

## PURDY'S IRIS

### *Iris purdyi* Eastw.

Plant Symbol = IRPU

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#### Uses

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

*Ethnobotanic:* Iris makes some of the finest cordage. The fibers are particularly strong, flexible, and fine like silk. Only two fibers can be taken from each iris leaf margin. Huge bunches 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 iris fibers. Animals were captured with iris rope. A deer rope is nearly 20 feet long with a lasso at one end, and about half an inch in diameter. A loop was set over a deer trail to catch the head or antlers. Within the loop positioned over a trail a delicate network of the same material was spread 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 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. Used externally, iris is successfully used for 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.

*Landscaping & Wildlife:* The blossoms lend themselves to landscaping, where they 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). Purdy's iris has leaves that are shiny green on top, gray-green and glaucous underneath. Stems and leaves are stained a brilliant mahogany red or cerise pink. There are two flowers on the tall (12") stem. It has pale cream-yellow flowers with prominent, brownish purple veins or whitish with lavender tinges. Flowers bloom in May and June. The rhizomes are 4-6 mm in diameter.

### **Distribution**

For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site. Purdy's iris is common in open to shady places, in redwood, north coastal coniferous and mixed evergreen forest communities, and grows at elevations below 1200m. It occurs in the north coast of California in the Klamath Ranges and outer North Coast Ranges, from Sonoma to Humboldt and Trinity Counties.

### **Establishment**

This iris does not form clumps, must be grown from seed, and is a sparse grower. 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; therefore, 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:* Purdy's iris is not densely rhizomatous, 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 times. 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 Purdy's 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. You have to watch them carefully, because they split very rapidly and two days later the seed is dispersed. Collect

capsules carefully to avoid spilling seeds; each capsule has from 20 to 80 seeds. Store seeds in paper envelopes at room temperature until they are planted. Seeds 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. Part of the seed won't 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)**

IRPU is readily available from native plant nurseries and seed companies 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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