

# *Lycopus europaeus* L.

**Standardized Common Name:** European Bugleweed

**Other Common Names:** Bitter Bugle, Gypsy Herb, Marsh Horehound, Water Horehound

**Family:** Lamiaceae (Labiatae)

**Taxonomy:** Most of the 15 species of *Lycopus* are native to North America; *Lycopus europaeus* is one of two European species. It is sometimes divided into two subspecies, subsp. *mollis* (A. Kerner) Rothm. ex Skalický and subsp. *menthifolius* (Mabille) Skalický, based on variations in the shape and pubescence of the leaves.

**Description:** Perennial herb, spreading by branching stolons. Stems 40–120 cm high, erect, quadrangular, pubescent. Leaves opposite, short-petioled, 3–12 cm long, 1–5 cm broad, lanceolate to ovate or elliptical, pubescent particularly along veins and glandular-punctate; base cuneate; apex acute to acuminate; margins sinuate or coarsely serrate with deepest lobes near base, or base pinnatifid in lower leaves. Inflorescences axillary, verticillate, bracteate; bracts lanceolate, 3–5 mm long, with narrow pointed apex. Calyx campanulate, 3.5–4.5 mm long, 13-nerved, pubescent; teeth 5, equal, longer than tube, awned. Corolla white with small purple spots, about 4 mm long, nearly radially symmetrical, tubular below, gradually widening above, 4-lobed; upper lobe slightly wider and crenate on outer margin. Stamens 2, protruding from corolla; anthers 2-loculed; staminodes 2, minute. Style gynobasic. Fruit 4 nutlets, 1.6–1.9 mm long, 1.0–1.3 mm broad, with a corky crest.

**Parts in Commerce:** Leaves and flowers

## Identification:

### Leaves

- 3–12 cm long, 1–5 cm broad
- Shape varying from lanceolate to ovate
- Margins sinuately toothed, approaching pinnatifid in some large leaves
- Base cuneate; petiole short
- Apex acute to acuminate
- Glandular-dotted; pubescence otherwise variable

### Flowers

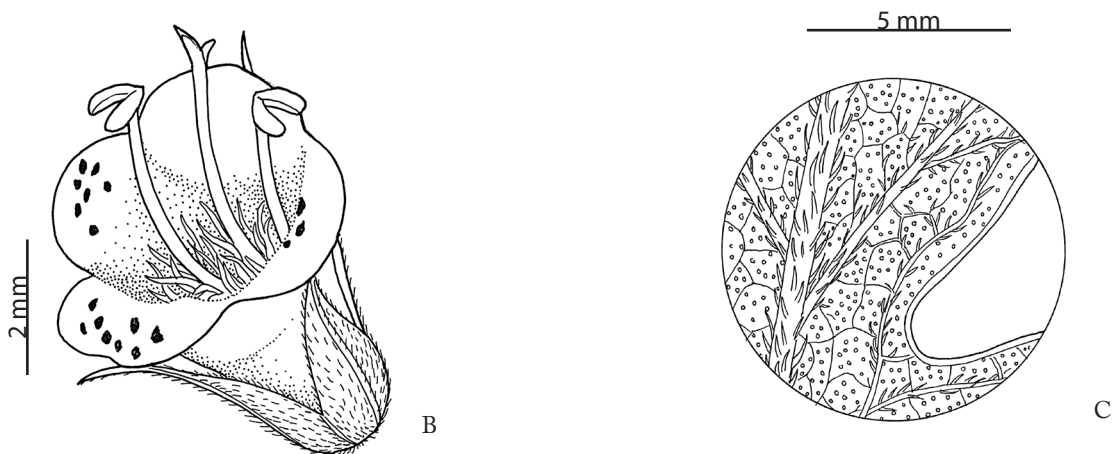
- Subtended by lanceolate, pointed bracts 3–5 mm long
- Calyx bell-shaped, pubescent, with 5 equal teeth; teeth longer than tube, awned
- Corolla 4-lobed, ca. 4 mm long, tubular below, widening above, white with small purple spots
- Stamens 2, protruding from corolla at flowering



**Figure 41: a, *Lycopus europaeus* habit.**

**Adulterants:** Although adulteration is not reported, *L. europaeus* shares a large portion of its range with *L. exaltatus* L. f., which it closely resembles. The two can be distinguished by the following features:

	<i>L. europaeus</i>	<i>L. exaltatus</i>
<b>Leaf margins</b>	Wavy, or pinnatifid only near bases of lower leaves	All leaves strongly pinnatifid almost to apex
<b>Bracts</b>	3–5 mm long	6–9 mm long
<b>Calyx teeth</b>	5, equal, awned, often 2 mm long	4–5, equal or with one smaller, not awned, <2 mm long
<b>Staminodes</b>	Minute or not present	Present, with enlarged tips



**Figure 41:** b–c, *L. europaeus* flower and leaf close-up of lower surface of leaf.