

## BOWLTUBE IRIS

*Iris macrosiphon* Torr.

Plant Symbol = IRMA

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### Uses

**Warning:** Fresh iris roots may be toxic.

*Ethnobotanic:* Iris makes some of the finest cordage with fibers that are particularly strong and flexible. The fibers are fine like silk. Only two fibers can be taken from each iris leaf margin with the remainder discarded. Significant numbers of leaves were harvested in the fall and stored until needed. Iris cordage was used for fishing nets, string, rope, snares, hairnets, and regalia.

The men knotted the fishing nets from this material. Iris rope was used to catch animals. A deer rope is near 20 feet long with a lasso at one end, and about half an inch in diameter. This loop was set over a deer trail to catch the head or antlers. Within the set loop over the trail was spread a delicate network of the same material to draw in the loop. One Indian stated that "it takes nearly six weeks to make a rope twelve feet long."

In spite of the tremendous labor of preparing this material, the iris fiber was one of the most generally employed in northwestern California. The threads and cords of this fiber were used to make fishing nets, camping bags and snares for catching deer,

birds, and other game. Since iris is fine and can be bent at sharp angles, it makes an excellent starting knot in coiled baskets.

The Pomo placed acorn meal in a shallow pit and covered the meal with iris leaves before pouring water over the meal to leach out tannic acid. The Monache and the Southern Yokuts in California make flour from iris seed.

A poultice of the raw rhizome is especially effective against staph sores. Externally iris is successfully used in infected wounds, ulcers, fistulas and to take away freckles. Only the dry root should be used internally. Iris is active as a cathartic, has a stimulating effect on the production of both pancreatic enzymes and bile, is a strong diuretic, and will stimulate both saliva and sweat. This is a useful drug plant but in general should be used with care and preferably in combinations where less energetic plants form the bulk of a medicinal formula.

Tea from iris roots was used for kidney trouble by several California Indian peoples (Murphy 1959). The Yana chewed iris roots to cure coughs. The Modoc used an iris root decoction to soothe sore eyes. A piece of iris root was inserted in a tooth cavity to kill the nerve, so the tooth will come out. Roots were burned and the smoke inhaled to alleviate dizziness. A root decoction was used as a cathartic and emetic, but large doses could cause severe digestive problems.

*Landscaping & Wildlife:* The beautiful and variable blossoms lend themselves to landscaping, where they naturalize and require minimal maintenance. Native irises are free flowering, most are long lived, require very little attention, and provide an abundance of seeds. Iris flowers attract insects and birds. Irises provide both nectar and insects to hummingbirds.

### Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status, such as, state noxious status and wetland indicator values.

### Description

*General:* Iris Family (Iridaceae). The native bowl-tube iris has green or blue-green leaves from 2-5 mm wide, generally colorless at the bases that are longer than the stems. It has golden yellow to apricot to

cream to deep blue-purple to violet flowers with rounded sepals. It blooms from April to May. This perennial, evergreen iris has one to two flowers close to the ground. The rhizomes average 8 mm in diameter.

### **Distribution**

For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site. In California, bowl-tube iris does not occur on the west slopes of the outer Coast Ranges, but is found over a very large area throughout the rest of those ranges from Santa Cruz County northward.

### **Establishment**

*Adaptation:* The plant grows in sun to broken shade with moderate moisture and porous soil. This iris occurs in open to partly shaded slopes, in the foothill and north oak woodland, mixed evergreen, and mixed conifer communities, generally less than 1000 m in elevation. Horticulturally, it is used for cover, edging, rock gardens, and variation in flower color. This species is more of an upland species than *Iris douglasiana*. This iris does not form clumps and must be started from seed. It does not grow vigorously in the garden. *Iris fernaldii* hybridizes with *Iris macrosiphon* and the hybrid populations threaten the pure strains.

*General:* The native irises are excellent in shade situations, even dense shade of walls and fences (Schmidt 1980). They will tolerate sun for most of the day in mild areas, and should have afternoon shade and ample water in the interior regions. These plants are intolerant of frequent summer water; they should not be planted near lawns or other moisture-loving plants. These plants require excellent drainage. Compacted or other water-holding soils may need to be modified. Fertilization increases biomass and seed production.

Irises start growing with the first cool weather and rains in fall, reaching the height of their growth in spring and early summer.

*Propagation by Plant Division:* Bowl-tube iris does not form clumps, and it is recommended that the plants be started from seed. However, this iris is still clonal, radiating in growth outward from the center of the plant. This iris can be propagated from plant division, in fall or winter after the first new roots are established but before the flowers form.

Native irises in the wild tend to produce only a small, dry rhizome with stringy roots, which is difficult to dig. Vigorous garden or greenhouse plants produce

firm, white, growing roots especially in winter and spring growing seasons, and clumps are easily divided at those time. Remove a new fan with fleshy roots set in a prepared site, water it, and provide shade for a few days if the plant is placed in full sun. Frequent division appears to keep the plants vigorous, as well as being the best method of increasing the supply of superior forms.

*Propagation by Seed:* Iris seed is easily collected from the large capsules. The seedpods from bowl-tube iris are sometimes right on the ground, almost like a peanut. The capsules turn from green to brown and open at the top when they are ripe. The ripe fruit disperse very rapidly. Two days after splitting, the seed is gone. Collect capsules carefully to avoid spilling seeds. Each capsule has from 20 to 80 seeds. Seeds should be stored in paper envelopes at room temperature until they are planted. The seeds of all species will keep up to 10 years at room temperature.

Plant seeds in 6-inch pots, using a combination of leaf mold and peat moss. Cover seeds with 1/2 inch of same material. Any good potting soil that's acidic is good for seed germination.

After planting, over-winter the pots outdoors in November or December. They will come up in 2-3 months, depending on the weather. Germination increases the second year, because there's always a percentage of hard seeds that won't germinate the first year. Some seeds do not germinate until the second year, to increase the probability for good weather conditions and optimize germination success.

Plant the seedlings in May, when the young plants are usually 3 to 6 inches tall or even taller. Plants are likely to require watering the first year while roots are being established. Plant from 6 inches to one-foot spacing. If a natural look is desired, scatter and clump the plantings. Plants will begin to bloom by their second year if growth has been continuous.

Direct seeding is possible in places that can be left undisturbed, as among shrubs, or among low perennials where the seedlings can be sheltered. If planting seeds in the ground, autumn is the best time for seeding; germination begins in two or three months and often continues beyond that time. A friable seed mixture of sand, loam, and either peat or screened leaf mold is best, covering the seed with sphagnum moss to aid in preventing damping-off of seedlings.

## Management

In autumn old leaves should be removed from the center of large clumps, the foliage cut back, and a mulch applied, especially if the irises are being naturalized in a semi-dry area. Traditional resource management included harvesting huge bunches of iris leaves in the fall, and storing these leaves until needed. The fibers are then harvested from the leaves. This naturally accomplished the pruning and mulching that modern horticulturists practice to maintain iris beds.

The PCI borer (*Amphipoea americana* var. *pacifica*) and iris borer are serious pests of iris. The iris borer stays in the rhizome through the winter, then metamorphose, coming out sometime in the spring as a nocturnal moth. Controlling the moth when its flying, to prevent it from laying its eggs on the iris, would control the borer. At this time, it is recommended to dig the infected plant out entirely, put it a plastic bag, and put them in the garbage can to avoid contamination of other plants.

Milkweed (*Asclepias* species) and dogbane (*Apocynum cannabinum*) were traditionally burned by native people in the fall to maintain vigorous plant production, to stimulate plant growth, to optimize long and abundant fiber production from leaves and stalks, and to stimulate seed production. It is probable that iris was burned for the same reasons.

## Cultivars, Improved and Selected Materials (and area of origin)

IRMA is widely available through native plant nurseries within its range. Seeds and plants of selected iris cultivars are available from many nurseries. It is best to plant species from your local area, adapted to the specific site conditions where the plants are to be grown. Contact your local Natural Resources Conservation Service (formerly Soil Conservation Service) office for more information. Look in the phone book under "United States Government." The Natural Resources Conservation Service will be listed under the subheading "Department of Agriculture."

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