## CLASSROOM IRIS PROGRAM

Introduction: The Classroom Iris Program (CIP) is designed for a leader/mentor to introduce and develop lessons focusing on bringing information and knowledge about irises to groups of AIS youths, under age 18, that may be located at Elementary through High School classes, Boy or Girl Scouts, FFA (Future Farmers of America) and other organizations. These groups of AIS youths are encouraged to participate in the Annual AIS Coloring, Photograph, and Ackerman Essay Contests, and to enter a local Iris Show. Sponsors and assistance to the CIP youths can also be provided by a School Principal, teacher, grandparent, parent, local iris club or AIS Region. Many ideas and lesson plans can be found on: aisyouth.org. Planting a new iris garden, visiting a local iris garden are just some of the fun activities to have as part of a C.I.P. A Youth Handbook is also available. For more information please contact,

Carolyn Hoover, AIS Youth Chair, yischoover@gmail.com

## Beardless Iris Culture

Beardless irises will adorn your garden for years to come if you meet their cultural requirements. Upon arrival, unwrap the irises from the damp paper and plastic bag in which they were shipped and immediately SOAK THE ROOTS OVERNIGHT IN WATER BEFORE PLANTING. Soaking in a bucket of water with roots just covered in water allows the plant to replenish the water lost in transit and will get the plant off to a good start in your garden. DO NOT LET THE ROOTS DRY OUT DURING TRANSPLANTING.

## WHEN TO PLANT

Beardless irises may be planted between August and October depending on your climate. The fall usually brings rain to supplement watering and roots will grow nicely as the weather cools. The new root growth will anchor the plants before winter.

## WHERE TO PLANT

Most beardless irises need a sunny location for best performance and bloom. If plants are getting less than one-half day of sun they may not bloom well.

Siberian irises like even moisture and Japanese irises like as much water as you can give them. These types do not, however, like to have wet feet in the wintertime. Louisiana irises and several of the beardless species will grow in standing water year round. Plant spuria iris where they will get full sun all day long.

## GARDEN SOIL

A good garden loam with added organic matter will make your beardless irises thrive. An acid soil is preferred, but Japanese irises are the only beardless irises that REQUIRE an acid soil. A pH of 5.0 to 6.5 will keep Japanese irises happy. Spuria irises like a more alkaline soil, but does not need supplementing unless there is a lot of moss growth indicating a very acid soil, then you can add some lime on top of the soil.

## HOW TO PLANT

Plant Louisiana and Siberian irises about one inch deep. Japanese should be planted a little deeper, two to three inches, as they make new roots on top of old roots. Keep newly planted rhizomes WELL WATERED until they are showing very active new growth. Drying out at this stage is certain death. Once established, beardless irises grow well, but extra care is needed to start them out. After plants are showing new growth, add a mulch of three inches and leave it on year round. This keeps out weeds and allows the roots to remain cooler. Also, it prevents sun scalding to Louisiana rhizomes.

For planting and care of the Spuria Iris - click here.

## FERTILIZER

Apply a good balanced fertilizer in the spring when plants are a few inches high. Japanese are heavy feeders and appreciate a second feeding before bloom time. Spuria iris love composted manure; so give them a side dressing in the Spring and in the Fall.

## GENERAL CARE

After bloom is finished, cut off the stalks before any seed pods made by bees develop, these could germinate and make new seedlings that may mix with your
named cultivars. Beardless irises can grow for many years in the same location if fed on a regular basis. Japanese iris are the exception -- they must be divided every three years to thrive. After fall frost, clip off brown foliage to discourage rodents from nesting in it. Louisiana foliage in southern climates will remain green and should not be cut off. Spuria iris may die back in the summer and should not be watered.

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green and should not be cut off. Spuria iris may die back in the summer and should not be watered.

## How to Plant an Iris Garden

## Early Preparation:

1. Choose a sunny, well-drained site that won't get trampled and is convenient to lawn mowing. ( $25 \mathrm{ft} \times 25 \mathrm{ft}$ is plenty big for 4 classes to plant).
2. Gather supplies (for 4 classes):
-- Garden markers (1/2" PVC Hot Temperature pipe cut into 18" sections. Use a hacksaw.)
-- Paint brushes and paint (or grease pencils) for labeling garden markers
-- 4 hand trowels
-- 4 shovels
-- 2 steel rakes
-- wheelbarrow (or buckets for moving dirt and mulch)
-- top soil
-- mulch
-- milk jugs for watering
-- (optional) gloves
-- bulb fertilizer or alfalfa pellets
-- composted manure for spuria
3. Students choose perennials for garden (drought tolerant, full sun, non-invasive)
4. Mark edges of the garden and remove all grass.
5. Prepare irises:
-- Assign irises to students
-- Paint or label garden markers
-- Keep irises and markers in labeled paper bags
-- Practice planting irises in sand or dirt in the classroom

## Planting

Day 1 -- Dig garden. Use shovels to turn over sod.
Day 2 -- Spread topsoil 4-6 inches deep. Spread mulch 1-2 inches deep (no deeper)
Day 3 -- Plant irises 2 feet apart. Place markers. When planting be sure to pull back mulch, plant rhizomes shallow, and keep mulch off rhizomes. Water irises. Make a map of the garden.
Day 4 -- Add perennial plants to garden

## Hints for Classroom Management during Planting Give everyone a job. Here are some ideas:

-- Everyone shovels. Create shoveling teams. Each person in the team turns over 10 shovels full of dirt. Or each team adds 2 wheelbarrows full of dirt to the garden.
-- Shovel Master -- carries shovels out and back to classroom
-- Fertilizer Master -- Adds fertilizer to holes before irises are planted
-- Hand trowel Master -- Carries and collects hand trowels.
-- Map Maker (2 people) -- Grid paper works well
-- Dirt and mulch measurers -- Measure depth as these materials are added.
-- Iris Distributor -- hands out bags of irises

## How to Cross Pollinate an Iris

Hybridizing is best done before noon on a day without rain.

Equipment: Tweezers or Q-tips, small cardboard tags, twist ties, pen and notebook.

## Method:

1. Remove anther from the iris, first check for pollen. Or use Q-tip to extract pollen. This is called the "pollen parent."
2. Rub pollen on the stigmatic lip (either one or all three) of another freshly opened iris. The stigmati lip should be moist enough for the pollen to stick. This iris is called the "pod parent."
3. Tag iris. The cross would read Pod Parent $x$ Pollen Parent.
4. Record cross in notebook along with name of person who made the cross. This is called your stı book. Keep these records for a long, long time.
5. The Iris blossom will close up and within a few days the ovary underneath will begin to swell if the cross "took." Allow pods to grow on stalks.
6. Observe pod as it continues to grow.
7. Harvest pod in mid summer. It will turn lighter green to tan and begin to split. Don't delay or seeds will spill on the ground.
8. Shell out seeds into an open container (like a coffee filter) and let dry for several weeks. Be sure $\dagger$ keep a tag in the container with seeds. Use a separate container for each pod.
9. In late fall (mid October in Missouri) plant seeds 1 inch deep and 1 inch apart in open ground or ir deep pots sunk at ground level. EACH SEED WILL PRODUCE A NEW IRIS DIFFERENT FROM ALL OTHERS.
10. The following spring seeds will germinate \& seedlings may be "lined out' late spring. Handle carefully and barely cover with soil in a sunny, well-drained spot.
11. Bloom will occur the second spring, or at least the third.
12. Evaluate seedlings for two bloom seasons or more. Destroy ugly seedlings. Assign numbers to good ones and grow to increase stock. Send to test gardens and tour gardens for evaluation if desired.
13. Choose a name for superior seedlings and send them to the AIS Registrar. Directions are in the AIS Bulletin and the AIS website.
14. Offer your new iris hybrid for sale by advertising it in the AIS Bulletin or other publication. Send a photocopy of the ad to the AIS Registrar. New tall bearded irises sell for $\$ 40$ per rhizome and up.
15. You are now a "real" hybridizer.

Note: The usual way irises reproduce is by vegetative propagation. After bloom, irises put out five to six "increases" near the "heel" of the rhizome and these will be identical to the original variety. (Thus JESSE'S SONG will always be JESSE'S SONG.)

New iris varieties are made by cross pollination which results in seeds, each one new and different. Making new iris varieties is done by seed propagation.

To keep your iris clumps true to name, break or cut out stalks right after bloom (unless, of course, you have made a cross and there is a seed pod on the stalk). Bumblebees often cross-pollinate irises and pods can go unnoticed. If these seeds fall to the ground, new iris seedlings could bloom in two to three years contaminating your original iris clump.

## Bearded Iris Varieties



DB -- Miniature Dwarf Bearded irises grow up to 8" tall with flowers 2-3 " across, are the earliest variety to bloom.

SDB -- Standard Dwarf Bearded irises grow 8-16" tall with flowers 3-4" across; they bloom just after the miniature dwarf.

IB -- Intermediate Bearded irises grow 16-27" tall with flowers 4-5" across, they bloom between the SDB and the TBs

MTB -- Miniature Tall Bearded irises grow 16-27" tall with flowers not more than 6 " combined height and width; blooms with tall bearded varieties.

BB -- Border Bearded irises grow 16-27" tall with flowers 4-5" across, they bloom with the tall bearded varieties.

TB -- Tall Bearded grow over 27" tall with flowers 4-7" across, and are the last bearded variety to bloom.

## Iris Color Patterns

The picture on the left has the parts of bearded iris labeled. The picture to the right is a plain iris. You can print it out and color it if you want.


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SELF -- Standards (upper petals) and falls (lower petals) are the same color. PLICATA -- Petals are rimmed, dotted or stitched in color. BITONE -- Standards are a different shade of the falls. Falls are usually darker. BICOLOR -- Standards are a different color from the falls. BLEND -- One color blended into one or more others. AMOENA -- A bicolor with white standards VARIEGATA -- Has yellow standards and red-brown falls NEGLECTA -- A blue or violet bitone.

## Hold an Iris Show

It is possible to have an approved, judged iris show at your school with the help of your sponsoring iris club. But an informal, unofficial classroom show is fun and requires less work. The needed eEquipment is listed below and a picture of the entry tags (to the left below).

1. Containers -- wine bottles in various sizes work well (soak off labels)
2. Water to fill containers
3. Carpet padding cut into 1 " $\times 2$ " pieces
4. Pruning shears, scissors or knife for cutting iris stalks
5. Q-tips; small, soft paint brush; rubber bands; paper punch
6. Entry tags (available from sponsoring iris club)
7. Ribbons, Blue $=1 \mathrm{st}$, red $=2 \mathrm{nd}$, white $=3 \mathrm{rd}$, pink $=$ Honorable Mention medium purple $=$ Best of Section, and the large purples $=$ Best of Show. Make these from paper and string.
8. Tables

## Procedure:

- Choose a deadline for entries (example, 9 AM)
- Fill containers with water. Students should carefully cut iris stalks at ground level and place them in a container. Discard bottom leaves. Carry a bottle inside.
- Wedge carpet padding on top of container so stalks stand straight.
- Groom iris. Remove dirt and insects using Q-tip or brush. Carefully remove any spent blooms and trim brown leaf tips. Use a Q-tip to wipe off fingerprints from the stalk.
- Fill out the entry tag and place it on the container with a rubber band.
- Place irises on the table in alphabetical order. Group into tall bearded, median, beardless, species, etc.
- 15-25 stalks would make a good show. A student may enter several stalks but only "1" of each named variety.


## Judging:

■ Each named variety is judged on its own merit. Judging is based on 1) Cultural Perfection (75\%) and 2) Condition \& Grooming (25\%).

■ Choose 3 students to be judges and 2 students to be clerks. Judges may not touch entries but clerks may turn containers so judges can see all sides of the iris. Clerks do not speak unless asked. One clerk punches the entry tag and the other places ribbons over entry tags as directed by judges.

■ Irises are judged in order with judges taking turns speaking. Any number of blue ribbons may be awarded, but only one to each named variety.

- After all stalks are judged, pick the best of each section (issue medium purple ribbons).
- After all section awards are decided, choose best of show (issue large purple ribbon).
■ When judging is complete, invite guests to see the iris show.

