

This WEED REPORT does not constitute a formal recommendation. When using herbicides always read the label, and when in doubt consult your farm advisor or county agent.

This WEED REPORT is an excerpt from the book *Weed Control in Natural Areas in the Western United States* and is available wholesale through the UC Weed Research & Information Center (wric.ucdavis.edu) or retail through the Western Society of Weed Science (wsweedscience.org) or the California Invasive Species Council (cal-ipc.org).

Iris pseudacorus L.

Yellowflag iris

Family: Iridaceae

Range: Many western states, except North and South Dakota, Wyoming, Colorado, Arizona and New Mexico.

Habitat: Moist soils near pond margins, irrigation ditches, and wetland sites.

Origin: Native to Europe. Was introduced and is still widely used as a pond ornamental.

Impacts: Yellowflag iris is toxic to humans and animals when a certain amount of the foliage or rhizomes is ingested. It can form dense stands at the edge of lakes, streams and ponds and reduce native plant biodiversity.

Yellowflag iris may also reduce habitat needed by waterfowl and fish.

Western states listed as Noxious Weed: Montana, Oregon, Washington

California Invasive Plant Council (Cal-IPC) Inventory: Limited Invasiveness



A perennial with thick rhizomes (1.5 to 2 inches in diameter), sword-like leaves, and several yellow to cream-colored flowers per stem. Plants are typically 3 ft tall, but can grow to 5 ft tall. There are numerous native irises throughout the western United States. These play an important role in plant communities. Yellowflag iris is one of the few that is found near aquatic areas and has bright yellow flowers.

Plants take 3 years to mature before flowering. The beautiful yellow flowers produce large seed capsules to 3 inches long containing many seeds per capsule (up to 120). Plants reproduce both vegetatively and by seed. Yellowflag iris seeds are dispersed by water. Seeds have a hard seed coat beneath which there is a gas space. This allows seeds to float on the water surface in fall and early spring and germinate along shorelines when water recedes. It is not clear how long the seeds persist in the soil seed bank.

NON-CHEMICAL CONTROL

Mechanical (pulling, cutting, disking)	Mechanical removal of yellowflag iris in sensitive aquatic areas may cause extensive disturbance that facilitates the establishment of other weedy plants. Nevertheless, physical and mechanical methods may be effective in controlling small populations of yellowflag iris. However, it is necessary to remove the entire plant and rhizome system. Repeated mowing is not often considered effective for iris control, but may eventually weaken the plant.
Cultural	Plastic tarps have been used to control yellowflag iris in small patches. Woven plastic and landscape fabric proved to be the best materials.
Biological	There are no biological control agents for yellowflag iris. Because the genus has many important natives, as well as ornamentals, it is not likely that a biological control program will be initiated.

CHEMICAL CONTROL

The following specific use information is based on published papers or reports by researchers and land managers. Other trade names may be available, and other compounds also are labeled for this weed. Directions for use may vary between brands; see label before use. Herbicides are listed by mode of action and then alphabetically. The order of herbicide listing is not reflective of the order of efficacy or preference.

GROWTH REGULATORS

2,4-D	Rate: 5 lb a.e. in 100 gal water
Several names	Timing: Postemergence at early bloom stage. Recommendation for terrestrial species is for a spray-to-wet treatment.

	<p>Remarks: Terrestrial irises have been controlled with 2,4-D ester formulations, but these are not registered for use in aquatic areas. It is possible that the aquatic amine formulation of 2,4-D may be effective on yellowflag iris, but no results have confirmed this. Rates are those used for terrestrial iris species using the ester formulations. Imazapyr or glyphosate are the preferred control methods.</p>
AROMATIC AMINO ACID INHIBITORS	
<p>Glyphosate <i>Rodeo,</i> <i>Aquamaster</i></p>	<p>Rate: 4% v/v solution of <i>Rodeo</i> or <i>Aquamaster</i> (2% a.e.) for spot treatment</p> <p>Timing: Postemergence to foliage when plants are growing rapidly, but before flowering in late spring or early summer. Can also apply in fall.</p> <p>Remarks: Use a non-ionic surfactant registered for use in aquatic areas. Glyphosate is nonselective. In some cases reapplication may be necessary. Application with a drizzle gun gives good results and is far easier to treat compared to a conventional spray boom. In addition, it greatly reduces the risk of drift. Glyphosate (2% v/v solution) can be tank mixed with imazapyr (1% v/v solution). Application with a drizzle gun was not as effective with glyphosate as it was with imazapyr.</p>
BRANCHED-CHAIN AMINO ACID INHIBITORS	
<p>Imazapyr <i>Habitat</i></p>	<p>Rate: Spot treatment: 1 to 3% v/v solution. Drizzle application: 20% <i>Habitat</i> in 30% aquatic registered modified vegetable oil (e.g., <i>Competitor</i>) at 5 gallons per acre.</p> <p>Timing: Postemergence to plants at pre-bloom stage or to late season plants in fall.</p> <p>Remarks: Use a non-ionic surfactant registered for use in aquatic areas. Application with a drizzle gun gives excellent results and is far easier to treat compared to a conventional spray boom. In addition, it greatly reduces the risk of drift. This technique with imazapyr is the most effective for iris control.</p>

RECOMMENDED CITATION: DiTomaso, J.M., G.B. Kyser et al. 2013. *Weed Control in Natural Areas in the Western United States*. Weed Research and Information Center, University of California. 544 pp.