae did the trick!

Mulch, mulch,
mulch!
Who knew?



We're on the web!
Tucsoniris.org

Iris Growing Tips from our Zoom Session with Adam Ferrell-Wortman, Horticulturalist at TBG, continued...

So *why* were we all taught to plant our rhizomes with their surfaces exposed? Since rhizomes tend to rot if they are in soggy soil, people planted them up high to reduce this risk. Adam said that since Tucson doesn't get much rain, the only way rhizomes will rot is if they are in a clay-rich soil that prevents good drainage. So we need to adjust and amend the soil.

Watering: We don't want our irises to be stressed during the summer even though they are dormant, so summer watering is crucial. Adam waters the beds twice a week (Mondays and Thursdays) for at least 2 hours each time during the summer. The beds are equipped with in-line drippers spaced 6" apart. This is enough to create hydrozones throughout. The 1/2" tubing is spaced about 2-3' apart and rather zigs and zags across the bed. If using 1/4" tubing, the lines would be closer together to provide adequate moisture.

Adam begins watering more when he sees new growth on the irises. This is also the time he begins paying more attention to the beds. Rather than following a specific schedule, he waters when the rhizome zone is dry and mentioned that the roots like to have consistent moisture. Use a moisture probe to determine when to water, even in a bed of irises. You may have to loosen the soil to be able to insert the probe. If rhizomes are exposed to the surface, insert the probe to 1/2" below the rhizome to see if it needs water. After a few times, you should be able to determine a watering schedule for that season.

Companion plants: The iris beds at TBG now have Oriental poppies and purple verbena (which Adam pulls when it gets out of control). See photo, right. The desert bluebells there bloom a couple weeks before the irises, so extend the visual interest. The goal is for the beds to be appealing year round.

Adam advises mixing lots of plants, even if they are not supposed to grow with other plants. Look for ones with different profiles and different root profiles. Iris roots grow downward, so chose neighbors that have shallow lateral roots.

After seeing how successfully irises grow in Tucson, Adam was inspired to try more bulbous, tuberous, and rhizomatous plants, including daffodils, dahlias, African iris; and even Japanese irises, which he planted in the splash zone around a fountain because they don't mind wet feet. He urges us to try all sorts of different plants even if they aren't supposed to grow here. He wants to grow *Iris missouriensis* var. *arizonica*.

We are invited to let Adam know what we grow with our irises.

Upcoming in the iris garden: Sections of irises whose names fall into themes will add year-round interest. The first up is a music-themed section, which will likely have a sculptural element, as well.

Adam is looking forward to a second year of fall blossoms from the reblooming irises. He mentioned that summer shade is essential for these.

Request: Adam is interested in our input on the iris bed, both in regards to design and for ideas. Let him know what grows well with your irises.

Tip: There is no one right way to

garden, but lots of wrong ways!

Sources: Greensand - look at various catalogs and websites for best price. Pecan mulch - you might get free or low-cost truckloads from pecan growers in Green Valley. Or try Acme Sand & Gravel for some of the best mulch prices in Tucson. - SC



Right: Photos of most of the guests, and Adam's photos of iris beds at TBG.

Treasurer's Report for August - submitted by Martin Juarez

Beginning Balance					\$6,063.10
Date	Pd	MOP	Deposits	Expenses	
24-Aug		#1850		\$75.00	Farrell-Wortman (speaker)
24-Aug		#1851		\$414.20	Clark - copies, stamps, club iris' *
25-Aug			\$13.00		Benedict (2) - #1708
Sub-Totals			\$13.00	\$489.20	
Ending Balance				\$5,586.90	8/25/20 13:38

* Club Iris' to be distributed to/among Board Members by Kevin (per Sue)

NOTE: Anyone requesting reimbursement for any expense is asked to please submit an original receipt/invoice for auditing purposes (as motioned and passed by the group) in a timely manner. Also, please do not mix/combine personal expenses and group expenses on/in the same transaction/receipt.



From top: *Iris hexagona*, *I. brevicaulis*, *I. giganteaerulea*, *I. fulva*, *I. nelsonii*, and 'Cherry Twist' (Pryor 2002). All photos from the Iris Wiki.

Species Iris, Part I: Louisiana Irises

Native mostly to wetlands along the Mississippi and Ohio Rivers, the five species of Louisiana irises also make lovely garden flowers, as do their hybrids. See photos at right. This group, known as the Series Hexagonae for their six-sided seedpods, is named after *Iris hexagona*, which grows in the lowland regions of Georgia, the Florida panhandle, and South Carolina. *I. hexagona*'s flowers come in blues and purples. This species has not been used to develop modern hybrids, but the other four have. *I. brevicaulis* has spread upriver from southern Louisiana all the way to Indiana, Illinois, and Ohio. Its lovely blue flowers are borne on short zigzagged stems. In its southern range, it has hybridized naturally with the following two species. *I. giganteaerulea* thrives in southern Louisiana, especially along the coast and even in brackish water. With its large flowers in blues, purples, and white, 5' stature, and huge rhizomes, this species has contributed genes to many modern hybrids. *I. fulva* offers not only a different color scheme with its reds, oranges, and yellows, but some cold hardiness, as well, as it ranges into Arkansas and Ohio. The fifth species, *I. nelsonii*, grows only around Abbeville, Louisiana. It is a natural hybrid of *I. fulva* and *I. giganteaerulea*, and its large flowers come not only in purple, but in the hot colors of *I. fulva*. [Note: I am not clear on why this natural hybrid is considered a species, and those natural hybrids mistakenly named as species by John K. Small in the 1920's and 1930's caused him so much ridicule. See our [July 2020 newsletter](#)].

Most Louisianas are diploids, but breeder Joseph K. Mertzweiler used the anti-gout drug colchicine to induce tetraploidy into the line, thereby increasing robustness, flower size, substance, and available colors. Diploid Louisianas are still used extensively in hybridizing due to their high quality. Modern hybrids display flowers 6" across with standards and falls about equal in size. Fully double varieties descend from the natural hybrid 'Creole Can-Can.' Louisiana irises truly come in all colors of the rainbow including red, and in these patterns: bicolor, bitone, amoena, and plicata. They typically form large clumps from their elongated, knotty rhizomes. Their robust leaves are often 3' tall, and may reach 5' in some varieties. Blooms are held 6-8" above the foliage.

Breeder Eugene Scheepers in South Africa is interested in developing quality cut flowers. He has created varieties of Louisianas with 8" blossoms in fabulous colors that will last for four days in water. As garden flowers, Louisianas are popular in the United States, Australia, and Japan, but not in Europe and Britain. In our country, they grow best in California and along the Gulf Coast. In the southwest, special soil preparation, heavy watering, and protection from the summer sun are recommended.

Former TAIS member Miriam Diamond grows Louisiana irises in Tucson. Photos of twelve of these were featured in the [June 2018](#) issue of this newsletter. Miriam said that she relies on luck when growing them. She recommends [Cindy's Louisiana Irises](#) website for rhizomes and mentioned that Cindy is always willing to answer questions. This nursery opened in 2000 and their website offers information on how to plant and grow these irises, including acidifying the soil to mimic bog conditions. - SC

Sources: [The Gardener's Iris Book](#) by William Shear, 1998, and [The Gardener's Guide to Growing Irises](#) by Geoff Stebbings, 1997. More info at <https://louisianas.org/> and <http://www.zydecoirises.com/>.

3rd Annual TAIS Photo Contest

Our contest will be online this year. Webmaster Tim has graciously agreed to handle submissions. Start searching for your best iris photos now!

Categories

1. Single iris flower or stalk of irises
2. Macro (close-up) view of an iris
3. Miscellaneous iris photos: garden, Photoshopped image, etc.



GUIDELINES FOR SUBMISSIONS

- Current TAIS members may submit up to 15 pictures in groups of 1-3 to submissions@tucsoniris.org. Note: emailing more than three photos at a time may result in the message not going through.
 - The photos must be in **final form**.
 - Please include for each picture: **your name, the category, and the name of the variety pictured**. If you do not know the name, label it as a NOID, meaning no ID (no identification).
 - You may use the same photos that you submitted for our Iris Show if you wish.
 - All photos must be your own, although they are not restricted to your own garden. Help make this a fun and successful event by participating!
 - Submissions will be accepted **between September 18 and 26**.
- Entries will be displayed anonymously on the website. They will be numbered and include the name of the variety.

VOTING

- TAIS members may vote for **three photos *per category*** by submitting to taisnewsletter@yahoo.com. See all photos at www.tucsoniris.org. Consider the *quality* of the photos (focus, composition, etc.), rather than the beauty of the iris(es) featured.
- Votes will be accepted from **September 28 to October 1**.

1st, 2nd, and 3rd place photos in each category will be featured during our Zoom meeting on October 10 at 1 PM. The nine winners will receive recently-introduced irises from Mid-America Gardens.



TAIS OFFICERS, ETC. FOR 2020

- Kevin Kartchner - Acting President**
- Bonnie Else - Vice President**
- Sue Clark – Secretary, Signatory on Account**
- Martin Juarez – Treasurer, Asst. Secretary**
- Bonnie & Kathy - Programs & Publicity**
- Joyce & Mary Ann - Hospitality/Door Prizes**
- Diane Tweedy - Birthday cards (temporary)**
- Dave Smith - Photographer**
- Susan Schaefer - Membership Chairperson**
- Sue Clark - Newsletter Editor & Publisher**

What to do in the Iris Garden for September:

Plant rhizomes starting late this month through October. Sterilize new rhizomes for 5-10 minutes in a solution of 2 1/4 c water and 1/4 c bleach. There are two strategies for dried roots - keep them to stabilize the rhizome or remove them to allow the rhizome to contact the soil. Choose a spot that will receive afternoon shade *during the summer*. Good drainage is essential, as is good air circulation! Remember that block walls radiate lots of heat. Dig a hole with enough depth so that the top of the rhizome will be buried about 2” (see p. 2). Leave a mound of soil in the center of the hole and fan any remaining roots over it. Press soil over rhizome. Drip lines appear to be the best way to water irises in the desert. Emitters with adjustable flow will give you the most control. I use Raindrip Adjustable Full Circle Stream Bubblers. - SC



Tip Exchange

Louisiana iris rhizomes need moisture and should be stored in water (for up to a month) before planting. Do not allow them to dry out.

Plant Louisiana rhizomes 1-2” below the surface. Mulch will help hold moisture in while new roots form, as well as protect the crowns from freezing during the winter.

Water deeply once a week if growing these irises in full sun [probably *more* in the desert].

Source: [Cindy’s Louisiana Iris](#) website.

Iris Haiku:

Yes, we still can thrive.
Autumnal equinox approaches -
We’ll plant more rhizomes.

- Sue Clark



Source: HIPS website

Iris germanica

Did You Know?

There are two intervals during which iris roots develop: early spring and early fall. The iris plant begins to grow in early spring, using nutrients which were stored in the rhizome. New roots develop as bud swellings appear in new fans, and the plant has a growth spurt. Old roots wither away. This above-ground growth spurt transfers to underground after the iris blooms. “During the six-to-eight weeks following bloom, the rhizome stores much of the food for next spring’s growth, initiates the increase buds that will be new rhizomes, and sets the new bloom stalk buds.” The rhizome is then mature and enters a semi-dormant state. Early fall moisture reinitiates root growth. - Ben R. Hagar, [The World of Irises](#), p. 314

“All appears to change when we change.”

- Henri-Frédéric Amiel

A Little Bit of Botany and Iris History

We have come to the final chapter of Clarence Mahan’s book this month. It is actually the third-to-last chapter, but I had skipped it because it was confusing to me when I first glanced through it. I am giving it another go for the sake of completeness.

You may have noticed that every modern iris hybrid you see is referred to as *Iris germanica*. According to Mr. Mahan, “The term “German irises” entered the vernacular in Europe because *Iris germanica* was the most-commonly-grown iris in European gardens of the 18th and 19th centuries. Even the first iris breeder of significance, Jean-Nicolas Lémon, called his new hybrid cultivars “Iris d’Allemagne” [Iris of Germany] and he *knew* that none of them was derived from *Iris germanica*.” Mahan goes on to say that the term has remained in use for over a century despite objections by iris specialists and that unfortunately it is unlikely to change.

So what is truly *I. germanica*? It is the iris in Van Gogh’s iconic painting *Irises* and in Monet’s masterpiece *The Artist’s Garden at Giverny*. It is an intermediate bearded iris, whose 2’ stem typically has two branches and four flowers. (See photo above). The blossoms usually have standards of blue-violet and falls of red-violet, but there are also white forms (one appears in Van Gogh’s *Irises*). It is very hardy. This iris rewards its growers with many new rhizomes since it is excellent at vegetative reproduction. It is not good at reproducing “true” from seeds, which suggests that it is not a species iris after all. It also does not pollinate well by hand (i. e., with human interference).

Why did Carl Linnaeus call this plant *Iris germanica* in 1753? Mr. Mahan, himself an internationally recognized iris authority, stated that the Swedish Linnaeus got his information about this particular plant from books by German authors Valerius Cordus and Johannes Bauhin, but that neither of these men had referred to the plant as *I. germanica*. Mahan pointed out that 18th-century scholars used the Latin term *germanica* to refer to the Holy Roman Empire, which was ruled by the German Hapsburgs, rather than to the country that we now call Germany. The places where *I. germanica* grew rampantly, northern Italy and Croatia, were under Hapsburg rule during Linnaeus’ time. Another source from the period called it the “the Austrian iris.”

Irisarian Ben Hagar postulated that since the Greeks and Romans grew this iris in their gardens and used it to make medicines, they carried it with them wherever they travelled and that is how it became so widespread. The iris likely mutated into slightly differing forms during its long tenure in various environments.

Science clinches this case. In 1932, French scientist and engineer Marc Simonet counted the chromosomes of *I. germanica* during work for his doctoral thesis. He came up with 2n=44, which makes it an *allopolyploid*, or natural hybrid which received “two sets of chromosomes from two different iris species” [likely *I. pallida* and *I. variegata* per Wikipedia]. Perhaps it was a bee who made the original cross. Buzz buzz. - SC

Source: [Classic Irises and the Men and Women Who Created Them](#) by Clarence E. Mahan