

Trifolium variegatum Nutt. var. *variegatum*, WHITE-TIPPED CLOVER. Annual, taprooted, 1–several-stemmed at base, sparingly branched, decumbent to erect, 15–40 cm tall; shoots with only cauline leaves, glabrous; roots nodulated. **Stems:** cylindric to slightly ridged, to 2.5 mm diameter, green aging purplish red. **Leaves:** helically alternate, palmately 3-foliolate, petiolate without pulvinus, with stipules; stipules 2, sheathing and fused to stem and to petiole to about midpoint, sheathing stem to 2.5 mm, wings of lower leaves typically entire and long-acuminate, wings of the lowest leaves 4–5 mm long and to 1.5 mm wide, wings of upper leaves with several–10 teeth and to 22 mm long, green lacking colorless patches between veins; petiole above wings \pm hemi-cylindric to scarcely channeled, to 25 mm long, with blade abscising near top of petiole leaving petiole persistent; petiolules pulvinuslike, to 0.3 mm long; blades of leaflets obovate, 4–8 \times 2.5–5 mm, tapered at base, short-serrate on margins nearly to base, obtuse to truncate at tip with inconspicuous to conspicuous tooth terminating midrib, pinnately veined with midrib sunken on upper surface and raised on lower surface, dull, upper surface often with jagged, blackish band ca. 1 mm from base. **Inflorescence:** headlike raceme, terminal and axillary, hemispheroid to inversely conic, 5–10 mm across, of 7–19 flowers in 2–3 whorls, bracteate, glabrous; peduncle angular at base becoming cylindric above, 20–50 mm long, green aging purplish red; **involucre** of bractlets subtending the lowest whorl of flowers, fused and 5–9-lobed, rarely with 1 or 2 lobes free, at early anthesis inversely conic around flowers, becoming spreading and saucer-shaped 2–10 mm diameter and 0.5–4 mm tall (including teeth), pale green and membranous at base to green on upper tube and lobes, with 5–7 teeth per lobe, teeth narrowly acuminate, with ca. 15 veins from calyx base forking for each tooth; rachis cylindric, 1–1.7 mm long, whitish; bractlets subtending pedicels of upper whorl fused or \pm free and deltate, \pm 0.2 mm long, whitish; pedicel 0.3–0.5 mm long. **Flower:** bisexual, bilateral, pealike (papilionaceous), 1.3–1.8 mm across (calyx); **nectary** nectar-producing receptacle below ovary; **calyx** 5-toothed, in range 4.8–5.5 mm long, glabrous; tube narrowly inversely conic, 2–2.4 mm long, 1–1.3 mm wide at orifice, light green, 10-veined at base with a vein to each lobe and sinus; lobes ascending and slightly curved, unequal, long-tapered, 2.5–3.3 \times 0.45–0.6 mm, green but transparent purplish red at spinose tip, aging with purplish red spots at bases of lobes; **petals** 5, purplish red with white tips; banner oblanceolate, 6.2–7.5 \times 1.6–1.9 mm, generally folded upward from midvein but spreading and slightly curved upward at anthesis, dark purplish red in middle, white at base and tip, tapered at base, scarcely notched at rounded tip, glabrous; wings 2, clawed, claws slender, 2.5–3 mm long, limbs lanceolate-oblong, 1.3–1.5 \times 0.3 mm, light purplish red to light purple, \pm bladderly lobed at base above claw, attached to keel above lobe, acute at tip; keel of 2 petals partially fused on lower edge, clawed, \pm scoop-shaped, claw \pm 1.5 mm long, whitish, limbs \pm elliptic, ca. 1.25 \times 0.55 mm, white at base and dark purplish red from 1/3 to tip; **stamens** 10, diadelphous (9 filaments fused and 1 free); filament sheet 3.4–5 mm long, filament free portions 0.5–0.9 mm long alternately short and long, free stamen 3.2–3.5 mm long, white; anthers dorsifixed, dithecal, oblong, ca. 0.2 mm long, yellow, longitudinally dehiscent; pollen light yellow; **pistil** 1, 4–5 mm long; ovary superior, oblong but tapered symmetrically at base and asymmetrically at top, 1.2–1.8 mm long, green, glabrous, 1-chambered with 2 ovules attached to upper side; style 2.7–3.3 mm long, purplish red becoming light green approaching stigma, slightly upcurved at tip; stigma terminal but oblique. **Fruit:** pod

(legume), indehiscent, 2-seeded, oblong to hatchet-shaped, $2.8\text{--}3.1 \times 1.6\text{--}1.8 \times 1\text{--}1.2$ mm, tannish and papery to midpoint, firmer and darker above midpoint, rounded on 3 angles and squarish on angle with style. **Seed:** \pm ovoid, ca. 1.7×1.2 mm, 0.8–1 mm thick, olive mottled dark purplish red. Late April–early June.

Native. Annual known from several moist grassy patches, e.g., recently at SMMNRA Circle X Ranch in a drainage swale associated with a volcanic outcropping and in a small opening of chaparral near Castro Peak (SMM). Our plants of *Trifolium variegatum* possess an involucre with five to nine lobes (teeth), which at maturity is saucerlike. It produces comparatively short flowers subtending by short bractlets, and the petals have white tips. This species is highly variable, and our plants more or less fit var. *variegatum*.
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