

1896, *Palmer* 131, 507; Saltillo, 1898, *Palmer* 193; near San Juan Capistrano, Zacatecas, 1897, *Rose* 2495.

The plant occurs as far north as western Texas and southern Arizona. In New Mexico it is known only from the Dona Ana Mountains, where it was collected October 28, 1896, by Wooton & Standley.

This has always passed as *S. stans* (*Tecoma stans* L.), but is distinguished by its low stature, narrow leaflets with sharp and salient teeth, and the narrower and longer bractlets. The leaflets, too, are usually more numerous than in *S. stans*. The latter is a shrub often 3 meters high or more, or even a low tree with well-defined trunk. The proposed species is never more than a very small shrub, often not more than 60 cm. high. It grows in the driest places in the southwestern mountains, on exposed slopes among rocks.

### RUBIACEAE.

*Houstonia rigidiuscula* (A. Gray) Wooton & Standley.

*Houstonia angustifolia rigidiuscula* A. Gray, Syn. Fl. 1<sup>o</sup>: 27. 1884.

Readily distinguished from *H. angustifolia* by the lower, stouter, less erect stems, the thick, rigid leaves, and the few, more closely glomerate flowers. A common plant of western Texas and eastern New Mexico, growing on the plains and low hills of the Upper Sonoran Zone.

### CAPRIFOLIACEAE.

*Sambucus vestita* Wooton & Standley, sp. nov.

Shrub 3 meters high or less, with numerous stout stems from a single root; young branches minutely and densely velvety-pubescent; leaflets lanceolate or narrowly so, 8 to 15 cm. long, long-attenuate, very unequal at the base and usually rounded, puberulent beneath, puberulent above along the veins, thin, rather pale green, coarsely serrate, the teeth not incurved, acute, or acutish; petioles and petiolules densely and finely pubescent; cyme broad (10 to 20 cm.), flat-topped, with numerous open, slender, pubescent branches; flowers small, 3 to 4 mm. in diameter; fruit abundant, 5 mm. in diameter, black, glaucous.

Type in the U. S. National Herbarium, no. 560944, collected by Paul C. Standley in Ice Canyon above Van Pattens Camp in the Organ Mountains, June 11, 1906.

ADDITIONAL SPECIMENS EXAMINED: West Fork of the Gila, alt. 2,250 meters, 1903, *Metcalfe* 344; 4 miles west of Kingston, 1909, *Goldman* 1822; Eagle Peak, August 2, 1900, *Wooton*; San Mateo Peak, alt. 3,000 meters, 1909, *Goldman* 1740; Black Range, alt. 2,550 meters, 1904, *Metcalfe* 1184; Organ Mountains, 1908, *Bailey* 1469, May 15, 1892, *Wooton*.

The plant is common in the canyons of the southwestern mountains. It is related to *S. neomexicana*, but has smaller flowers and pubescent instead of glabrous branches. In habit the two are dissimilar, for *S. neomexicana* has usually a well-developed trunk with branches, while *S. vestita* consists of a clump of mostly simple shoots.

### CICHORIACEAE.

*Crepis chamaephylla* Wooton & Standley, sp. nov.

Perennial from a thick, fleshy root; stems glabrous, glaucous, 30 cm. high, erect or ascending, very slender, the branches ascending, nearly naked, bearing only a few small, linear, bract-like leaves; basal leaves oblanceolate, entire, acute, 9 cm. long or less, glabrous, glaucous especially beneath, thick and succu-

lent, all lying flat upon the ground, sessile, or on short, broadly winged petioles; heads few; involucre 8 mm. high, glabrous, the bracts linear-lanceolate, pale yellowish green, the few outermost much reduced; corollas deep yellow; achenes dark brown, glabrous, scarcely discoid at the summit, with copious pappus of bright white bristles 4 mm. long.

Type in the U. S. National Herbarium, no. 686386, collected at the north end of the Carrizo Mountains, July 30, 1911, by Paul C. Standley (no. 7419). The plants were common in the wet ground about a small hillside spring flowing out from among juniper and pinyon trees. Upper Sonoran Zone.

The proposed species is a very distinct one by its entire, glaucous leaves which are reflexed upon the ground instead of erect as in most of our species. The heads are comparatively small and the bracts are a clear, pale yellowish green rather than black or brownish as we find them in most species. The aspect of the plant is strikingly like that of two of the species of *Cynthia*.

*Crepis mogollonica* Greene, sp. nov. in herb.

Basal leaves numerous, some of them linear and entire, others narrowly linear-oblong or linear-oblong and runcinate-pinnatifid into linear lobes, glabrous, bright green, thin, 18 to 24 cm. long; stems slender, 40 to 60 cm. high, glabrous, with few, ascending branches, bearing linear, bract-like leaves at the nodes; heads few, long-pedunculate; involucre 10 to 12 mm. high, of linear-oblong, glabrous bracts; flowers bright yellow; achenes slender, brown, 5 mm. long, shorter than the slightly sordid pappus.

Type in the U. S. National Herbarium, no. 495570, collected in the Mogollon Mountains, Socorro County, on the West Fork of the Gila, altitude 2,400 meters, August 23, 1903, by O. B. Metcalfe (no. 576).

This is related to *C. glauca*, or is of that group at least. It is distinguished from the related species by its large heads and the very long, extremely narrow leaves.

*Crepis neomexicana* Wooton & Standley, sp. nov.

Basal leaves in a dense cluster, about 9 cm. long, nearly sessile by winged bases, oblanceolate or oblong, deeply runcinate-pinnatifid with broadly triangular lobes, rather obtuse at the apex, thick and firm, bright green, glabrous; stems about 30 cm. high, stout, glabrous, sparingly branched, with reduced, linear, bract-like leaves at the nodes; peduncles sparingly tomentose; involucres 8 mm. high, the bracts linear, slightly attenuate upwards, glandular; flowers bright yellow; mature achenes not seen, the young ones very short, brown.

Type in the U. S. National Herbarium, no. 563743, collected on Tularosa Creek, Socorro County, July 14, 1906, by E. O. Wooton.

Similar to *C. perplexans* Rydb., but with smaller heads and very thick, broad, deeply lobed leaves.

*Ptiloria bigelovii* (A. Gray) Wooton & Standley.

*Hemiptilium bigelovii* A. Gray, U. S. & Mex. Bound. Bot. 105. 1859.

## CARDUACEAE.

*Coelestina sclerophylla* Wooton & Standley, sp. nov.

Slender, rigid perennial, about 35 cm. high, with numerous puberulent, nearly simple stems from a suffrutescent base; leaves opposite, numerous, lanceolate to ovate or somewhat deltoid, 25 to 40 mm. long, thick and rigid, acute or attenuate, attenuate or acute at the base, coarsely crenate, puberulent on both