TAIS Newsletter

Tucson Area Iris Society - established 1965

Our 59th year

An Affiliate of the American Iris Society



'Rameses'
(H. P. Sass 1929)

Marcusen Sculpture Garden, Prescott, Arizona

Photo by Sue Clark, 2023

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President's Message

Well, our big iris order to Sutton's is in. We will have a lot of new varieties, selected by you, to choose from at our sale. Your personal selections will also add varieties to our future sales. Thanks for contributing.

Remember the amazing arrangements we had at last year's show? To improve your abilities, come to our flower arrangement presentation at February's meeting. I'm hoping to expand my arrangement skills beyond just throwing a bunch of stems in a vase.

- Kevin Kartchner

"Pon't wait for someone to bring you flowers.

Plant your own garden and decorate your own soul." - Luther Burbank (2) (2) (2)

Upcoming Events

Next meeting: February 10, 1 PM, Tucson Botanical Garden. TAIS member Terry Swartz will demonstrate several Asian flower arrangement techniques useful for home or iris show

March 9 meeting: 1 PM. Miller-Golf Links Library, 9640 E. Golf Links Road. TAIS member Pat Olsen will share tips & experiences about preparing blooms for an iris show. Learn how to make an iris transport device from PVC pipe à la Kevin

April 20: TAIS Iris Show, Trinity Presbyterian Church

Birthday Wishes to:

Maureen Kelly	Dave Smith	David Sliffe
Shirley Andrews	Sue Clark	Barb Nicholson
Stanna Schoepel	Sam Wymer	Candace Pappa
Thomas Modaff	Marie Radecki	



January Meeting Minutes



13 Jan 2024 - Twenty-two members enjoyed a panel discussion about growing irises in the Tucson area. See notes on p. 5-7.

Meeting: General Door prizes of irises and calla lilies were won by Sally, Sue, Cindy, LeeAnn, Kathleen, and Diane. Members again may choose which irises Kevin orders for the Rhizome Sale. Kevin displayed the 17 books in our new lending library. Several members signed books out for the month. Welcome to new Schroeder, member, Dan who was a member of our sister club in Prescott. Dues are due: \$15 per household.

Terry will chair our Show, Sue the Auction, Joyce, Kathleen, and Bonnie the Sale, and Taffy will tally votes for the Photo Contest. March and April seem to be prime flower months in Tucson, with the Orchid Show at MVG on Mar 2-3, Master Gardeners' tour on April 6, TAIS/Rose Society Show on April 20, and TAIS member garden tours on April 27. The AIS & Japanese Iris Society convention will be June 26-29 in Portland, Oregon.

Board Meeting: The following expenses were approved by the board: \$450 for rhizomes for the Auction and Club irises. \$30 for our annual affiliation with AIS, \$25 for Region 15 portion of AIS convention donation (Taffv motioned. Kathleen 2nded each). Also \$500 for Show approved: expenses, \$300 for four folding tables and some gratitude for Harlow's staff for the Sale, \$100 for Kevin to purchase Paw Paw plant markers to sell at Sale. Show expenses will be split with the Rose Society. Potted irises to sell at Show: Terry has 90. Diane 10, Joyce 30, and Bonnie 10. Reminder for the four executive officers t o renew e-memberships to AISrequired. - Sue Clark, secretary

2025 WILL BE OUR 60TH ANNIVERSARY! We're on the web: Tucsoniris.org

TAIS 2024 Meeting Schedule

<u>January 13</u> – 1 PM, Columbus-Eckstrom Library. Panel Discussion on growing iris

<u>February 10</u> – 1 PM, Tucson Botanical Gardens' Education Room. Terry Swartz, apprentice arrangement judge, will give a presentation on Asian-style arrangements with irises

March 9 – 1 PM, Miller-Golf Links Library. Pat Olsen shares her experiences and tips for exhibiting irises at shows: selecting bloom stalks, getting blooms to open at the right time, how to display them, etc. We'll also feature the iris holder that Kevin uses to transport irises to the show, and directions for how to make your own from PVC pipe

<u>April 20</u> – Iris & Rose Show at Trinity Presbyterian Church, corner of University Blvd & Fourth Ave.

May 11 – 1 PM, Tucson Botanical Gardens' Porter Hall. Kevin Kartchner on growing iris from open-pollinated seeds: how to harvest, plant, and grow

June and July – no meetings

<u>August 10</u> – 1 PM, Tucson Botanical Gardens' Education Building. Rhizome Auction for members only

<u>September</u> 21 - 9 AM, Rhizome Sale at Harlow's Gardens Nursery

October 12 – Location TBA. Winning photos from our annual photo contest. Possibly a hybridizer talk

November – Holiday Potluck

<u>December</u> – no meeting

January Meeting - photos by Dave Smith



Treasurer's Report for February - submitted by Jim Wilcoxon

11,310.76—Checkbook balance 1 Jan 2024

INCOME

325.00-Dues

8.70—Petty Cash

11,644.46--TOTAL

EXPENSES

36.00—Refreshments

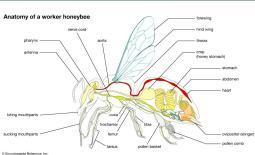
2483.73-Rhizomes

500.00-Web

213.41-Books

3233.14--TOTAL

TOTAL INCOME LESS TOTAL EXPENSES 8411.32 ending net worth 31 Jan 2024



Above: diagram of the internal and external parts of a honey bee (from <u>Britannica article on Honeybee</u>. According to the Wikipedia article, the correct usage is "honey bee" rather than honeybee, since it is describing a bee who produces honey. But you will see it spelled both ways.



From top: honey bee on honey comb (by Matthew T. Rader), two honey bees collecting pollen - note pollen baskets on hind legs (by Sue Clark and by Muhammad Mahdi Karim), and close-up of hind leg of honey bee, showing the basiltarsal comb and the corbicula or pollen basket (by G Lens Microscopist) (images 1, 3, and 4 from Wikipedia)

Pollinator of the Month, Part X: Honey Bees

This month we are highlighting an important and non-native pollinator, the honey bee. These likely originated in southeast Asia, spread naturally throughout Africa and Europe, and then humans got involved and brought them to South America in the early 16th century, to North America in the early 17th century, and to Australia in the early 19th century. There are currently eight species of honey bees with 43 subspecies, representing a tiny portion of the 20,000 species of bees. The oldest honey bee fossils are from the boundary between the Eocene and the Oligocene (34 million years ago) in Europe, while the oldest fossil honey bee in the United States was found in Nevada and is 14 million years old.

Besides their use in pollinating crop plants, humans keep honey bees for the honey that they make, as well as their beeswax which is used in various balms and cosmetics, candles, soaps, lubricants, and in the lost wax method of casting jewelry.

The most common honey bee is *Apis mellifera*, the western honey bee, which was domesticated before 2600 BC. Other names for it are the European or common honey bee. It originated in Africa. The practice of keeping bees is called apiculture.

Honey bees eat pollen for its protein content and sip nectar for its water and carbohydrate content. Worker bees have comb-like structures called *basiltarsal combs* on their hind legs. Using their legs, they transfer the pollen from the combs to the *corbicula* or pollen basket. This is the golden sac that you may have noticed on the back legs of bees.

We increasingly hear that we are in dire straights because of a decline in honey bees. There is no scientific evidence to back a quote often misattributed to Albert Einstein, "If bees disappeared off the face of the earth, man would only have four years left to live." According to the article on Wikipedia, the ten most important crops in the world, which provide 60% of all human food energy, are not pollinated by insects at all: plantains and cassava are propagated by cuttings, potatoes, yams, and sweet potatoes by tubers, soybeans are self-pollinated, and rice, wheat, sorghum, maize, and all other cereals and grasses are wind-pollinated. In fact, no native crops in the New World depend on honey bees since the bees are non-native. Tomatoes, peppers, and squash for instance, are pollinated by native bees. Some crops do depend on honey bees, though. Apples, cherries, and blueberries are 90% pollinated by these insects. Honey bees pollinate many kinds of flowers, but since they are generalists, they are not efficient like specialized native pollinator-plant combinations. The truth is likely somewhere in the middle of all that, but we can certainly help bees by not using insecticides in our gardens. - SC

Sources: Wikipedia article on "Honey bees" & "List of Crop Plants Pollinated by Bees," Britannica: Honeybee



Growing Irises in the Tucson Area Panel Discussion, 13 January 2024

Three members of the Tucson Area Iris Society shared their top tips on iris issues. Panelists included (from downtown eastward across the Speedway Blvd. cooridor) Terry Swartz (TS), Susan Schaefer (SS), and Kevin Kartchner (KK). Terry grows Japanese irises in pots, arilbreds and tall beardeds in beds, Susan tall beardeds in pots, and Kevin tall beardeds and spuria in beds. Other members chimed in when they had something to offer. Diane Pavlovich (DP) moderated and offered advice, as well.

Fertilizing:

TS: Feed irises the same as roses – they are both heavy feeders. He had the best irises when he mixed the following in water: ~2c fish emulsion, Pentrex soil penetrant (it decreases the surface tension of water, which lets it sink in better) [this product may no longer be available - try Penex or Penterral, and ~2c Epsom salts. He used a fish pump to fill his iris pots with this solution. The fish emulsion spikes bacterial action in the soil and this is good for plants. Now he uses a handful of Arizona's Best Rose or Citrus and Avocado food, and handfuls of alfalfa meal, Epsom salts, and Milorganite (available at Ace Hardware), and thoroughly waters it in with a hose. His initial dosing is the first week of February, after which he alternates this treatment with a watersoluble fertilizer weekly until bloom time. He also uses fish meal (from GrowOrganic.com). Every three months, each iris gets some Osmocote Plus. General warning - bone meal will kill Japanese irises. Best tip – feed the soil first.

SS: Apply <u>fish emulsion</u> from end of bloom season until January 1st. On January 1st, start using Super Bloom [or other fertilizer with 50 or higher as the middle number - see list on p. 8] every week mixed as on package. She adds one bucketful per pot per week. Tip: replace half of the soil in each pot annually with Miracle-Gro soil.

DP: Triple A Fertilizer in Tucson sells Grow More products. You can get a 25pound bag of fertilizer similar to Super Bloom. Contact the owner, Callaghan, at 520-574-0040. He provides fertilizers and other gardening products to many nurseries and landscapers southern Arizona. Sometimes will he deliver to your house or can arrange to meet you somewhere for delivery.

KK: Uses whatever fertilizer is on sale. He adds a generous amount of it when planting and also adds compost at this time. All of his iris are drip irrigated, so he fertilizes before a good rain so that it sinks in and reaches the roots. And he only fertilizes during the wintertime. Phosphate needs to get down to the roots, so be sure to water it in. His best tip: keep trying different things with irises!

DP: Since phosphate moves slowly in the ground, the trick is to punch holes around plant using a piece of rebar, pour a spoonful of Triple Super Phosphate fertilizer into holes, cover over the holes with soil, and then water.



Watering:

SS: All of her pots are connected to a drip line. All drippers are adjustable so that she can turn them off which she does often, typically when it rains. The timer is set to come on Monday, Wednesday, and Friday at 6:00 AM for 15 minutes. She uses a moisture meter and only waters if it reads Dry or almost dry. She sticks the probe all the way in. Tips: Using saucers under pots can lead to rot, as the soil cannot drain well. Monitor pots daily for moisture.

TS: He's still trying to figure out watering, as both overhead and drip watering caused rot. Watering *roses* at sundown helps them through the heat of the day, so watering irises at night might help. Tip: Plants need access to oxygen in the soil so they need some time to dry out between waterings.

KK: Leaving drippers on in July when the humidity was high from the monsoon led to lots of rot. The plants need to dry out a bit between watering. Tip: Water less when humidity is up.

Joyce: Finds herself watering less, and only when the moisture meter indicates that the soil is nearly dry.

Jessamyn: Irises looked great this past summer even though she was away for 5 months. They received drip irrigation for 15 minutes twice a day. Most were in full sun, some in pots and some in the ground on the north, east, and west sides of her home.



Heat, Summer, and Shade Cloth:

DP: Her irises grow in large plastic containers. Irises in two pots burnt up and died no matter what adjustments were made to their shade and water. Three others are still struggling. The rest are fine.

TS: All rhizomes with exposed tops rotted or cooked in the heat. Those which were well covered by soil did fine.

SS: Just the opposite! Rhizomes with their top surfaces exposed do best at her house.

Jim: He grows irises in pots because he has grubs in his soil. He checked the temperature of the soil in the black plastic pots and it was 120°!

DP: She is going to try wrapping her pots in shade cloth to keep them from getting so hot.

Joyce: Master Gardeners recommend a *maximum* of 40% shade cloth for any plant. She orders it online since she cannot find it in town. This summer, she will cover the irises to the ground level to protect them.

KK: The year he installed a 40% shade-cloth structure over his irises preceded the year he had the fewest blooms ever. The shade cloth was up from about mid-May till September.

Joyce: Try leaving it up for just two months.

KK: Very crowded irises rotted the most in his beds. Perhaps leaf debris held humidity in? Of the irises that he transplanted this past summer, the ones with shade cloth over them began growing faster than non-shaded ones.

DP: Some members of the Sun Country Iris Society in Phoenix tried placing burlap sacks over their irises. No word on the results.

Kathleen: Covering her irises with shade cloth last summer led to mealy bugs and rot.

Pests, including rot:

Joyce: Lost 30 irises to mealy bugs last summer. She advises squishing them or treating with <u>Triple Action</u> by <u>Ferti-lome</u> to kill them. Apply it every 7-10 days. There is some evidence that these are a problem if nitrogen levels are too high in the soil.

KK: Last summer, aphids appeared on his irises, and then ladybugs appeared and ate the aphids. He has never used pesticides on his irises.

SS: Plant a clove of garlic or an onion in each pot to keep aphids away.

TS: Thrips from his roses do not seem to bother the irises.

KK: Efforts to scoop out all the rot in rhizomes and treat with Comet cleanser or chlorine bleach have not been very successful. What worked best was to dig affected rhizome, carefully the remove all of the rot, thoroughly wash the rhizome, and let it dry completely before replanting. He used a hair drier or a fan to dry the rhizome. Note that different varieties of iris are affected differently, likely due to their specific genetic makeup. Two clumps of the same variety in different parts of the garden died the same day. The bacterium that causes soft rot in rhizomes. Erwinia carotovora, (recently reclassified and renamed *Pectobacterium carotovorum*) is active at temperatures above about 85°. Information in an article from Applied and Environmental Microbiology, Feb 2004 suggests that Bt, Bacillis thuringiensis, can disrupt rot-inducing bacteria. Bt is commonly available in Mosquito Dunks and Mosquito Bits.

This is worth some experimenting.

Cindy: Cinnamon is reported to help with rot. Antifungal properties, perhaps?

Miscellaneous:

DP: For irises purchased from several places last year, the original or "mother" rhizomes died, but the increases (babies) survived.

TS: Perhaps they were planted too high?

DP: All new irises started in 1-gallon pots. They died after being transplanted in the garden.

TS: Irises try to die any time he moves them so he moves them back to where they want to be.

Sally: Her NoIDs do fine. Hybrid varieties not so well. Does it depend on where they were grown (e.g., Oregon)? Would locally-hybridized or locally-grown irises do better?

DP: <u>Bloomer-Rang Iris Farm</u> in Wilhoit near Prescott is likely the closest source.

Sue: Ardi Kary in Scottsdale sells iris, too.

Freezing temperatures and irises:

All reported that they do not cover or do anything special for their irises in freezing temperatures, whether they are growing in pots or in beds, unless the iris has a bloom stalk. Kevin has covered stalks of rebloomers, but they freeze when temps are in the 20°'s.

Sue: I brought one pot with a bloom stalk inside during a cold spell.

- SC, from my notes. Proofed by panelists. I may revise this into a handout later.



Kevin Kartchner - President

Cindy Long - Vice President

Sue Clark - Secretary, Signatory on Account

Jim Wilcoxon - Treasurer, Asst. Secretary

Diane Pavlovich & Sally Vega - Programs & Publicity

Cindy Long, Linda Briggs, Kathleen Marron, and Evelyn Jacobs - Hospitality

Bonnie Else and Susan Schaefer - Door Prizes

Taffy Holvenstot - Membership

Dave Smith - Photographer

Sue Clark - Newsletter

What to do in the Iris Garden during February:

<u>Maintenance</u>: Check for aphids. Keep plants hydrated during this interval of rapid growth. Use a moisture meter to monitor them. Replace faded labels. Names are required when showing irises!

<u>Organic care</u>: Continue feeding with fish emulsion every other week and feather meal monthly. Apply humic acid as desired.

Non-organic care: Apply weekly or every two weeks: Scott's SuperBloom (12-55-6), Miracle-Gro Bloom Booster (10-52-10), Schultz Bloom Plus 10-54-10), or Ferti-lome Blooming & Rooting (9-58-8) through May. Susan starts this on New Year's Day; Kristee on Valentine's Day. - SC



Tip Exchange

Last winter, I mentioned that OKeefe's Working Hands lotion helped my dry hands. Well, I have found a lotion that works even better - Merino Nourishing Lanolin Skin Cream. It absorbs quickly, helps hands and heels feel smooth and hydrated in winter and summer, and is made in New Zealand. Their website is www.merinousa.com and it's also available from Amazon. - SC

One advantage of growing irises in pots is that one with a bloom stalk can easily be brought inside whenever there is a freeze warning. This is something I had not considered before but which came in handy last month for my 'Again and Again.' - SC

Iris Limerick:

There was a young girl from Devizes
Whose irises won all kinds of prizes.
She was so proud
That she whooped out loud,
That green-thumbed young girl from
Devizes. - Sue Clark



'Ola Kala' (J. Sass 1943)

Did You Know?

Feather meal is a natural fertilizer for organic gardens. Poultry feathers are sterilized in steam pressure cookers, converting their proteins into a form more available to plants. Then the feathers are dried, cooled, and ground into a powder. When mixed into garden soil (or soil in pots), the meal offers a slow-release source of nitrogen for green leaf growth, improves soil structure, and activates compost decomposition to make nitrogen more available to plants. - SC

Source: Wikipedia article, "Feather Meal"

"Always maintain a kind of summer even in the middle of winter." - Henry David Thoreau



A Little Bit of Botany and Iris History

The Sass brothers immigrated to the United States from Germany with their family in 1884 when Hans Peter was 16 and Jacob was 12. Already interested in plants at that age, they settled in Nebraska and eventually owned adjacent farms near Omaha. Besides farming, they grew many kinds of flowers. Jacob had a few irises in his garden and planted seeds from some bee pods one year. He soon made his own crosses and was encouraged by his success. Hans began hybridizing irises when he saw Jacob's accomplishments. To achieve their hybridizing goals, the brothers began buying irises from Bertrand Farr in Pennsylvania and from the Rev. Charles Harrison of York, Nebraska, author of the first American book about irises, Manual on the Iris, 1909. Rev. Harrison was one of the first in the Midwest to feature many quality irises in his plant catalogs.

The brothers became charter members of the American Iris Society in 1920. From the 1920s through the 1950s, Hans, Jacob, and Jacob's son Henry introduced approximately 200 irises. These were mostly tall beardeds, but also some medians, Siberians, and a spuria. The Sasses were instrumental in developing reblooming (remontant) varieties, which they liked despite little interest in them at the time. (How things have changed in that regard!). Hans' 'Autumn Queen' (1926) was noted to bloom in each month from April through November. They also developed intermediate bearded irises, improved flower form, and for 26 years concentrated on breeding better pink irises.

Hans considered 'King Tut' (1926) his most important iris. It was used in countless crosses. Hans won Dykes medals for a 'King Tut' offspring named 'Rameses' (1929) and later for 'Prairie Sunset' (1939). Jacob won two Dykes medals: for 'The Red Douglas' (1937) and 'Ola Kala' (1943). The brothers were awarded the AIS Hybridizer's Medal and the Foster Memorial Plaque from the British Iris Society. Henry Sass continued their work, introducing irises under Sass or Sass Brothers, before later introducing his own under Henry or H.E. Sass. His BB 'Jungle Shadows' won the Knowlton Medal in 1967. Thank you to all three Sasses!- SC

Source: "The Sass Family" by Gary White, in The American Iris Society, 100 Years Bold!, The Early Years, Supplement 1 of 4, 2020; AlS Iris Wiki for links