

TAIS Newsletter

Tucson Area Iris Society - established 1965

Our 58th year

An Affiliate of the American Iris Society



'War Chief'
(Schreiner, 1992)

Marcusen Sculpture Garden,
Prescott, Arizona

Photo by Sue Clark, 2023

President's Message

This time I'm sharing my 25+ years of iris labeling experiences. For me, "Sharpie"-type markers only last a few months in the desert elements. #2 pencils and grease pencils last much longer but are not as readable or neat (especially my handwriting). So I print weather-resistant labels to stick onto metal plant markers. Years ago, I used galvanized-wire-supported markers because they are cheaper. But, every year or two, the wires in contact with the ground rust away and the label becomes several inches shorter. Ugh. I also printed labels on half-inch stock with the iris name on one label and the hybridizer and year of introduction on another label. Double the work to label a plant. Now I use plant markers with stainless steel wires that resist corrosion and are 20" high to get above the iris foliage. My favorite (free shipping, too) marker source is the Everlast Label Company: <https://www.everlastlabel.com/product-page/f-tall-display-plant-labels>. I generate the labels, with introduction information, when I planted it, and a cutesy iris icon, on my laptop and use a cable to send the data between the computer and label maker. Then I print them on 1" label stock with a Brother label maker (PT-2730: discontinued. Similar: <https://www.brother-usa.com/products/ptd610bt>). See the example label below. It works for me. Many of my labels are over 10 years old with minimal degradation of the wire or label. I stay with Brother brand label stock as I think it adheres better. But, even stainless steel wires corrode in a soggy environment like my Louisiana iris tubs. Also, zinc labels corroded when I accidentally left rot-fighting Comet cleanser on the metal. Oops. Always learning...

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**Healing thoughts to
Joyce, who broke her
foot & ankle**



Happy Holidays (and label making) - Kevin Kartchner

"All that is gold does not glitter, not all those who wander are lost: the old that is strong does not wither, deep roots are not reached by the frost." - J R R Tolkien

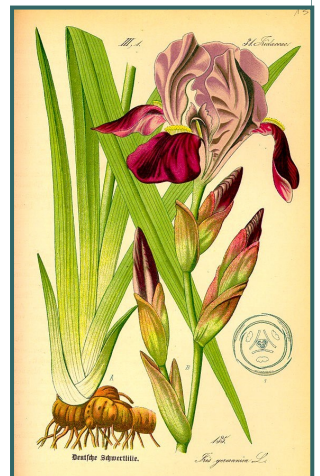


Upcoming Events

Next meeting: January 13, 1 PM, Eckstrom-Columbus Library. Panel discussion with Q&A about growing irises in the Tucson area

Birthday Wishes to:

Madeleine Glaser Cathy Pane-Scire
Becky Clark Suzanne Hughes
Jonathan Dunnigan



November Meeting Minutes



11 Nov 2023 - Twenty-two members gathered for a potluck feast at Bonnie's home. Anchored by a turkey roasted to perfection by our hostess, the food ranged from savory to sweet - and it was all delicious!

In addition, we had our annual plant and seed exchange. I came home with seeds for poppies, clippings of purple and chartreuse sweet potato vine, and a rainbow agave with golden-edged leaves. Besides those, others gained new irises, elephant feed plant, cacti, and seeds for lupines, *Moraea* iris, and African daisies.

Business meeting - In the spirit of Thanksgiving, Kevin expressed his gratitude for the Board and for members who have helped and contributed this year: Cindy for being our new Vice President and for running the October meeting. Everyone who submitted photos and voted in our recent photo contest. To Kathleen Marron for counting

the votes. Kevin passed out Iris Bucks to members with winning shots. To those who moved irises to their new beds at TBG last month. And to Adam there, who made Kevin understand that iris names *do* elicit engagement between people and irises, even non-blooming ones, rather than simply being something that differentiates one iris from another. Everyone who helped, donated, or bought irises at our Sale in September, which netted us approximately \$4000. Kristee for her presentation at the Sale about growing irises. A friend of Linda's who made a donation to the club in her honor. Someone is writing an article about irises for the April edition of *Desert Leaf* magazine and wants to interview some of our members. This should generate attention for our Iris Show that same month. Our bank balance is currently high.

**CONSIDER
POTTING SOME
IRISES TO SELL
AT OUR SHOW**



We're on the web:

Tucsoniris.org

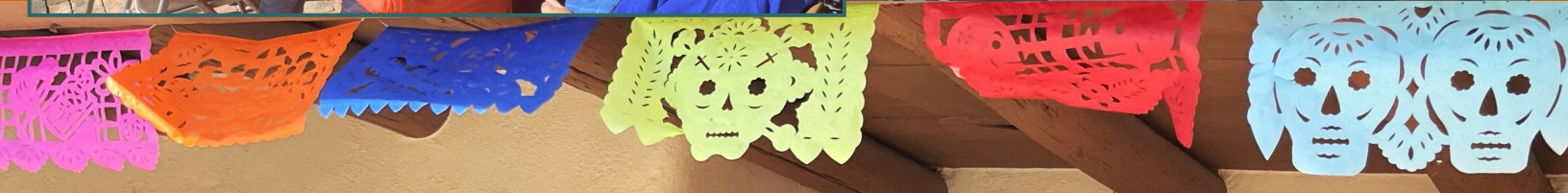
Kevin proposed that he create, house, and manage a lending library of iris books for \$200. Gary motioned and Kathleen Marron seconded. He also proposed to place his Sale order to Sutton's earlier than he did last year because many of the varieties that we chose were already sold out. Members seemed to like the novelty of choosing which irises would be in the order this year, and had agreed to purchase one of each one that they selected in that process. There was no interest expressed in hosting a Region 15 Fall Trek. Back to the Thank yous: Hospitality Committee of Kathleen Marron, Linda, Evelyn, and Cindy for keeping us in snacks and water. Diane and Sally for arranging and publicizing programs and securing rooms, and especially for the publicity for the Sale. Sam supplies TAIS fliers to TBG. Bonnie and Susan for door prizes. Bonnie for hosting the Potluck, which we love! Taffy for Membership. Jim for serving as Treasurer. Dave for supplying photos for the newsletter. Me for the newsletter and secretary duties. Terry for setting the spark for and then managing the Iris Show. Joyce and Cathy for being all-around helpers. Thank you, thank you to everyone for contributing to the success and comradery of our club! I hope we did not forget to mention anyone.

- Sue Clark, secretary

Photos from the Potluck by Dave Smith



More Photos from the Potluck by Dave Smith



Treasurer's Report for November - submitted by Jim Wilcoxon

Beginning checkbook balance (1 Nov 2023) 11,444.96

NOV INCOME	THIS MO.	YEAR TO DATE
Dues-----	0.00-----	816.00
Plant Sales-----	0.00-----	6284.86
Show (plant sales) -----	0.00-----	425.16
Auction-----	0.00-----	0.00
Donation-----	0.00-----	70.00
Other-----	0.00-----	0.00
TOTAL-----	0.00-----	7596.02

NOV EXPENSES	THIS MO.	YEAR TO DATE
Program-----	0.00-----	0.00
Plant (etc) purchases-----	0.00-----	1559.73
Show--(misc)-----	0.00-----	362.90
Food, (etc)-----	0.00-----	398.68
Admin-----	13.20-----	655.90
Sale supplies-----	0.00-----	224.42
TOTAL-----	13.20-----	3201.63

Ending checkbook balance (30 Nov 2023) ---11,430.76
 Petty Cash-----+8.70
Net Worth-----11,441.46

1 JAN 2023 checkbook balance 7023.95
 30 Nov 2023 11,441.96
YTD CHANGE +4406.81

"There is nothing better than a friend,
 unless it is a friend with chocolate."
 - Linda Grayson



Above: magnification of a chocolate midge (genus *Forcipomyia*). Source: [Meet The Flies That Pollinate Cocoa Trees \(sciencefriday.com\)](https://www.meettheflies.com/pollinate-cocoa-trees)



From top: chocolate midge (NPS.gov), two chocolate midges on frog's head (KidsGardening.org), cacao flower (NPS), cacao tree with Ernesto Sandoval, collections manager (UCanr.edu), and cacao tree trunk with pods as well as a close-up of a pod showing seeds and pulp (Wikipedia)

Pollinator of the Month, Part VIII: Chocolate Midges

If you receive a gift of chocolates this month, thank the chocolate midge, a tiny fly the size of a pinhead. This fly with feathery antennae is the only pollinator of cacao, the plant which produces cocoa beans. Both the chocolate midge and the plant are native to the understory layer of tropical rainforests of Central and South America, Africa, and Asia, with one tree growing at the UC Davis Botanical Conservatory in California. Most of the adult midge's time is spent in damp, shady spots. They lay their eggs in rotted logs and leaf litter.

Cacao trees, *Theobroma cacao*, meaning "food of the Gods," produce small, intricate flowers, each lasting 24-48 hours. Clusters of these pendulant white blossoms grow directly out of the trunk and older branches of the tree. Each flower is approximately 1/2" in diameter and resembles a miniature columbine. Most drop off within about five days due to water stress. Although chocolate midges are not good flyers and can barely carry enough pollen grains to fertilize one flower, they manage to get the job done because they are busy foraging for nectar in the cacao blossoms. At least 35 grains of pollen are required on the receptive parts of the flower for it to be pollinated. The blossoms create 75 aromatic compounds to attract the flies. A tree may yield 400-500 flowers, with only one of these developing into a fruit. During a cacao tree's 25-year life span, it produces between 50,000 and 100,000 flowers and 100 to 250 pods. Each 6-12" pod contains 20-60 cocoa beans surrounded by sweet edible flesh. When ripe, the yellow-orange pods weigh about a pound. Approximately 400 beans are needed to make one pound of chocolate, so a tree might yield enough beans to make 9 lbs of chocolate in its lifetime.

At 2.2 million metric tons of cocoa beans, the Ivory Coast of Africa was the largest producer in 2018, while 5.3 million metric tons were produced in the world that same year. Americans consume 2.8 billion pounds of chocolate annually, or about 11 lbs/person. Besides chocolate, the beans are also used in the manufacture of cocoa powder, cocoa butter, and chocolate liquor. In some countries, the pulp from the cocoa pods is made into smoothies, juice, creams, jelly, and is distilled into an alcoholic beverage.

Genetic studies of cacao trees, combined with climate models, suggest that the area near the borders of Ecuador, Columbia, and Brazil served as a refuge for the trees during the peak of the last ice age 21,000 years ago. Most cacao trees are grown on large plantations nowadays. With less shade and lower humidity, these are less hospitable to the chocolate midges, as you can imagine. Flowering time on the plantations does not correspond to peak midge populations, and these blossoms have few aromatic compounds. Only 10-30% of pods on plantations will mature. There is thus a movement to grow cacao on small farms instead, which should hopefully and thankfully keep us in chocolate forever! Look for labels stating Fair Trade, Rainforest Alliance, UTZ, or Organic. - SC

Sources: [Chocolate Midge Pollinator Profile \(kidsgardening.org\)](https://www.kidsgardening.org/chocolate-midge-profile) (has an attractive and informative coloring page for children), <https://www.nps.gov/articles/chocolate-midge.htm>. Wikipedia articles - [Theobroma cacao](https://en.wikipedia.org/wiki/Theobroma_cacao) and [Forcipomyia squamipennis](https://en.wikipedia.org/wiki/Forcipomyia_squamipennis). [If You Like Chocolate, Thank the Midges!](https://www.ucanr.edu/blog/if-you-like-chocolate-thank-the-midges) - Bug Squad - ANR Blogs (ucanr.edu), [The Miracle Process of Cacao Pollination](https://www.themiracleprocess.com/cacao-pollination) - The Chocolate Journalist

TAIS OFFICERS, ETC. FOR 2024

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 December:

Maintenance: If you haven't done so, create or update the map of your iris beds or containers, just in case labels fade or go missing. Replace faded labels. Names are required when showing irises!

Organic care: Continue feeding with fish emulsion every other week. Apply humic acid as desired.

Non-organic care: Buy some Scott's [Super Bloom](#) (12-55-6), Miracle-Gro [Bloom Booster](#) (10-52-10), [Schultz Bloom Plus](#) 10-54-10), or Ferti-lome [Blooming & Rooting](#) (9-58-8) to get ready for feeding from December through May. These are available at Harlow's, Mesquite Valley Growers, Ace Hardware, Amazon, and other places. TAIS member Susan starts applying this in early December; Kristee on Valentine's Day. - SC



Tip Exchange

Determined to do better with irises, I asked for advice from TAIS member Joyce, a Master Gardener, before potting my new rhizomes. Her recipe: fill pot 1/4 with compost, 1/3 with [pumice](#), and the remainder with [Kellogg's Patio Plus Premium Outdoor Potting Mix](#). (If using Miracle-Gro or other potting mix, up the compost amount to 1/3). Pour all into a basin, mix well, and return to pot. Add I T fertilizer ([Schreiners Iris Fertilizer](#), [Comanche Acres Iris Fertilizer](#), or 10-10-10). Soak bottoms of rhizomes in water overnight to get the roots going, then plant them. - SC

Iris Limerick:

There once was an iris called 'Purissima'
And oh, it was so magnificent!

It grew quite tall -
Higher than a wall!

That gigantic white iris, 'Purissima.'
- Sue Clark



'Purissima' and BIS
President Pilkington

Did You Know?

Clay soils are typically dense and compacted, so they are not ideal for plants. Over-fertilization causes clay to become super-saturated with salts from the fertilizer. These salts neutralize the negative charges along the surfaces of the clay particles, which causes them to become even more densely packed. Application of humic acid can loosen and improve the structure of clay soils. Humic acid removes the salts and restores the negative charges, thus loosening the soil by a process known as colloidal action. - SC Source: article from Adam Farrell-Wortman, horticulturalist at TBG: [Humic Acid Healthy Soil.pdf](#)

"Only in reflection, it seems, do we get to make sense of what has been, to then play a part in shaping what might be."

- Joanna Gaines

A Little Bit of Botany and Iris History

In his breeding program, Bay-area hybridizer William Mohr used many of the wild tetraploid species of irises that we've talked about during the past five months. The son of German immigrants, Mohr was born in 1870 on the family farm in what is now Hayward, east of San Francisco. William took over operations after his father died, leasing out most of the farm's 400 acres. He kept some to grow wheat and barley, and had two or three acres of flowers near the house. Besides irises, William hybridized daffodils, tulips, primrose, and clematis.

Although starting with the typical garden irises of the day, Mohr soon added in *Iris mesopotamica* and *I. cypriana* to increase branching and size of flowers. He crossed *I. mesopotamica* with both types of aril irises - onocyclus and regelia. His introductions covered many kinds of irises: all of the bearded classes, spuria, Siberian, arils, and Pacific Coast Natives. Humble and retiring by nature, Mohr was reluctant to introduce any of his creations. He was encouraged to do so by his mentors, Sydney Mitchell, Grace Sturtevant, and Dr. Samuel Berry.

An early introduction was '[Conquistador](#)' (1923), a cross between *I. mesopotamica* and a TB called 'Juniata' (Farr 1909). One of Mohr's goals was to produce a larger yellow iris. He crossed yellow *I. pumila* with *I. mesopotamica* and *I. trojana*, and came up with '[Alta California](#)' (1931) and '[California Gold](#)' (1933). Another accomplishment was the pure white '[Purissima](#)' (1928), which grows to over 6' in height. (See photo above). Mohr's '[San Francisco](#)' (1927) won the first Dykes Medal.

William Mohr, his wife, and three neighbors died in 1923 when an express mail train hit their car. The Mohr's daughter Marian was the only survivor. Marian eventually married and moved her father's operations to a farm in the San Joaquin Valley because of encroachment by the city. Mohr's irises went to his friend Sydney Mitchell, who lived 15 miles away. Mitchell introduced many of Mohr's best irises. It has become common to include "Mohr" in the names of arilbreds, and there are over 100 irises with "Mohr" in their names. And the William Mohr Medal is the top award for arilbreds with 1/4 to 1/2 aril ancestry. - SC

Source: [World of Irises: William Mohr - A Brief Life But Enormous Influence on Iris \(theamericanirissociety.blogspot.com\)](#)