

Robinia pseudoacacia L., BLACK LOCUST, FALSE ACACIA. Tree, winter-deciduous, often with multiple trunks, somewhat spinescent, openly branched, in range to 13 m tall; shoots when young \pm short-strigose with upward-pointed hairs; trunk bark fissured, brown.

Stems: initially ridged soon becoming cylindrical, aging somewhat zigzagged, puberulent aging glabrescent. **Leaves:** helically alternate, odd-1-pinnately compound, lateral leaflet pairs typically 4–8(–12, especially in fall), in range 120–350 mm long, petiolate with pulvinus, with stipules; stipules 2, on low swellings at base of petiole beneath pulvinus, initially linear, \pm 2 mm long, early-deciduous but sometimes developing into woody spines on 2-year stems, paired stipular spine sharply pointed, often flattened side-to-side and angular, $<$ 5 mm long but sometimes persistent on the trunk (–30 mm long); petiole pulvinus conspicuous; rachis to 280 mm long, channeled on upper side and low-ridged, glabrate; stipel subtending each leaflet, attached to rachis ridge along channel and oriented forward, linear, 1–1.5 mm long, densely puberulent, nectar-producing from tip, abscising when developing leaflets still small; petiolules 2–4 mm long, pulvinuslike with minute ridges, puberulent; blades of leaflets elliptic to ovate, 10–80 mm \times 6–45 mm, thin, obtuse to rounded at base, entire, minutely notched often with a minute midrib extension at tip, pinnately veined with midrib slightly raised on lower surface. **Inflorescence:** raceme, axillary, pendent, 100–200 mm long, 25–50-flowered, bracteate, puberulent; peduncle 15–25 mm long; rachis several-ridged, finely striped green and purplish red; bractlet subtending pedicel linear to narrowly oblanceolate, 3–3.5 mm long, pinkish, abscising when flower bud very small; pedicel 3.5–8 mm long, glabrate to puberulent. **Flower:** bisexual, bilateral, pealike (papilionaceous), \pm 13 mm across, 16–20 mm long, sweetly fragrant like clover (*Trifolium*); **nectary** nectar-producing receptacle below ovary, cuplike, nectar copious, thin; **calyx** 5-lobed, 6–6.5 mm long, green and typically mottled with purplish red markings, short-strigose; tube bell-shaped, somewhat keeled on lower side; lower and 2 lateral lobes broadly triangular, 1.2–1.7 mm long, acuminate at tip, upper 2 lobes fused \pm along length, broadly obtuse, with 0.2–0.5 mm notch between them; **petals** 5, clawed, white to creamy white (sometimes blushed with light pink); banner claw \pm 4 mm long, curved, semicircular in \times -section, with incurved margins, limb erect, broadly oblong or obovate and \pm cloven-shaped, 13–14 \times 12.5–13.5 mm, $\pm \perp$ and funneled to claw, cordate at base, notched at tip, with outer surface longitudinally grooved along midline, convex on each side of groove, pale yellowish or pale yellowish green on both sides of groove below midpoint; wings 2, arching forward, 15–16 \times 4–5 mm, claws \pm 5 mm long; keel of 2 petals fused on lower edge from near midpoint to tip 6–8 mm, claws 4.5–5 mm long, the keel portion semicircular to crescent-shaped, 13.5–14 mm long; **stamens** 10, diadelphous (9 filaments fused and 1 free); filaments \pm 14 mm long, filament sheet \pm 10 mm long, white, upcurved \pm 90° approaching tip, sheet filled with nectar; anthers basifixed, dithecal, subequal, \pm 0.5 mm long, yellow to pale yellow, longitudinally dehiscent; pollen pale yellow; **pistil** 1, short-stalked (stipe), stipe ca. 3 mm long; ovary superior, \pm 10 mm long, compressed side-to-side, green with faint reddish stripes, 1-chambered with $>$ 12 ovules attached to upper side; style 5–6 mm long, bent upward 90°, with short, straight hairs below stigma for ca. 1 mm fringing stigma; stigma capitate, 2 \times wider than style. **Fruit:** pod (legume), short-stalked, passively dehiscent, 1–15-seeded, linear-oblong and strongly flattened, in range 25–80 \times 10–15 mm, brown, glabrous, upper edge with thin marginal vein, lower edge with submarginal vein and narrow wing \pm 1.2

mm wide; valves stiffly papery, netted-veined; stalk (stipe) 1.5–2.5 mm long. **Seed:** kidney-shaped, 4.5–6 mm long, dark brown and spotted blackish. Early March–mid-May.

Naturalized. Tree naturalized along roadsides where planted originally for erosion control and as a landscape plant. Black locust, *Robinia pseudoacacia*, can reproduce in range by seed, but this species also forms root suckers, although it typically is not invasive into native vegetation. Its leaflets exhibit movement, especially sleep movement at nighttime but also when water-stressed, due to presence of special motor cells in the pulvinus of each petiolule. *Robinia pseudoacacia* flowers here profusely in April and produces a strong, sweet fragrance, attractive to insects.

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