



DYER'S WOAD

Isatis tinctoria



Beki Shoemaker
Pierce Co. Noxious Weed Control Board

- ✦ Dyer's Woad is a Class A noxious weed.
- ✦ Dyer's Woad biennial or short-lived perennial from the Brassicaceae Family and reproduces by seed.
- ✦ This plant grows from 1 to 4 feet tall and has a 3 to 5 foot long taproot. The basal rosette produces stalked, bluish green leaves covered with fine hairs. The stem leaves are 1 ½ to 7 inches long lance shaped, alternate with a whitish mid vein. When the rosette bolts, up to 20 stems can be produced. Its small yellow flowers bloom from April to June, they are cross shaped with 4 sepals, 4 petals, 2 short outer stamens, and 4 longer inner stamens.
- ✦ Dyer's woad was used as a source for blue dye (indigo) since the 13th century and it was cultivated till the 1930's in England. Indigotine, the blue dye chemical, is located in the leaves.
- ✦ Dyer's Woad will establish in rocky soils, along road sides, gravel pits, levees and railroad rights-of-ways. From there it has the ability to spread by seed to well vegetated pastures, forests, waterways, hayfields and crop lands.
- ✦ Rotting seed pods contain an allelopathic chemical that works as a germination inhibitor and hinders the root development of nearby plant seedlings. This gives Dyer's Woad seedlings the ability to outcompete other plants and contributes to seed bank formation.
- ✦ Dyer's woad is unpalatable. Though it isn't toxic to livestock, it is closely related to several other toxic weeds, which makes it a candidate for toxicological studies.



CONTROL OPTIONS

- ✦ Mowing is not considered an effective treatment due to re-sprouting from the crown.





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- * Hand pulling may be effective in reducing infestations. It is critical to remove the crown to prevent re-sprouting. Hand pulling is easiest after the plants have bolted, but should be done before seed set. Most pulling programs have indicated it is necessary to follow up for several years to prevent re-infestation
- * The selective, translocated active ingredient 2, 4-D (used in Hi-Yield, Weedmaster, etc) is an effective treatment for Dyer's Woad. Plants should be treated in the seedling to rosette stages. Late season control of flowering plants is difficult and may not eliminate seed production.
- * When using herbicides, read and follow all label instructions and obey all label precautions. (Note:

pesticide product registration is renewed annually and product names and formulations may vary from year to year.)

- * A native rust pathogen has shown some effectiveness in preventing seed or fruit production and seems to be spreading naturally to new populations.



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