

Blue Flag Root Profile

Also known as

Iris versicolor, Wild Iris, Flag Lily, Liver Lily, Snake Lily, Fleur-de-lis, Dragon Lily, Poison Flag, Dagger Flower, Dragon Flower, Water Flag, Water Iris and Larger Blue Flag.

Introduction

Blue flag is a perennial herb native to North America, and cultivated elsewhere in the world. It grows in shallow water, at the edge of ponds, marshes and swamps and is similar in appearance to other wild iris, and is sometimes mistaken for them. Blue flag root was a popular herbal treatment among Native American tribes, who used it to treat liver ailments and as a cathartic. Blue flag root is the source of iridin (irisin), a glycoside used as a purgative and liver stimulant.

Constituents

Iridin, also called iridin, volatile oils, salicylic and isophthalic acids, gum, resin, tannin and sterols

Parts Used

Dried Root (rhizome) or fresh root for poultices

Typical Preparations

In teas, extracts and rarely capsules. Used for poultices.

Summary

Once officially listed in the U.S. Pharmacopoeia, blue flag has been used medicinally for centuries to detoxify the body and treat sluggish liver action. Because of this traditional belief in its blood cleansing abilities, it was given the nick name "Liver-Lily". Russian herbalists believed that it was good for chronic skin problems like acne, eczema, and even it could be used as a freckle remover. Taken internally as a tea, it is a strong laxative, diuretic and emetic. Dried root is milder than fresh root, and it's recommended that dried root be used for infusions and teas. Applied topically, it may reduce inflammation, relieve pain and inhibit infection in bruised, swollen or injured joints. Eclectic physicians of the 19th century used it as a non-specific immune enhancer.

Precautions

Blue flag root should not be used by pregnant or lactating women. Some people may have allergic skin reactions to blue flag root, and the fresh root may cause nausea, vomiting and diarrhea. It should not be taken by children.

Iris Versicolor

Botanical: Iris Versicolor (LINN.)

Family: N.O. Iridaceae

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---Synonyms---Blue Flag. Poison Flag. Flag Lily. Liver Lily. Snake Lily. Dragon Flower. Dagger Flower. Water Flag.

---Part Used---Root.

Iris Versicolor (Linn.) is a perennial herb, found abundantly in swamps and low grounds throughout eastern and central North America,

common in Canada, as well as in the United States, liking a loamy or peaty soil. It is not a native of Europe.

It grows 2 to 3 feet high, with narrow, sword-shaped leaves, and from May to July produces large, handsome flowers, blue, except for the yellow and whitish markings at the base of the sepals.

---Description---Blue Flag Rhizome has annual joints, 2 or more inches long, about 3/4 inch in diameter, cylindrical in the lower half, becoming compressed towards the crown, where the cup-shaped stem-scar is seen, when dry, and numerous rings, formed of leaf scars are apparent above and scars of rootlets below. It is dark brown externally and longitudinally wrinkled. The fracture is short, purplish, the vascular bundles scattered through the central column. The rootlets are long, slender and simple. The rhizome has a very slight but peculiar odour, and a pungent, acrid and nauseous taste.

Owing to the similarity of name, and the appearance before blooming, this flag is sometimes mistaken by American children for Sweet Flag or Calamus, which grows in the same localities, often with disastrous results.

Of the 100 species of true Iris, twenty-two inhabit the United States, but only one, *Iris Missouriensis*, much resembles this species (the rhizome of which yields an official American drug), or has a rhizome likely to be mistaken for it.

When *cultivated*, the American Blue Flag succeeds best in heavy, rich, moist soil. If planted in August or September, it can be harvested at the end of October the following year. The yield per acre is 3 to 4 tons of the rhizome.

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---Constituents---The rhizome contains starch, gum, tannin, volatile oil, 25 per cent of acrid, resinous matter, isophthalic acid, traces of salicylic acid and possibly an alkaloid, though a number of substances contained are still unidentified. It owes its medicinal virtues to an oleoresin.

Distilled with water, the fresh rhizome yields an opalescent distillate, from which is separated a white, camphoraceous substance with a faint odour. The oil possesses the taste and smell, but only partly the medicinal activity of the drug.

---Medicinal Action and Uses---The root is an official drug of the United States Pharmacopoeia and is the source of the Iridin or Irisin of commerce, a powdered extractive, bitter, nauseous and acrid, with diuretic and aperient properties.

Iridin acts powerfully on the liver, but, from its milder action on the bowels, is preferable to podophyllin.

The fresh Iris is quite acrid and if employed internally produces nausea, vomiting, purging and colicky pains. The dried root is less acrid and is employed as an emetic, diuretic and cathartic. The oleoresin in the root is purgative to the liver, and useful in bilious sickness in small doses.

It is chiefly used for its alterative properties, being a useful purgative in disorders of the liver and duodenum, and is an ingredient of many compounds for purifying the blood. It acts as a stimulant to the liver and intestinal glands and is used in constipation and biliousness, and is believed by some to be a hepatic stimulant second only to podophyllin, but if given in full doses it may occasion considerable nausea and severe prostration.

Its chief use is for syphilis and some forms of low-grade scrofula and skin affection. It is also valuable in dropsy.

It is said to have been used by the southern North American Indians as a cathartic and emetic.

The flowers afford a fine blue infusion, which serves as a test for acids and alkalies.

---Preparations and Dosages---Powdered root, as a cathartic, 20 grains. Irisin, 1 to 3 grains. Solid extract, 10 to 15 grains. Fluid extract, 1/2 to 1 drachm. Tincture, 1 to 3 drachms.