

MARCH 2011

# STEVE'S Weed of the Month

## Black Medic

**Also Known As:** Japanese clover, black clover, hop clover, trefoil

**Black medic, *Medicago lupulina* L.,** is a Eurasian native that is normally an annual but can act as a perennial in some settings. Primarily a weed of turfgrass, this legume (closely related to alfalfa) is a low-trailing plant that reproduces from seed and has a deep taproot in areas where it survives longer than a year. Able to reach lengths of 1–2 feet, its stems are prostrate, 4-angled and branch from the base of the plant, radiating out from the tap root. The leaves are alternate and compound, consisting of 3 oval-shaped leaflets with toothed margins, prominent veins and slightly projecting tips. Longer than the 2 lateral leaflets, the central leaflet extends beyond them on a short stalk. Flowers bloom from late spring to early fall; the bright yellow flowers are small, 5-petaled, rounded to slightly elongated, and borne in dense, globe-shaped clusters. The flowers produce 1/8 inch long pods (the fruit of the plant) that are strongly curled, thick-walled and contain a single kidney-shaped seed; the pods blacken when ripe. Depending on growing conditions, a single plant can produce up to 6,600 seeds, which can remain viable in the soil for several years.



Photo by: Karin A Rawlins, University of Georgia, Bugwood.org

Black medic may be confused with other weedy trifoliolate legumes such as clover species and yellow woodsorrel; however, it can be distinguished by its yellow flowers, black seed pods and leaflets with their oval shape, serrated margins, longer stalked central leaflet, and small apex tips.

Black medic is nitrogen-fixing—its roots add nitrogen to the soil by forming an association with rhizobial bacteria. This weedy plant is able to adapt to a wide range of environmental conditions and is commonly found in lawns, waste areas, pastures, fields, gardens and along riverbanks and railways.



Photos by: Karin A Rawlins, University of Georgia, Bugwood.org

Photos By: Forest & Kim Starr, Starr Environmental, Bugwood.org

## Control Methods

**Cultural control:** Maintaining a healthy plant community (well-watered, fertilization that balances nitrogen/phosphorus) and encouraging the plants to grow thick and tall are good ways to crowd out black medic. As always, it is prudent to reseed a disturbed site with perennial grasses or other desirable plants.

**Mechanical/physical control:** Small populations of black medic can be hand pulled when the soil is moist. The plant can also be removed by rototilling or hoeing. Mowing may not be feasible because of black medic's low-lying growth habit.

**Chemical control:** Small populations can be spot treated with glyphosate (Roundup®), using care not to injure nontarget plants (including grasses and trees), which glyphosate will kill upon contact. A broadleaf lawn herbicide can also be used. Herbicides that contain triclopyr, dicamba, clopyralid, or 2,4-D combinations are generally effective if applied correctly, usually in early spring or fall when the plant is young and actively growing. More than one application may be necessary.

**Biological control:** No biological control agents are available; however, a few fungi have been reported to infect black medic. The plant can be grazed and provides nutritious forage although it can cause bloating in cattle

## **More information can be found in the PNW Weed Management Handbook**

Use pesticides with care. Apply them only to plants, animals, or sites listed on the label. When mixing and applying pesticides, follow all label precautions to protect yourself and others around you. It is a violation of the law to disregard label directions. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

Questions: contact [Steve Van Vleet](#) or phone (509) 397 - 6290