

15. The Mint, Vervain, and Borage Families

THESE THREE FAMILIES have a common type of a fruit. Typically it is dry, at maturity splitting longitudinally into 4 1-seeded segments termed nutlets. These, the "seeds" of common par-lance, are then shaped somewhat like a quarter section of an orange with two flat sides coming together at right angles and a curving back.

There are some exceptions to this "typical" fruit type, owing primarily to nondevelopment of some of the seeds. The number of ultimate segments, in such cases, is then less than 4, and their shape is not as above described.

LABIATAE, MINT FAMILY

Plants usually with square stems and a strong aromatic odor. Leaves simple, opposite, toothed or lobed. Flowers gamopetalous, irregular, 2-lipped.

The Labiatae contain numerous weedy species, most of them minor pests. It also includes a number of well-known garden herbs and sources of aromatic oils, e.g. peppermint, sage, thyme.

Nepeta. *Nepeta cataria*, Catnip, Catmint. Plants perennial, erect, pubescent. Leaves cordate-lanceolate, dentate. Flowers in dense, interrupted, terminal spikes and axillary clusters, dirty-white in appearance. Seeds dark brown, smooth, with a pair of conspicuous white spots at the base. Roadsides, fence rows, barnyards. Summer. p144

Prunella. *Prunella vulgaris*, Selfheal, Heal-all. Plants erect or prostrate. Leaves lanceolate. Flowers in short spikes, lavender, partially concealed by broad bracts. Seeds smooth and glossy, light brown with darker, longitudinal lines. Pastures, lawns, uncultivated areas, more common eastern portion of range. Summer. p144

Teucrium. *Teucrium canadense*, Germander. Perennial from creeping rootstocks. Stem erect, finely hairy. Leaves petioled, cordate-lanceolate, serrate. Flowers reddish-lavender, in loose terminal and axillary racemes. Nutlets 2.5 mm. in diameter, ovoid or subspheroid, covered with a network of ridges, brownish, with a very large attachment p145

scar. Cultivated soil, especially bottoms, roadsides. Summer. Seeds often encountered in seed oats.

- p146 *Leonurus*. *Leonurus cardiaca*, Motherwort. Plants perennial from rhizomes. Leaves palmately lobed; uppermost only toothed. Flowers in axillary clusters, the persistent, pointed calyx lobes becoming spiny after flowering. Central and eastern. Waste areas and around buildings. Summer.
- p145 *Lamium*. *Lamium amplexicaule*, Henbit, Dead-nettle. Annual. Lower leaves petioled; upper blades sessile and clasping. Flowers reddish-purple, clustered in upper leaf axils. Southern and eastern. Gardens, cultivated ground, waste areas, usually in moist soil.

VERBENACEAE, VERVAIN FAMILY

Verbena, Vervain. Plants not aromatic. Leaves opposite. Flowers in spikes, blue or white, gamopetalous, regular or nearly so.

- p147 *Verbena stricta*, Hoary vervain. Plants perennial, erect, hairy. Stems scarcely branching below inflorescence. Leaves serrate, coarsely wrinkled and veined, densely pubescent. Flowers in dense spikes, purple-blue, 8-9 mm. in diameter. Seeds 3 mm. long, dark brown in color, the back covered with a network of longitudinal ridges and cross veins. Common, pastures. Summer to fall.
- p149 *Verbena hastata*, Blue vervain. Perennial. A taller, less hairy, more branching plant than the hoary vervain. Flowers bluish, small, 3-4 mm. across, in slender spikes. Seeds about 2 mm. in length, the back longitudinally ridged, with weak cross nerves. Central and eastern. Pastures, waste land, open woodland. Summer to fall.
- p148 *Verbena urticaefolia*, White vervain. Essentially similar to blue vervain except flowers white, in loose spikes. Pastures, open woodlands. Late summer.
- p147 *Verbena bracteata*, Bracted vervain, Prostrate vervain. Plants annual, prostrate. Leaves irregularly lobed or toothed. Flowers blue in dense, conspicuously bracted spikes. Nutlets reticulate on back. Central and western. Lawns, around buildings, trampled areas, often succeeding in dry sterile soil. Summer and fall.

BORAGINACEAE, BORAGE FAMILY

Leaves alternate. Flowers regular. Nutlets often with tubercles or hooked bristles.

The family contains a number of species of somewhat weedy nature, several of which may be found in the North Central States. Only the following seems common enough to deserve specific description.

Lappula. *Lappula echinata*, Stickseed. Plant annual, pubescent. Leaves sessile, narrowly oblong, entire. Flowers blue, small. Fruit splitting into 4 bristly one-seeded nutlets. Common, pastures and hay fields, roadsides. Summer. The seeds are occasional in legume and grass seeds, usually with the barbs broken off so that the surface appears only knobby. In the field the fruits will readily adhere to clothing or to animals. p150



PLATE 81

Prunella vulgaris 1. Habit x2/3.
Nepeta cataria 2. Habit x2/3. 3. Flower x4.



PLATE 82

Teucrium canadense 1. Inflorescence and upper leaves x2/3.
Lamium amplexicaule 2. Habit x2/3.

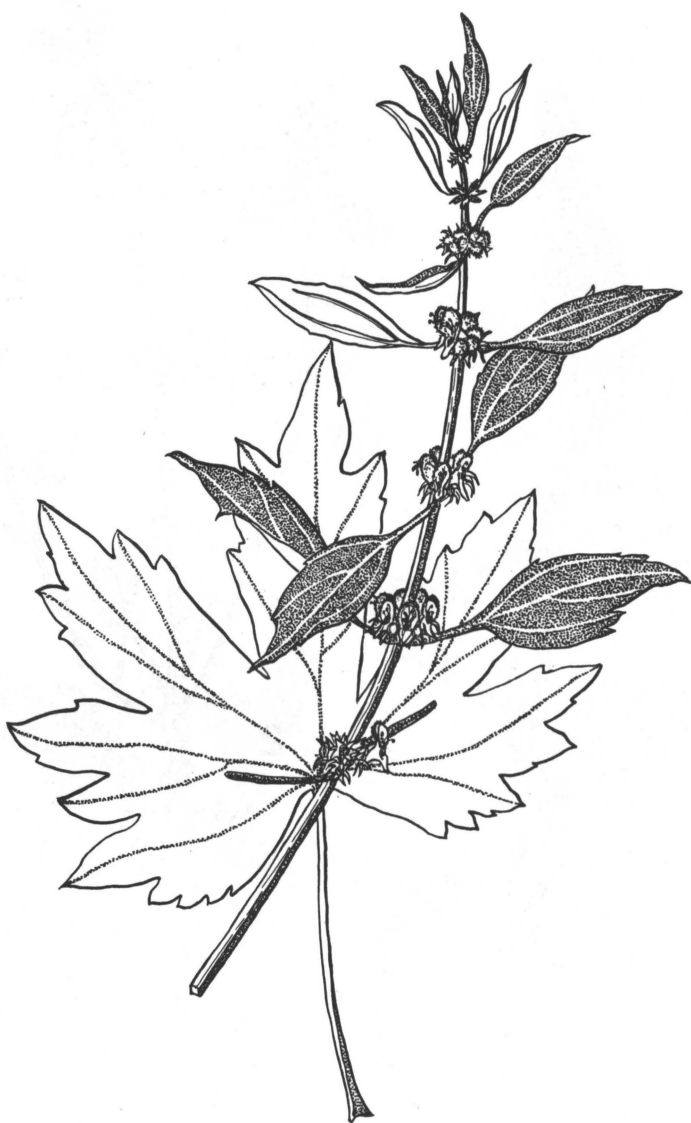


PLATE 83

Leonurus cardiaca Habit and basal leaf x2/3.

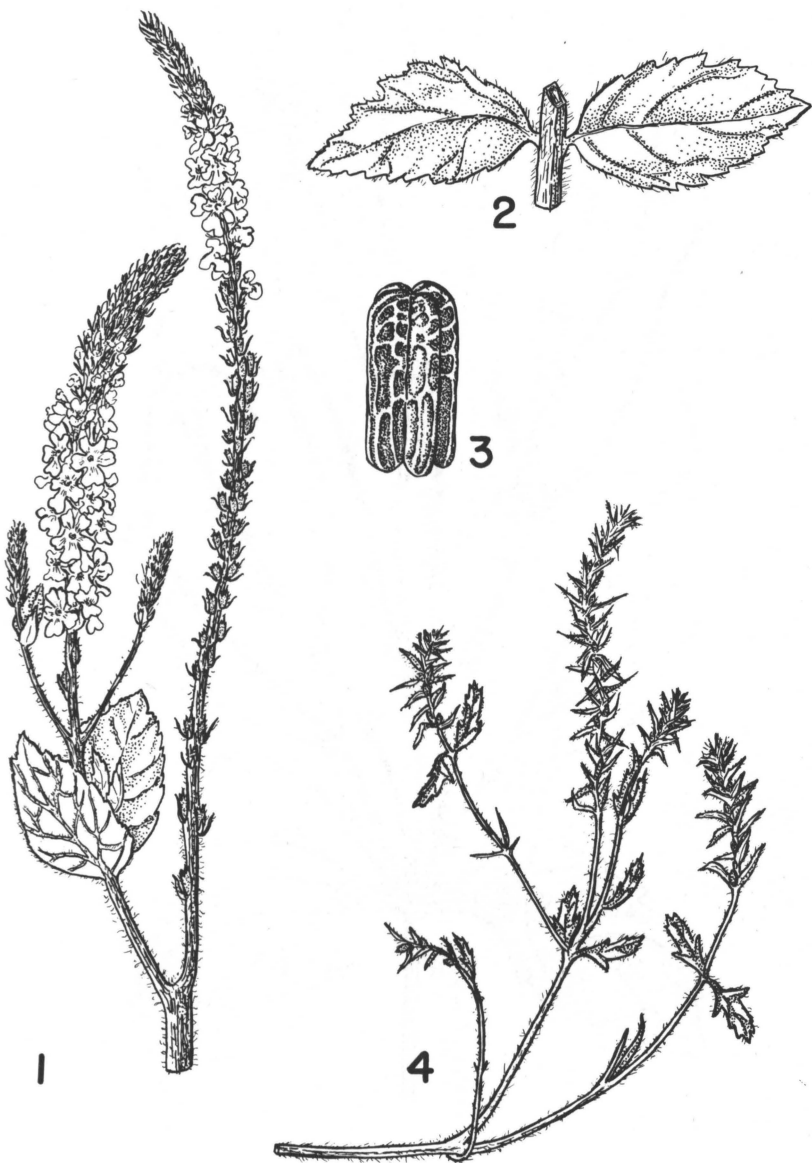


PLATE 84

Verbena stricta 1. Inflorescence x2/3. 2. Opposite leaves x2/3. 3. Nutlet cluster x7.
Verbena bracteata 4. Habit x2/3.

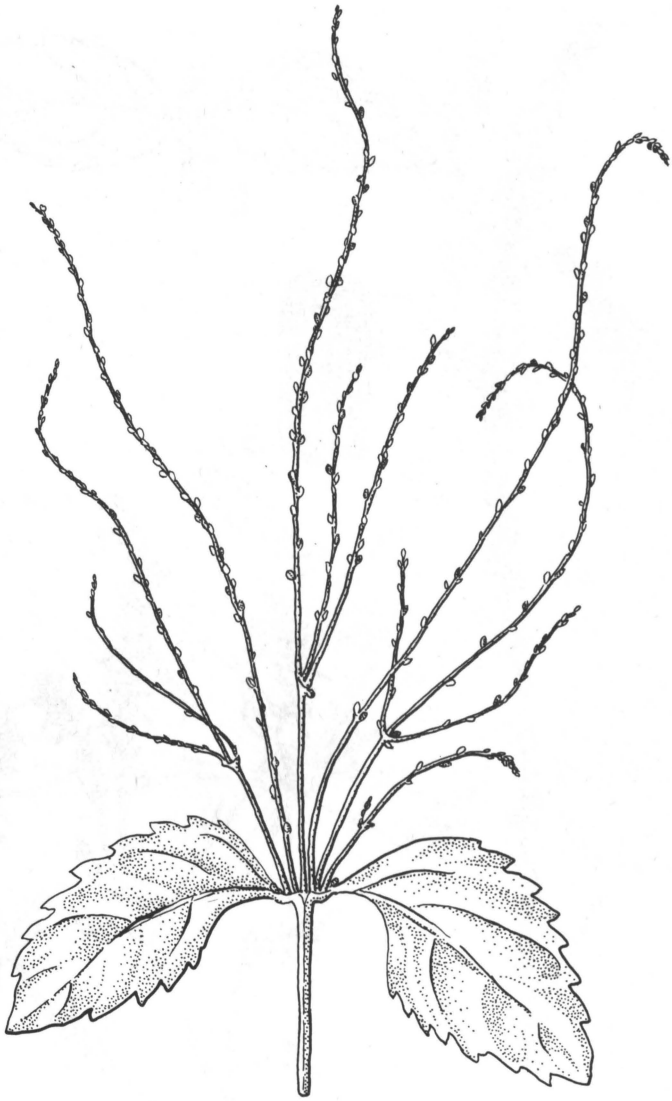


PLATE 85

Verbena urticaefolia Apex of plant x2/3.

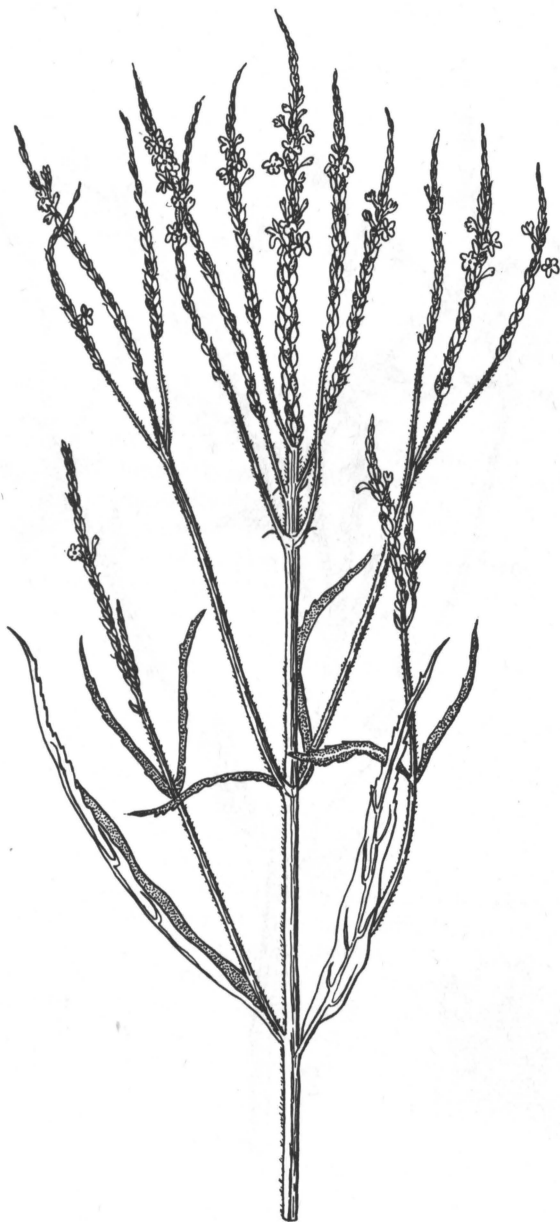


PLATE 86
Verbena hastata Flowering branch x2/3.



PLATE 87

Lappula echinata 1. Fruit x7. 2. Apex of plant x2/3.