

ger often lacinate and petioled; upper small and linear, or reduced to subulate minute scales: flowers golden yellow, sweet-scented (somewhat as in those of *Acacia Farnesiana*). — *Carphephores junceus*, Benth. & p. 113. *B. atriplicifolia* (*Carphephorus atriplicifolius*, Gray, l. c.) of Lower California is probably the same, and var. *aspera*, Greene, l. c., is a common hispidulous state. — Rocky places, in cañons, &c. in the arid regions of Arizona and S. E. California (Lower Calif., first coll. by *Hinds*). Evidently an outlying representative of the subtribe *Liabeæ*.

192. SENÉCIO, Tourn.

- S. aúreus**, var. **Balsámitæ**, p. 391. Add syn.: *S. ceratophyllus*, Nees, Pl. Neuwied Trav. 12.
- S. Neo-Mexicánus**, GRAY, p. 392. *S. Austinæ*, Greene, Bull. Calif. Acad. i. 93, is probably a form of this, from the northeastern borders of California, in Modoc Co., *Mrs. Austin*.
- S. Lyóni**. (Next after *S. eremophilus*, p. 393.) Obscurely suffrutescent, and somewhat succulent, early glabrate except the persistent dense tufts of wool in the axils: leaves once or twice prinnately parted into linear obtuse segments and lobes, glabrous above, minutely woolly-pubescent beneath: peduncle bearing a few pedicellate heads (these 4 to 6 lines high and radiate): pedicels and involucre sparingly subulate-bracteolate. — Island of San Clemente, off S. California, on cliffs by the sea, *Nevin & Lyon*, April, 1885.
- S. Califórnicus**, DC. Growing in sand along the sea-shore (San Diego and southward) it becomes succulent and dwarf, when it is *S. ammophilus*, Greene, Bull. Calif. Acad. i. 193.

At the end of the genus, p. 394, add:—

* * * * Indigenous winter-annual: heads with few and minute ray-flowers, or none.

- S. Mohavénsis**. Glabrous, branching from the base, leafy up to the loose corymbiform panicle: leaves soft and thickish, ovate or oblong, sinuate-dentate or sparingly incised, cauline with auriculate or cordate-clasping base: heads slender-peduncled, 4 lines high: involucre narrow-campanulate, 18–20-flowered; calyculate bracts few and inconspicuous: ray-flowers when present mostly difformed and biligulate, not surpassing the disk: akenes canescent. — S. E. California in the Mohave region, near the Colorado, *Lemmon*. (Also within the borders of Sonora, Mex., *Pringle*.)

213. STEPHANOMÉRIA, Nutt.

- S. coronária**, Greene, Bull. Calif. Acad. i. 194, Santa Lucia Mountains, *Brandegee*, by the character seems too like *S. exigua*, Nutt, p. 414.

219. MICRÓSERIS, § SCORZONELLA. At end, p. 418, add:—

- M. Howéllii**, GRAY. A foot or more high from a fusiform root, slender, bearing solitary or 2 or 3 heads: leaves (only 2 or 3 lines wide) elongated-linear and attenuate, some bearing a few attenuate refracted lobes; involucre half-inch high, narrow, 15–20-flowered; its bracts all acuminate; inner oblong-lanceolate and all nearly equal; outer much shorter and mostly ovate: akenes 3 lines long, narrower at base: pappus of 8 or 10 conspicuous and firm lanceolate paleæ, which nearly equal the length of the akene and bear a denticulate-scabrous awn of hardly greater length! — Proc. Am. Acad. xx. 300, where by some mistake the pappus is quite wrongly described. — Waldo, S. W. Oregon, June, 1884, *Howell*. Ambiguous between the sections *Scorzonella* and *Calais*, with pappus-paleæ of the latter, except in number, but perennial or biennial from a fusiform root, and the habit of a slender *M. leptosepala*.

223. MALACÓTHRIX, DC.

- M. Couൾteri**, GRAY, p. 421. Anthesis vespertine or matutinal, the heads closed at midday.
- M. insuláris**, GREENE. Intermediate between § *Malacolepis* and *Malacothrix* subsection *Malacomeris*, annual, glabrous, a foot or two high: leaves oblong-lanceolate, lacinate-pinna-

tifid, the lobes almost linear: involucre well imbricated, less than half-inch high; outermost bracts ovate, innermost linear, all scarious with green or purplish tip and centre: corolla yellow: receptacle almost destitute of bristles: akenes 15-ribbed, five of the ribs angulate-prominent: one or two stronger pappus-bristles persistent. — Bull. Calif. Acad. i. 194. — S. California, on Coronados Islands, off San Diego, *Greene*.

M. foliôsa. Between *M. obtusa* and *M. incana*, p. 423, with habit of *M. saxatilis*, but an annual, with much smaller heads of yellow flowers, glabrous: stem a foot or two high, erect, much branched, very leafy even to the branchlets: leaves lanceolate, most of them laciniate-pinnatifid, 2 to 4 inches long, uppermost linear-attenuate: heads short-peduncled, 3 to 5 lines high: bracts of the involucre lanceolate, rather obtuse: akenes somewhat equally 10-costate: pappus wholly deciduous, leaving neither bristles nor crown. — Island of San Clemente, off Southern California, *Nevin & Lyon*, April, 1885. — Connects the *Leucoseris* of Nuttall with his *Leptosaris*.

M. saxátilis, TORR. & GRAY, p. 423. Under this may be more than one species, not only the *M. tenuifolia*, Torr. & Gray, but also a larger-flowered one, *M. altissima*, *Greene*, Bull. Calif. Acad. i. c., of mountains of Kern Co., *Mrs. Layne-Curran*, said to be annual (but not seen here): probably same from Ojai, *Peckham*. But the characters are not yet clear.

226. HIERÁCIUM, Tourn.

H. longípilum, TORR., p. 426. Cancel the var. *spathulatum*, which should be transferred to

H. Mariánum, WILLD., var. *spathulátum*. A mountain form, with leaves all or mainly radical and unusually barbate-hispid. — *Pilosella spathulata*, Schultz Bip. in Flora, 1862. — Tuscarora or Two-top Mountain, Penn., *Porter* and *Traill Green*.

H. Brandegéi, *Greene*, Bull. Calif. Acad. i. 194. Santa Lucia Mountains, *Brandegée*, fide *Greene*, which we have not seen, appears to be the same as the plant of the same district, coll. *G. R. Vasey* (not *Parry* as stated), and referred to *H. argutum*, Nutt., on p. 428.