

Dyer's Woad
Isatis tinctoria

Currently in Montana, noxious weeds infest about 7.6 million acres (Montana's Noxious Weed Management Plan, 2008). Many of these state listed noxious weeds were brought to America as ornamentals for gardens, medicinal purposes, by accident in discarded soil from a ship's ballast, or unintentionally in bags of seed brought from other parts of the world. Whatever the cause of introduction, 32 non-native plant species have found their way onto Montana's state noxious weed list.

Dyer's woad (*Isatis tinctoria*) is a priority 1B listed noxious weed in the state of Montana. Priority 1B species are noxious weeds that have limited presence within the state of Montana. Management for these species includes eradication or containment and education. Species listed as Priority 1B noxious weeds are: dyer's woad, flowering rush, Japanese knotweed complex, purple loosestrife, rush skeletonweed, Eurasian watermilfoil, scotch broom and curlyleaf pondweed.

Dyer's woad is native to central Asia, eastern Siberia, and western Asia. The dyer's woad plant produces a blue substance that was used for centuries as a form of dye for pottery, textiles, and body paint. Dyer's woad was introduced into North America during the colonial period for its use as a dye before indigo dye was available. Dyer's woad escaped cultivation and spread to the West as a contaminant in alfalfa seed and continues to persist in today's landscapes. This plant tends to inhabit dry, rocky soils and is commonly found on hillsides and can usually be found in dry pastures, uncultivated fields, roadsides, waste areas, forest and rangelands.

This plant is very diverse and can be a winter annual, a biennial or a short-lived perennial depending upon climate and habitat conditions. Dyer's woad has bluish-green alternate lance shaped leaves that are covered with fine hairs. Leaves have a cream colored mid-vein; which is especially noticeable on the rosettes. This plant can grow up to four feet in height and the taproot can reach depths of up to five feet! Dyer's woad grows very quickly and can produce up to 20 stems that are capable of setting seed very quickly. The flowers of dyer's woad are yellow with petals 1/8" long and wide; flowers are found in clusters at the ends of the branch tips. When dyer's woad sets seeds it produces large blackish-blue teardrop-shaped seed pods.

Dyer's woad is best managed by hand pulling or the use of herbicides. Dyer's woad is currently found in Beaverhead, Carbon, Flathead, Gallatin, Missoula, Park, and Silver Bow counties in Montana. If you think you have found an infestation of dyer's woad be sure to alert your local county weed district weed coordinator so that they can confirm the presence of this noxious weed and a proper treatment program can begin.

Please take a few moments to learn about dyer's woad as well as the other Montana state listed noxious weeds, if noxious weeds are not currently a problem in your area, they may be in the near future. For more information about Montana's state listed noxious weeds, regulated plants, or weed species listed on your county weed list, please contact your local county weed district (can list weed district name here... ex: Lewis & Clark County Weed District) at (406) (Phone number). Or you can contact the Montana Department of Agriculture at (406) 444-3144.