

Vinca major L., GREATER PERIWINKLE. Perennial herb, evergreen, clonal, arching and trailing, readily forming paired, nodal adventitious roots on buried, stolonlike shoots, seldom branching, with trailing shoots often > 100 cm long, < 50 cm tall; shoots somewhat 2-dimensionally flattened (plagiotropic), ± glabrous, axillary buds green with minute, red speckles; latex white and thin. **Stems:** cylindric, 1.5–3 mm diameter, with decurrent petioles separated the length of internode by shallow grooves, tough, flexible (never woody), internodes 40–150 mm long, green or finely streaked with bright red epidermal cells, essentially glabrous with a few hairs at upper nodes. **Leaves:** opposite, simple, petiolate, with stipules; stipules 4 (= 2 pairs, apparently separated by late elongation of petiole), lanceoloid to tongue-shaped, to 0.7 mm long, green with tip becoming purplish red, the lower pair in the leaf axil, juxtaposed or separated by an axillary bud, without hairs around base, the upper pair staggered above petiole midpoint to just below blade, with 3–8 hairs at base, becoming hard and brittle when dry; petiole channeled, 5–15 mm long; blade ovate to broadly ovate, 45–80 × 25–55 mm, ± truncate or short-tapered at base, entire and short-ciliate on margins, acute at tip, pinnately veined with veins slightly raised on both surfaces, dark green and ± glossy aging dull, upper surface minutely pubescent along midrib, typically glabrous on lateral veins. **Inflorescence:** flowers solitary, axillary but only 1 flower per node, bending upward, lacking bracts; pedicel 35–45 mm long. **Flower:** bisexual, radial, 40–60 mm across; **calyx** 5-lobed, fused at base; lobes long, slender, 12–15 mm long, green, ascending, with short-ciliate margins and a ± staggered pair of toothlike nectaries near lobe base; **corolla** 5-lobed, funnel-shaped, blue fading purplish blue; tube ca. 6 mm long, white at base becoming bluish toward throat, internally white, glabrous; throat expanding upward, lighter in color than lobes and glabrous, internally white-streaked with broad bands of pale violet and bearing colorless to whitish hairs below midpoint, forming a thin, erect membrane (corona) at top, corona light lavender; lobes obovate to wedge-shaped but asymmetric, (14–)17–23 × 8–15 mm; **stamens** 5, fused to base of throat; filaments white, bent sharply and ladlelike, bearing colorless to whitish, downward-pointed hairs at base; anthers dithecal, yellowish white with a tongue-like terminal appendage bent toward the stigma, with ascending, whitish to pale yellow or pale tan hairs covering back of appendage; pollen colorless, very sticky; **nectaries** 2, hemispheric to compressed oblong, 2/3 to nearly as long as ovaries, appressed to ovaries, dark green to yellowish green; **pistil** 1, ± 12 mm long; ovaries 2, superior, slightly united, hemi-conic to hemi-ellipsoid, 2 mm long, light green, each 1-chambered with several ovules; style 1 (due to a late fusion event), 7–8 mm long, light yellowish, expanding to a pale orange, disclike collar, ± conic and green above collar, with a dense, spheric tuft of many long white hairs subtending stigma; stigma 2-lobed with semicircular lobes. **Fruits:** (in range never produced) follicles, 2 per flower, ± 4-seeded, arched-cylindric, 40–50 mm long, long-pointed. **Seed:** sausage-shaped, < 1 mm long. Late November–mid-June.

Naturalized. Evergreen perennial widely cultivated as a ground cover and often spreading from plantings and then persisting by vegetative cloning in shady woodlands and canyon bottoms because belowground shoots are like stolons. If growing near a creek, rooted plants of *Vinca major* can be washed away during a storm and become established downstream. White latex appears immediately from any cut or broken shoot or root. The

blue flowers of *V. major* do not appear to have an effective pollinator in range, so that fruits locally are never observed.

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