

# *Marrubium vulgare* L.

**Standardized Common Name:** Horehound

**Other Common Name:** White Horehound

**Family:** Lamiaceae (Labiatae)

**Taxonomy:** *Marrubium* includes about 30 Eurasian and Mediterranean species; *M. vulgare* is the most widely distributed.

**Description:** Perennial herb. Stems to 45 cm high, weak, quadrangular, branched at the base with branches ascending, pubescent with soft tangled white hairs. Leaves opposite, petiolate, ovate or elliptic to orbicular or transversely elliptic, 1.5–5(–6) cm long, 1–4.5 cm broad; base narrowed, rounded, truncate, or subcordate; apex obtuse; margin coarsely crenate; venation pinnate and reticulated, conspicuous; upper surface rugose, somewhat pubescent to nearly subglabrous; lower surface densely white-pubescent, with multicellular branched hairs and glandular hairs. Inflorescences verticillate, axillary, globose, many-flowered; flowers subtended by pubescent bracteoles. Calyx 5–7 mm long; tube 10-nerved, 10-toothed, pubescent; teeth narrow, equal, spreading, lower part hairy, tips sharp-pointed and reflexed. Corolla white, bilabiate, longer than calyx, typically 7–8 mm long, more or less pubescent; upper lip erect, notched; lower lip spreading, 3-lobed, with middle lobe largest. Stamens 4, 2 longer, 2 shorter. Style gynobasic. Fruit 4 nutlets, triangular and blackish at maturity.

## References:

Cullen J. *Marrubium*. In: Tutin TG, Heywood VH, Burges NA, et al., eds. *Flora Europaea*. Vol. 3. Cambridge: Cambridge University Press; 1972:137–138.

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**Parts in Commerce:** Leaves and flowering tops

## Identification:

### *Stem and leaves*

- Stem portions in flowering tops with long, soft white hairs
- Leaves 1.5–5(–6) cm long, broadly ovate to orbicular
- Leaf apex obtuse
- Margins coarsely crenate

- Underside of leaf with prominent venation, shortly woolly-pubescent especially on veins, with multicellular stellate hairs and glandular hairs
- Upper surface of leaf coarsely wrinkled, much less hairy than the lower, with conspicuous netted venation
- Taste bitter

#### Flowers

- Bracteoles subtending flowers narrow, pubescent, with awl-shaped tips
- Calyx narrowly tubular, 10-toothed, usually ca. 5–7 mm long
- Calyx with dense ring of long soft hairs at mouth; outer surface strongly tomentose, especially on nerves
- Calyx teeth narrow, of equal length, sharp-tipped, reflexed
- Corolla at least slightly longer than calyx; white, or yellowed when dried, but not pink or purple
- Lower lip of corolla spreading, 3-lobed, with middle lobe widest; upper lip erect, notched

**Adulterants:** *Ballota hirsuta* Benth., *Ballota nigra* L. (Black Horehound), *Marrubium peregrinum* L. (also called Black Horehound), and *M. incanum* Desr. are morphologically similar and are reported as adulterants to *M. vulgare*. Each of these species has distinguishing features:

#### *Ballota hirsuta*

- Branched trichomes on leaves with longer basal stalks; sometimes with gland at the tip of the central hair
- Calyx broadly funnelform, densely hairy, with 10 short, triangular teeth
- Outside of upper lip of corolla extremely hairy

#### *Ballota nigra*

- Leaves variable, but often narrowly ovate, with acute apex; margins often serrate rather than crenate; often not distinctly wrinkled
- Calyx funnelform rather than tubular; teeth only 5, triangular with short awns
- Outside of upper lip of corolla extremely hairy; corolla may be purplish

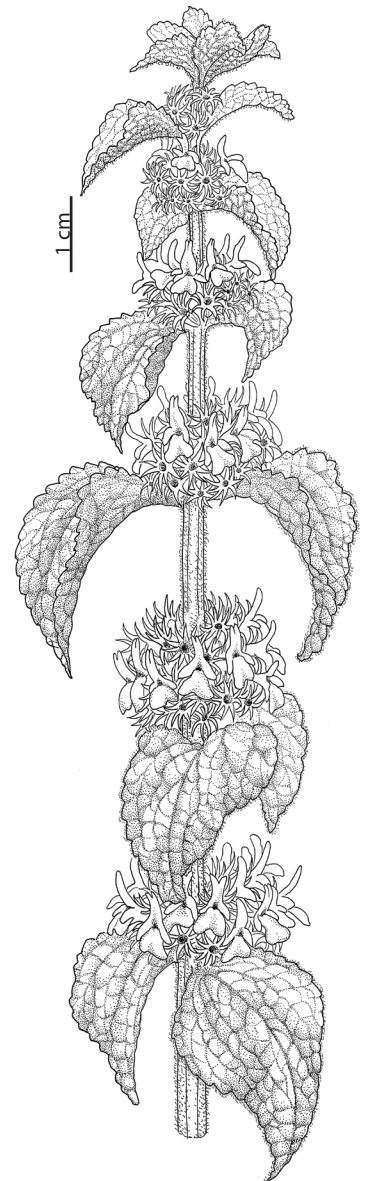
#### *Marrubium incanum*

- Leaves oblong to ovate, not approaching round; margins may be shallowly dentate to serrate
- Calyx teeth only 5; teeth erect or spreading, but not recurved at tip

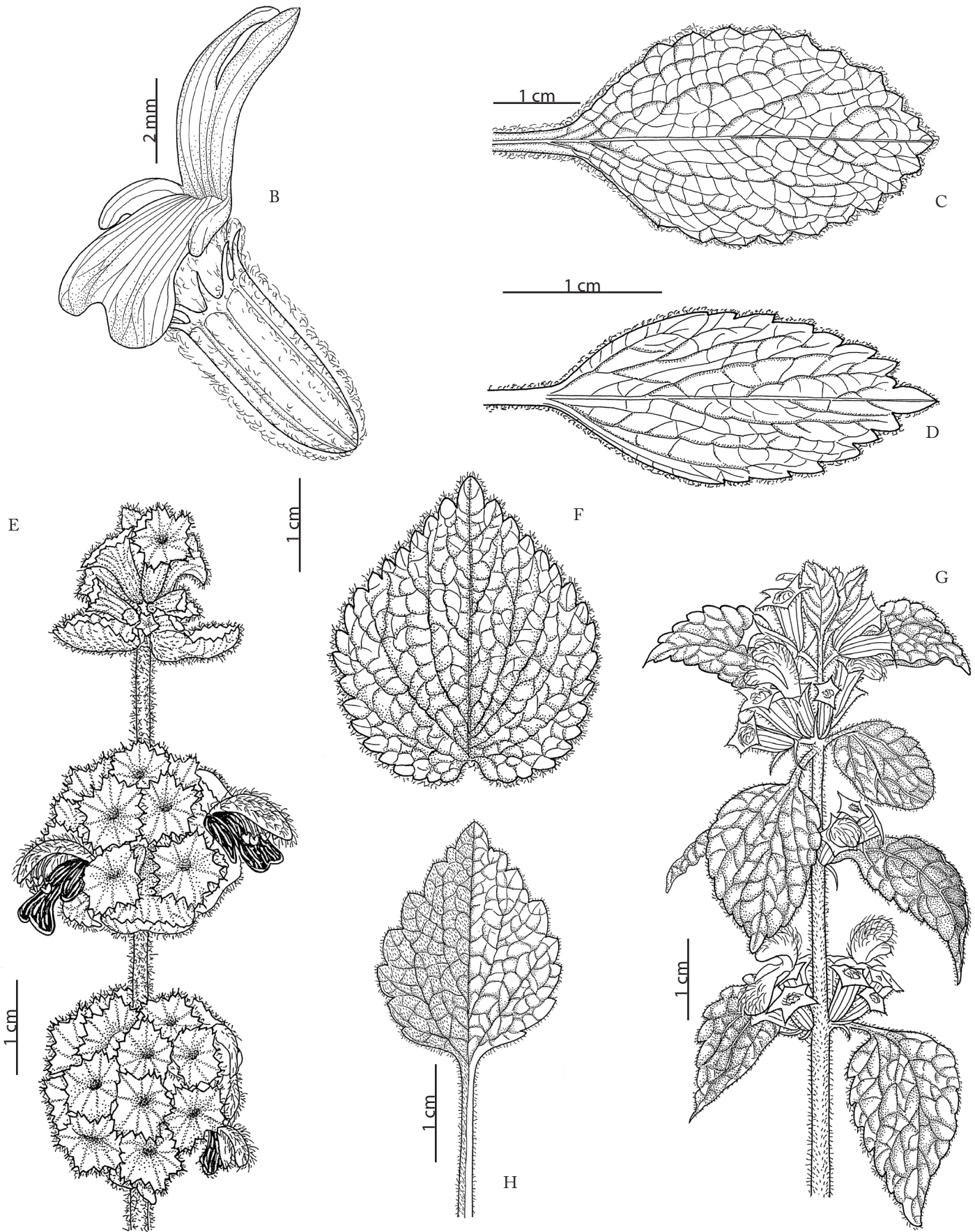
#### *Marrubium peregrinum*

- Stem hairs short, appressed
- Leaves narrower than in *M. vulgare*
- Upper leaf surface densely woolly-pubescent
- Flowers in whorls of 10 or fewer; bracteoles short
- Calyx tube less hairy than in *M. vulgare*; teeth only 5, erect to spreading

*Marrubium* × *paniculatum* Desr. (also known as *M. remotum* Kit.), a Central European hybrid originating from a cross between *M. peregrinum* and *M. vulgare*, is another reported contaminant. Like *M. peregrinum*, its upper leaf surface is often densely woolly-pubescent. It has 8–10 calyx teeth, distinctly unequal in size, with tips not more than slightly recurved.



**Figure 43: a,**  
*Marrubium vulgare*  
inflorescence.



**Figure 43:** b-c, *M. vulgare* flower and leaf; d, *M. perigrinum* leaf; e-f, *Ballota hirsuta* inflorescence and leaf; g-h, *B. nigra* inflorescence and leaf.