



Yellow Sweetclover

Melilotus officinalis (L.) Lam

Native Origin: Native of Europe and Asia. It was introduced to North America from Europe as a forage crop species.

Description: A sweet-smelling herb in the pea family (Fabaceae). It is an erect annual or biennial that grows from strong taproots, often growing in colonies. The stems are freely branched above, hairless or with sparse, fine, flat, stiff, very short hairs. The leaves are alternate on the stems, and each leaf is comprised of 3 leaflets, arising from a distinct petiole. The leaflets are .5 to 1.5 inches long, with small, sharp teeth, almost hairless to finely flat- short-hairy. The numerous yellow flowers grow in clusters, flowering from May to October. The fruit is produced in pods, usually with 1 seed. Seeds are dispersed by water and wind. They are drought tolerant and winter hardy, but cannot withstand prolonged flooding.



Habitat: It is most commonly found on calcareous soils and grow best on rich loams and clay loams with pH levels of 6.5 or higher. It will grow on highly alkaline soils. It grows well in direct sunlight or in partial shade and is most frequently found in open, disturbed, upland habitats such as prairies, savannas, and dunes.



Distribution: It has been cultivated as a forage crop and soil builder throughout the United States since the early 1900's. The Alien Plant Working Group reports yellow clover to be invasive in the following states: AK, AZ, CA, CO, HI, IA, ID, IL, IN, KY, MD, MI, MN, NV, NY, OK, OR, SD, TN, TX, UT, VA, WA, WI, WV, WY . It is distributed throughout the United States as shaded on the map.

Ecological Impacts: It is a threat to recovering prairies because it easily invades open areas and may compete for resources with native species. It is similarly an unwanted invader of rocky, open, calcareous glades and woodlands. It can degrade natural communities by overtopping and shading native sun-loving species.

Control and Management: Due to the long viability of seeds (up to 30 years) these plants may need continuous management.



- **Manual-** Manual methods include hand pulling before seeds are set, cutting to ground level when plants are in full bloom, mowing close to the ground when seedlings are 6-8 inches tall. For very dense small patches, cutting with a power brush-cutter using a heavy duty saw blade is effective. The stand should be cut just before flowering, and checked a week later for missed or partly cut plants.
- **Prescribed Burns-** Sweetclover response to carefully timed seasonal burns using good management practices. A burn schedule such as a dormant season burn (late fall or early spring) to stimulate germination in the subsequent growing season, followed by a later spring burn the next season to eliminate the second year plants before they set seed has been effective.
- **Chemical-** Spray with 2, 4-D in early spring when seedlings are very small.

References: www.nps.gov/plants/alien/list/m.htm, www.botany.wisc.edu, Wisconsin DNR-
www.dnr.state.wi.us/org/land/er/invasive/factsheets/clovers.htm, www.tneppc.org/Invasive_Exotic_Plant_List,
<http://plants.usda.gov>, http://montana.plant-life.org/species/melilot_offic.htm,
www.fs.fed.us/database/feis/plants/forb/meloff/all, Element Stewardship Abstract-
<http://tncweeds.ucdavis.edu/esadocs/documnts/melioff.htm>