Other Common Name: Lucerne Family: Fabaceae (Leguminosae)

Taxonomy: Medicago comprises about 83 species of legumes, including some two dozen species previously placed within *Trigonella*, which are frequently used as animal fodder or forage. The taxonomy of these species, which are native primarily to Europe, Southwest Asia, and Africa, is difficult. Medicago sativa L. is a diverse polyploid hybrid complex, widely cultivated and naturalized in Europe, Asia and North America, that may be divided into about five subspecies. The most important of these are subsp. sativa (the most widespread cultivated and feral subspecies), subsp. falcata (L.) Arcangeli (a cold-resistant plant of Eurasian origin), and subsp. ×varia (Martyn) Arcangeli (the hybrid of the previous two, often cultivated). Subsp. falcata is distinctive, having yellow flowers and straight or falcate (curved) legumes, and is still treated by some authors as a separate species, M. falcata L. **Description:** Perennial herb with woody roots, to 1 m tall; stems branching with numerous short lateral branches in upper part, more or less short-pubescent. Leaves alternate, stipulate, trifoliolate; leaflets narrowly oblong to obovate; margins denticulate near apex. Inflorescences lateral, racemose. Calyx campanulate, 5-lobed, 4.0–5.5 mm long. Corolla 5-petaled, bilaterally symmetrical, 6–12 mm long; single standard petal outermost, 2 keel petals fused with small apical notch at juncture; color variable from purple to bluish, purple and yellow, yellow or cream. Stamens 10, with 9 forming a single group with attached filaments, 1 separate. Gynoecium of 1 carpel with short style and blunt stigma. Fruit a legume, indehiscent, somewhat flattened, several-seeded, usually coiled for (1-)2-3(-4) turns forming a bur 4-6(-9) mm in diameter, or 5–10 mm long, sickle-shaped or rarely nearly straight in subsp. *falcata*.

Parts in Commerce: Leaves

Identification:

- Trifoliolate
- Central leaflet borne on longer petiolule than lateral leaflets
- Texture thin with thin weak petiole
- Pale or clear green
- Leaflets 1.0–3.5 cm long (usually 0.5–1.2 cm in subsp. falcata, very rarely to 5.0 cm in subsp. sativa), narrowly oblong-oblanceolate to obovate or rarely elliptical or narrowly lanceolate
- Margins with a few small teeth near apex, otherwise entire
- Apices rounded to rounded-truncate with a small tooth extending from midrib (mucron), sometimes shallowly emarginate (centrally notched)
- Bases tapering, cuneate to somewhat rounded
- Upper surface glabrous
- Lower surface often weakly pubescent with short, soft white hairs, especially in younger leaves
- Venation pinnate, secondary veins very weak and inconspicuous, at acute angle to midrib and point-ing toward apex
- Odor characteristic (at least when fresh)
- Taste mild, grassy, pleasant

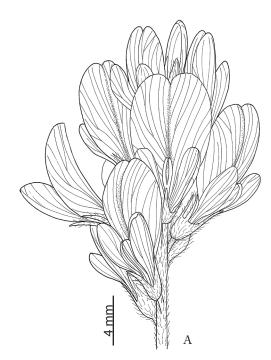
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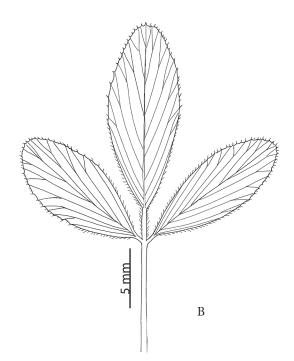


Figure 45: a–b, *Medicago sativa* inflorescence and leaf (hairs are borne on lower surface.)