

To this genus I propose to append an imperfectly known species, of the southern borders of California, which has no pappus at all. It may prove to be a state of a pappose species.

A conspectus of the species, as now understood, is added in a note.*

* MALACOTHRIX DC., Torr. & Gray.

§ 1. MALACOLEPIS Gray, Pl. Fendl. Involucrum gradatim imbricatum pluri-seriale, e squamis latissimis albo-scariosis, costa tantum viridi. Herba annua, capitulis majoribus.

1. M. COULTERI Gray, l. c. Receptaculum setis capillaribus persistentibus inter flores onustum: ligulæ forte flavidæ demum purpurascens. Pappus exterior e setis 1-2 validioribus lævibus fere persistentibus.

§ 2. EUMALACOTHRIX. Involucrum pauciseriale, e squamis angustis parum scariosis.

* Annuæ, leptophyllæ, capitulis solitariis majoribus scapos simplices terminantibus, involucri squamis gradatim imbricatis, floribus luteis. — *Malacothrix* DC.

2. M. CALIFORNICA DC. Laxe lanosa, nunc glabrata. Pappus exterior e setis 2 persistentibus cum denticulis nonnullis.

** Annuæ, paniculato-ramosæ, capitulis minoribus, involucri plerumque biseriali, squamis interioribus æqualibus, exterioribus paucis brevibus calyculum referentibus, floribus pallide flavis demum purpurascens, foliis præsertim radicalibus runcinato-pinnatifidis. — *Leptoseris* Nutt.

— Pappus exterior e setis validioribus nudis sat persistentibus 1-8.

3. M. TORREYI. Spithamæa ad sesquipedalem, fere glabra; ramis pedunculisque setis glanduliferis interdum parce munitis; capitulis mediocribus vel majusculis multifloris; involucri campanulato; achenio costis 5 subalato-prominulis insigniter angulato, valleculis bicostatis; pappo exteriori persistente e setis validis 4-8 (sæpius 5) denticulisque pluribus interjectis. — *M. sonchoides* Torr. in Stansbury, Rep. p. 392; Gray, Pl. Wright, 2, p. 105, p. p.; Eaton in Bot. King, p. 201, non Torr. & Gray, Fl. — From Salt Lake, Utah (Stansbury, S. Watson), to the western borders of Nevada (Anderson, S. Watson); and a slender, narrow-leaved form in southern Utah, collected by Dr. E. Palmer and Mrs. Thompson.

4. M. FENDLERI Gray, Pl. Wright, 2, p. 104. Humilis, fere glabra; involucri campanulato; achenio nigricante cylindrico æqualiter 15-costato, apice manifeste cupulato margine integerrimo; pappo exteriori persistente unisetoso. — New Mexico and Texas, on the Rio del Norte from near Sante Fé (Fendler) to El Paso (Wright) and still lower (Bigelow); also Guadalupe Cañon, Capt. Smith.

5. M. XANTI. Sesquipedalis, glabra vel glabrata; foliis fere omnibus radicalibus runcinatis membranaceis; caule scapiformi gracillimo polycephalo; involucri cylindræo; achenio castaneo costis 15 obtusis striato ob 5 paullo validiores angulato, apice cupulato obtuse 5-dentato; pappo exteriori e setis

CREPIS COOPERI = *Malacothrix crepoides* Gray, in Pacif. R. R. Expl. 12, p. 49, which is also no. 327 of Hall's Oregon collection. It

3-5 gracillimis subpersistentibus. — *M. parviflora*? Gray, in Proc. Am. Acad. 5, p. 163, non Benth. — Cape San Lucas, Lower California, no. 67, coll. L. J. Xantus.

+ + Pappus exterior præter denticulos minimos plane nullus. Capitula parva.

6. *M. SONCHOIDES* Torr. & Gray, Fl. Spithamæa, fere glabra; dentibus lobisve foliorum radicalium subspinuloso-apiculatis; acheniis fere linearibus 15-costatis ob costas 5 paullo majores sub-angulatis, apice haud contracto denticulis minimis albidis circa 15 coronulato. — *Leptoseris sonchoides* Nutt. in Trans. Amer. Phil. Soc. l. c. p. 438. *Malacothrix obtusa* Eaton, in Bot. King, l. c. quoad pl. Utah. — Upper Platte, Nuttall, Geyer (no. 40); Utah, S. Watson, Lieut. Wheeler.

7. *M. OBTUSA* Benth. Pl. Hartw. Spithamæa ad sesquipedalem; caulibus sæpius gracillimis amplius paniculatis subaphyllis; foliis radicalibus primum pl. m. albo-lanuginosis lobis dentibusque obtusis; acheniis obovato-oblongis pl. m. 15-costatis (costis secundariis aut prominulis aut fere evanidis), apice sub-contracto annulo integerrimo. — *M. parviflora* Benth. l. c. est forma scaposæ microcephalæ. — California, common. In this species the capillary bristles of the receptacle are often very evident, about twice the length of the akenes, and deciduous with them, very fragile, resembling bristles of the pappus.

* * * Annuæ, scaposæ, platyphyllæ, involucre præcedentis, floribus purpureis albisve. Pappus nullus. — *Anathrix*.

8. *M. PLATYPHYLLA*. Glaucescens; foliis dilatato-cuneatis venosis margine inæqualiter subspinuloso-denticulatis; scapo nudo ultrapedali superne laxè corymboso-ramoso polycephalo; involucri squamis propriis ovato-oblongis, accessoriis calyculi paucis brevibus. — S. E. California, in gravelly soil near Fort Mohave, Dr. J. G. Cooper.

* * * * Perennes vel biennes? basi nunc suffrutescentes. Receptaculum sub-alveolatum, alveolis dentatis.

+ Albifloræ (nunc purpurascens), glabrata, caulibus foliatis, capitulis sæpius paniculatis majusculis. — *Leucoseris* Nutt.

9. *M. SAXATILIS*. Tenuiter tomentulosa et glabrata, nunc fere glabra; foliis lanceolatis imisve oblongo-spathulatis nunc laciniato-pinnatifidis; acheniis lineari-oblongis 10-costatis, coronula prominulo 10-denticulato. — *M. saxatilis* & *M. commutata* Torr. & Gray, l. c. *Hieracium? Californicum* DC. *Sonchus? Californicus* Hook. & Arn. *Leucoseris saxatilis* & *Californica* Nutt. l. c. — Santa Barbara and southward.

10. *M. TENUIFOLIA* Torr. & Gray, l. c. & Bot. Mex. Bound. p. 106. Glaberrima vel mox glabrata; foliis angustissime linearibus vel filiformibus sæpe 3-5-partitis; capitulis paucis in pedunculis filiformibus; acheniis obovatis, coronula obscura. — *Leucoseris tenuifolia* Nutt. l. c.? — In the Botany of the Mexican Boundary, I stated that "from three to five of the bristles of the pappus are