

- 8 Racemes c. 1 cm; legume 3–3.5 mm, globose with a short beak **9. neapolitana**
- 7 Racemes with at least 10 flowers
- 9 Ovary and young legume glabrous; legume with transverse veins
- 10 Biennial; legume with indistinct transverse veins **5. officinalis**
- 10 Annual; legume with very prominent transverse veins **11. elegans**
- 9 Ovary and young legume pubescent; legume reticulate-veined
- 11 Biennial or perennial; legume flattened **2. altissima**
- 11 Annual; legume globose **9. neapolitana**
- 2 Stipules of the middle leaves toothed
- 12 Legume reticulate-veined
- 13 Corolla 3–3.5 mm; legume faintly veined, compressed **1. dentata**
- 13 Corolla 6–9 mm; legume foveolate-rugose, globose **8. italica**
- 12 Legume concentric-striate
- 14 Racemes much shorter than subtending leaf; legume acute **15. messanensis**
- 14 Racemes in fruit at least as long as subtending leaf; legume rounded at apex
- 15 Standard as long as or longer than keel; legume blackish-brown **12. infesta**
- 15 Standard shorter than keel; legume yellowish-brown
- 16 Corolla 3–4 mm; legume broadly sessile; leaflets oblong-cuneate **13. sulcata**
- 16 Corolla 4–8 mm; legume stipitate; leaflets obovate-cuneate **14. segetalis**

1. M. dentata (Waldst. & Kit.) Pers., *Syn. Pl.* 2: 348 (1807). Erect or ascending, branched biennial 20–150 cm. Leaflets oblong-elliptical or lanceolate-ovate, serrate. Stipules subulate, dentate at base. Racemes many-flowered. Corolla 3–3.5 mm, bright yellow; wings shorter than standard, longer than keel. Legume 4.5–5.5 mm, obovoid, slightly reticulate-veined, glabrous, blackish-brown when ripe. $2n=16$. *Salt steppes, saline meadows and river-banks. E. & C. Europe, extending northwards to S. Sweden.* Au Cz Da Ge Hu Ju Po Rm Rs (C, W, E) Su.

2. M. altissima Thuill., *Fl. Paris* ed. 2, 378 (1799). Erect, branched biennial or short-lived perennial 60–150 cm. Leaflets oblong-ovate or cuneate, obtuse, serrate. Stipules subulate-setaceous, entire. Racemes 2–5 cm, many-flowered, elongating in fruit. Corolla 5–7 mm, yellow; wings, standard and keel equal. Legume 5–6 mm, obovoid, acute, reticulate-veined, pubescent, black when ripe, usually 2-seeded; style long and persistent. $2n=16$. *Damp or saline habitats, and as a ruderal. Throughout a large part of Europe, but rare in the east and absent as a native from the islands.* Al Au Be Cz Da Ga Ge Gr He Ho Hs Hu It Ju No Po Rm Rs (C, W, E) Su [*Br Hb].

3. M. alba Medicus, *Vorl. Churpf. Phys.-Ökon. Ges.* 2: 382 (1787). Erect, branched annual or biennial 30–150 cm. Leaflets narrowly oblong-obovate to suborbicular, serrate. Stipules setaceous, entire. Racemes lax and slender, many-flowered. Corolla 4–5 mm, white; wings and keel nearly equal, shorter than standard. Legume 3–5 mm, obovoid, mucronate, reticulate-veined, glabrous, greyish-brown when ripe. $2n=16$. *Open habitats, often as a weed or ruderal. Almost throughout Europe, except for most of the islands, but doubtfully native, especially in the north.* Al Au Bu Cz *Da *Fe Ga Ge Gr He *Ho Hs Hu It Ju Lu *No Po Rm Rs (*N, *B, C, W, K, E) *Su Tu [Be Br].

4. M. wolgica Poiret in Lam., *Encycl. Méth. Bot., Suppl.* 3: 648 (1814). Erect, branched biennial 40–120 cm. Lower leaflets rhombic-ovate, serrate, the upper oblong-lanceolate to linear, usually entire. Stipules linear, setaceous, entire. Racemes 5–10 cm, lax and slender, many-flowered, elongating in fruit; pedicels

2–4 mm. Corolla 3–3.5 mm, white; wings and standard longer than keel. Legume 4–5 mm, obovoid, acute, distinctly reticulate-veined, glabrous, brownish-yellow when ripe, usually 1-seeded. *Usually on saline soils. S.E. Russia, S. & E. Ukraine, W. Kazakhstan; casual in N. Europe.* Rs (W, E).

M. arenaria Grec., *Consp. Fl. Roman., Supl.* 198 (1909), from sand dunes in Romania (S. of Constanța) and Ukraine (Danube delta), with racemes grouped 3–5 together, corolla 5–6 mm and legume 6–7 mm with 2 or more seeds, may be separable from 4, but further information is needed.

5. M. officinalis (L.) Pallas, *Reise* 3: 537 (1776) (*M. arvensis* Wallr.). Decumbent or erect, branched biennial 40–250 cm. Leaflets of lower leaves obovate to ovate, the upper ovate-lanceolate, all serrate. Racemes lax and slender, many-flowered. Corolla 4–7 mm, yellow; wings and standard equal, longer than keel. Legume 3–5 mm, transversely rugose, mucronate, glabrous, brown when ripe, usually 1-seeded; style often deciduous. $2n=16$. *Cultivated ground, often on clay or saline soils. Most of Europe except the extreme south, but only as an alien in much of the north.* Al Au *Be Bl Bu Cz Ga Ge Gr He *Ho Hs Hu It Ju Po Rm Rs (*N, *B, C, W, K, E) Sa Tu [Br Da Fe Hb No Su].

6. M. polonica (L.) Pallas, *Reise* 3: 537 (1776). Erect or ascending, branched biennial 35–150 cm. Lower leaflets obovate, acute, dentate, the upper spatulate, subentire. Racemes 4–6 cm, lax, 4- to 9-flowered; pedicels 4–5 mm. Corolla 5.5–6.5 mm, bright yellow; wings and standard a little longer than keel. Legume 7–8 mm, lanceolate or oblong-rhomboid, acute, reticulate-veined, yellow or pale brown when ripe. *Sandy soils. S. Ukraine, S.E. Russia, W. Kazakhstan.* Rs (W, E). (*W.C. Asia.*)

7. M. taurica (Bieb.) Ser. in DC., *Prodr.* 2: 188 (1825). Erect, branched biennial 30–80 cm. Lower leaflets rhombic-obovate or suborbicular-cuneate, the upper oblong, obtuse or truncate, all serrate. Stipules linear-subulate, entire. Racemes 5–9 cm, lax, 40- to 60-flowered, elongating in fruit. Corolla c. 6 mm, white; wings, standard and keel subequal; ovary and young legume pubescent. Legume 4–5 mm, obovoid, transversely striate, with prominent veins, pale brown when ripe, usually 1-seeded. *Dry hillsides and cultivated ground. Krym.* ?Rm Rs (K). (*N. Anatolia.*)

8. M. italica (L.) Lam., *Fl. Fr.* 2: 594 (1778). Erect, branched annual 20–60 cm. Lower leaflets orbicular-obovate, the upper narrower, all obtuse or truncate, serrate above middle. Stipules incise-dentate. Racemes 1.5–3 cm, lax, many-flowered, elongating in fruit. Corolla 6–9 mm, yellow; standard longer than wings and keel. Legume 5–6 mm, globose, obtuse with an apiculus, strongly reticulate-veined, yellowish or greyish-brown when ripe. *Dry, open habitats. Mediterranean region.* Al Bl Co Cr Ga Gr Hs It Ju Sa Si [Lu].

9. M. neapolitana Ten., *Fl. Nap.* 1, *Prodr.*: 62 (1811). Erect, branched annual 15–50 cm; stem pubescent above. Lower leaflets obovate-orbicular, the upper oblong-linear, all obtuse, serrate. Stipules lanceolate, entire. Racemes c. 1 cm, lax, 8- to 20-flowered, elongating in fruit. Corolla 4–6 mm, bright yellow; standard, wings and keel equal; ovary pubescent. Legume 3–3.5 mm, globose, reticulate-veined, narrowing to a conical beak 0.5–1 mm, becoming glabrous, light brown when ripe. $2n=16$. *Dry, open habitats. S. Europe.* Al Bl Bu Co Cr Ga Gr Hs It Ju Lu Rs (K) Sa Si Tu.

10. M. indica (L.) All., *Fl. Pedem.* 1: 308 (1785) (*M. parviflora* Desf.). Erect or ascending annual 15–50 cm. Leaflets lanceolate-oblong, serrate. Stipules subentire. Racemes dense, (10–)many-