

**SOLANACEAE PART FIVE: *CHAMAESARACHA* (A. GRAY) BENTH.
FIVE EYES.**

Erin Manton
Department of Botany
University of British Columbia
3529-6270 University Boulevard
Vancouver, B.C., Canada V6T 1Z4

Perennial herbs, unarmed, the surfaces often hairy, the hairs simple, branched, stellate, or glandular. LEAVES simple, the margins entire to pinnately lobed, subsessile to petiolate. INFLORESCENCES axillary, uniflorous or few-flowered. FLOWERS 5-merous, actinomorphic; calyx campanulate, densely hairy, the lobes triangular, ca. equal to the tube; corolla rotate, creamy yellow to yellow-green, tinged with purple, the throat with white, tomentose, cushion-like pads attached, these alternating with the stamens; stamens equal; anthers free, basifixed, oblong, longitudinally dehiscent, yellow; filaments longer than anthers; stigma minutely 2-lobed. FRUITS spherical berries, tightly invested but only partially hidden by the accrescent calyx (so that top of berry is exposed), the calyx not inflated in fruit; seeds wingless, flattened, reniform. —2 spp. in AZ, 7 spp. worldwide; exclusively of N. Amer., especially the Chihuahuan desert (*chamae*, Greek for “low” or “dwarf” + *Saracha*, a S. Amer. genus of Solanaceae).

- 1. Surfaces glabrous to scurfy, the hairs short, white, branched or stellate, often mixed with longer, tangled hairs, never glandular; leaves subtire to deeply lobed.....*C. coronopus*

- 1' Surfaces densely covered with glandular hairs mixed with longer, simple hairs; leaves entire to only slightly lobed.*C. sordida*

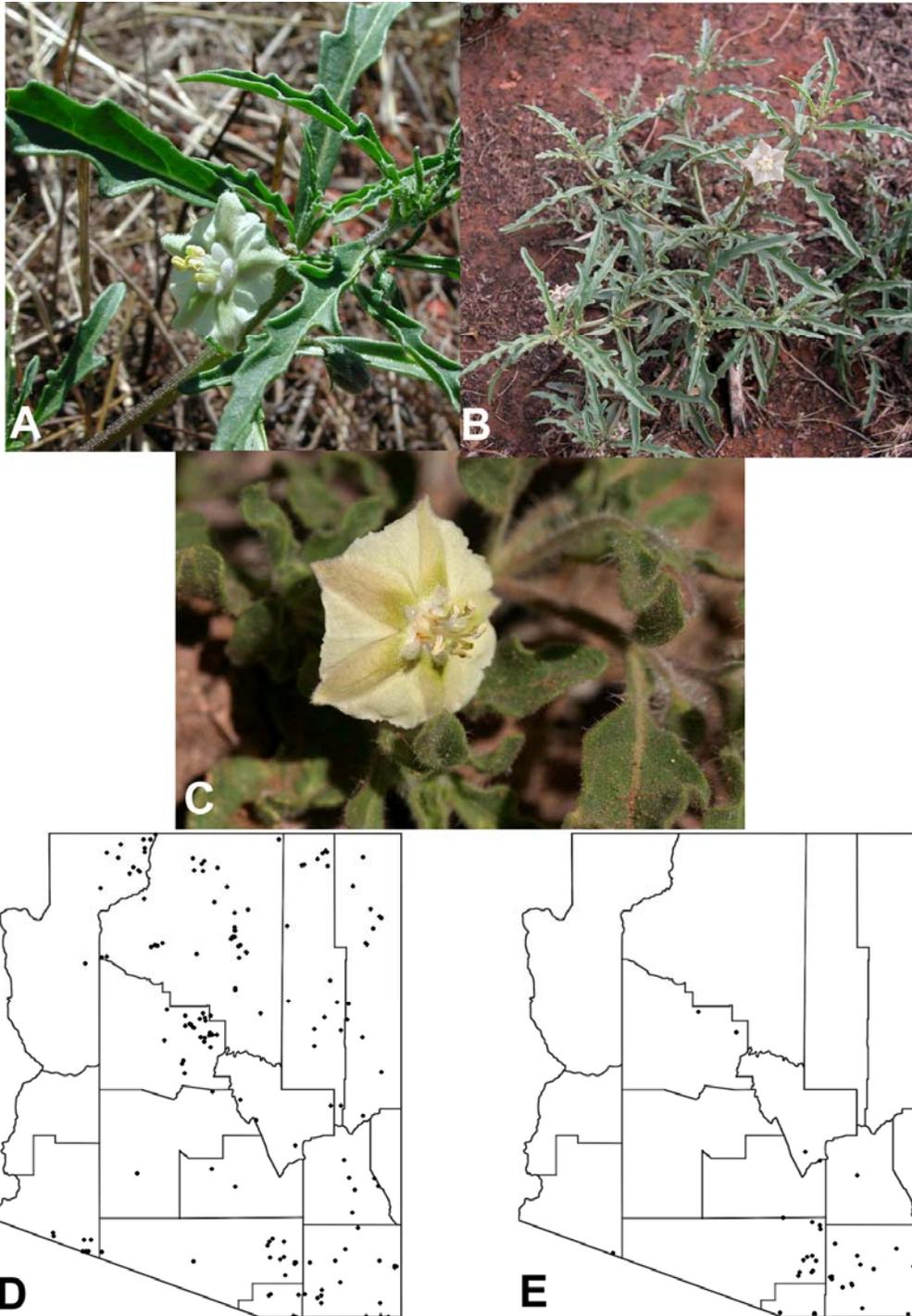
Chamaesaracha coronopus (Dunal) A. Gray (Greek: *korone* = crown + *pous* = foot). Greenleaf five eyes. —Herbs, to 50 cm tall, rhizomatous, glabrous to scurfy, the hairs short, white, branched or stellate, often mixed with longer, tangled hairs (especially on stems, peduncles, and calices). LEAVES linear, lanceolate, narrowly elliptic, or oblanceolate, 1.5–8 cm long, the margins minutely undulate to pinnately lobed and often densely hairy, membranous to subcoriaceous, the midvein prominent; apex acute to rounded-obtuse, tapering to an attenuate, subsessile base. INFLORESCENCES uniflorous, the peduncles 1–3 cm long. FLOWERS with calyx 2.5–6.0 mm long, densely stellate-pubescent; corolla ca. 1 cm wide, the white cushion-like pads contiguous (or nearly so) and almost filling the throat; stamens less than 6 mm long; anthers ca. 1/3 as long as filaments. FRUITS 4–8 mm wide, whitish, pendulous; seeds light brown, alveolate. —Weedy, found especially in disturbed areas, dry grasslands, and deserts; all cos. except La Paz (Fig. 1D); 200–2100 m (700–6900 ft); Mar–Oct; sw U.S. and n Mex.

Chamaesaracha sordida (Dunal) A. Gray (dull, dirty). Hairy five eyes. — Herbs, to 30 cm tall, rhizomatous, densely glandular-pubescent, the glandular hairs mixed with longer, simple hairs (especially on the stems, peduncles, and calices). LEAVES lanceolate, elliptic, oblanceolate, or rhombic, 1–4 cm long, the margins mostly entire or subentire, sometimes shallowly lobed or toothed, membranous to subcoriaceous; apex acute to rounded, tapering to an attenuate, subsessile base. INFLORESCENCES uniflorous, the peduncles 1–3 cm long. FLOWERS with calyx 3–5 mm long, densely glandular-pubescent; corolla ca. 1 cm wide or less, the white cushion-like pads not contiguous and not filling the throat; stamens less than 6 mm long; anthers 1/2—1/3 as long as filaments. FRUITS 4–8 mm wide, whitish, pendulous; seeds light brown, alveolate. —Found in disturbed areas and deserts; Cochise, Gila, Graham, Pima, Pinal, Santa Cruz, Yavapai, Yuma cos. (Fig. 1E); 700–1700 m (2300–5600 ft); Mar–Oct; sw U.S. and n Mex.

Chamaesaracha sordida was merged into the closely related *C. conoides* by Gray (1876); however, the two taxa are now distinguished by morphological, chemical, and chromosomal differences (Averett 1973). Although the distributions of the two species overlap in some states, apparently *C. conoides* does not extend westward into AZ.

LITERATURE CITED

- Averett, J.E. 1973. Biosystematic study of *Chamaesaracha* (Solanaceae). *Rhodora* 75: 325–365.
- Gray, A. 1876. Botany of California, Gamopetalae, Vol.1, pp. 277-622. In: J. D. Whitney, Geological Survey of California. 1876-1880. Botany. 2 vols. Cambridge.



Chamaesaracha Figure 1. Flowers and distribution maps for *Chamaesaracha*. (A, B, D) *Chamaesaracha coronopus*; (C, E) *Chamaesaracha sordida*. (Photos A & B by Max Licher and C by Patrick Alexander).