

WHITE SWEET CLOVER

Melilotus albus

Status in Maine: widespread



Description: Tall (3-6'), freely branching, biennial herb; member of the legume (pea) family. **Leaves:** Alternate, compound with three leaflets, with ~1" long petioles and ~½" long, narrow stipules. Leaflets are oblong to ovate, ~1" long; finely toothed. Leaves become sparse on the upper stem. **Flowers:** Small, white "pea" flowers, grouped in 2-8" elongated spikes of 30-80 flowers. **Fruit/seeds:** Small pods (~¼"), each containing 1-2 seeds. Dried pods, when separated from raceme, have a small hook, which can aid in dispersal. Tan seeds are longer than wide. **Stem:** Erect, round. **Root:** Sturdy, long taproot, 2-4' long, with fibrous lateral roots and bacterial nodules, and a root crown. One plant can produce multiple stems.

Native range: Asia, Europe, and Northern Africa. **How arrived in U.S.:** Introduced in the 18th century, probably as livestock fodder and honeybee forage. Still widely planted for soil reclamation and in agriculture as a nurse crop, green manure, livestock fodder, and bee forage.

Reproduction: By seed. One plant can produce several thousand seeds; can be dispersed long distances by animals and water. Plants produce both ready-to-germinate and hard (water resistant) seeds, resulting in seed banks. Seeds can remain viable 14+ years in soil.



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Habitat: Disturbed sites, roadsides, waste areas, floodplains, riverbanks, old fields. Species is a nitrogen fixer, able to colonize poor soils.

Similar native species: None.

Similar non-native species: Yellow sweet clover (*Melilotus officinalis*) is nearly identical but has slightly larger, yellow flowers. The two species are considered one by some taxonomists.

Control methods: Frequent mowing is effective at greatly reducing seed production in its second year. Establishing perennial plant cover, e.g., a native grass sward, has been shown to remove white sweet clover from the habitat within a couple of years. Chemical methods can be used to provide faster control of infestations. Triclopyr provides better control than glyphosate. First year plants can be controlled with a foliar application of a triclopyr ester formulation. Second year plants must be sprayed well before seed set.

