War on Weeds — Weeds are Everybody's Problem

THE ISSUE: Dyer's woad

Dyer's woad (*Isatis tinctoria*) is a biennial or short-lived perennial that is native to Europe. It was originally introduced into the U.S. as a source for making blue dye and for medicinal purposes. It invades rights-of-way, rangelands, pastures, cropland, and other disturbed sites. Its presence reduces forage and crop production. It has become a widespread problem especially in southeast Idaho.

Dyer's woad seedlings can establish in the spring or the fall. Seedlings that establish in the fall overwinter as rosettes and then bolt in the spring.



Photo courtesy of Steve Dewey, Utah State University, Bugwood.org

Seedlings that establish in the spring will remain in the rosette stage until the following spring. After bolting dyer's woad can grow up to 4 feet tall. Its leaves are lance shaped, 1-7 inches long, bluish green in color, with a whitish midvein and slightly wavey margins. It has distinct yellow, flat topped clusters of flowers. Each flower has four petals. Seeds are housed inside brown-black oblong pods, each pod contains a single seed. A single plant can produce 85-500 seeds in a single year. Seeds can be transported easily on animals, clothing, and equipment. Dyer's woad has a taproot that can be up to $1\frac{1}{2}$ feet long.

Integrated Pest Management (IPM) Options:

- Prevention Learn to identify this plant. Clean equipment after leaving an infested area.
 Do not transport unknown plant material.
- Mechanical Hand digging individual plants can be an effective method of control.
 Spring tillage and mowing prior to the production of seed can also be effective forms of control.
- Cultural Establish a healthy stand of beneficial plants that will compete with dyer's woad.
- Chemical 2,4-D LV ester, aminocyclopyrachlor + chlorsulfuron (Perspective), chrlorsulfuron (Telar), imazapic (Plateau), metsulfuron (Escort and others) are herbicide active ingredients that can effectively control dyer's woad. Always read and follow herbicide label directions!

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