CALYCOSERIS, Nov. Gen.

Capitulum liguliflorum multiflorum. Involucrum campanulatum, duplex, interius e squamis circa 12 lineari-lanceolatis margine scariosis subuniseriatis; exterius calyculiforme, e squamis totidem brevibus laxis. Receptaculum planum, paleis tenuissimis piliformibus inter flóres onustum. Achenia conformia, fusiformia, crasse 5 – 6-costata, muricato-scabra, apice attenuato-rostrata. Pappus duplex; exterior coroniformis persistens; interior pilosus, copiosus, setis mollibus niveis vix scabris basi in annulum concretis caducis. — Herba monocarpica, humilis, glabra; caule a basi ramoso; foliis pinnatipartitis, lobis rhachique linearibus; pedunculis brevius-culis monocephalis ante anthesin nutantibus cum involucri basi hispido-glandulosis; floribus roseis.

Calycoseris Wrightii. (Tab. XIV.) — Stony hills around El Paso, abundant; March, April. (1423.) — Plant about a span high, from a slender simple root, branched from the base; the branches or stems ascending, sparsely leafy, sparingly setose-glandular towards the summit. Leaves glaucescent, linear, and with few or several spreading linear lobes from 2 to 5 lines in length; the terminal lobe prolonged. Involucre half an inch long, externally sparsely beset, like the peduncle, with nail-headed glandular setæ. Ligules pale rose-color, marked with deeper purple underneath, half an inch long. Receptacle flat, about 25-flowered, areolate, each flower subtended by a delicate capillary bristle in place of a palea: these bristles, which may perhaps be compared with those of the receptacle of Andryala, are persistent, though rather fragile, and as long as the achenia. Achenia all alike, $2\frac{1}{2}$ lines long, terete, with 5 or 6 broad ribs separated by narrow grooves, tuberculateroughened, tapering gradually into a thickish beak which is rather shorter than the body of the achenium, its dilated apex crowned with the hyaline crateriform outer pappus, the edge of which is even, but multidenticulate. Inner pappus pilose, bright white, consisting of copious and equal, scarcely denticulate, soft bristles, all rather firmly united into a ring at the base and deciduous together. — This wellmarked genus (as well as Anisocoma, Torr. & Gray in Bost. Jour. Nat. Hist. 5. t. 13, which agrees with it in having an exterior coroniform pappus) will hardly find a place in any of De Candolle's subtribes, as they now stand. Disregarding this peculiar character of the pappus, Calycoseris would fall into Rodigieæ, if the setæ of the receptacle be taken for true paleæ. But if they are of the same nature as those of Andryala, the genus might be placed near Crepis and Malacothrix. However, it is hardly worth while to speculate upon its appropriate place until the whole tribe has undergone revision.

Malacothrix Fendleri: nana, glabrata; caulibus e radice exili plurimis diffusis; foliis junioribus parce arachnoideis, radicalibus runcinato-pinnatifidis dentatisve lobis cuspidato-mucronatis, caulinis paucis linearibus, summis integerrimis; acheniis fere cylindricis æqualiter multicostatis apice manifeste cupulato integerrimo; pappi seta unico validiore lævi subpersistente, cæteris scabris inferne barbellulatis caducis. — M. sonchoides, Gray, Pl. Fendl. p. 113, non Torr. & Gray. — Stony hills around El Paso, &c., abundant; March, April. (1424.) — The habit

and aspect of this plant are almost exactly as in M. sonchoides, with which I formerly confounded it. That species, however, as stated by Dr. Torrey (Appendix to Stansbury's Report, p. 392), has five stronger and persistent bristles to the pappus. The achenium, moreover, is strongly angled with five thick and equidistant ribs, which are much larger than the others (two in each interval), and alternating with the stronger setæ of the pappus; and its apex is very minutely denticulate, but not produced into a cup or distinct border. In M. Fendleri, the ribs of the brownish achenium are slender and all alike, and its apex is continued into a decided cup, with an even edge, within which the row of minute denticuli, like persistent bases of the setæ of the pappus, are concealed; and only one (sometimes two?) of the rays of the pappus is stronger and persistent. — The Californian plant of Coulter's collection, which I also inadvertently referred to M. sonchoides, is doubtless M. obtusa, Benth.; likewise gathered by Dr. Parry, at Monterey. In this the achenia, in Parry's specimens, are tapering to the base, somewhat angled, but evenly multistriate, and with scarcely any apical border; the pappus is wholly deciduous in a ring; and I find no stronger and naked bristles. — Dr. Torrey indicated to me an analogous structure in the pappus of Sonchus, in which four or five of the inner bristles of the pappus are much stronger than the soft and delicate exterior pappus. This, I find, has been duly noticed by C. H. Schultz, in the Phytographia Canariensis of Mr. Webb.

Prenanthes? exigua (sp. nov.): caule 3 - 4-pollicari ramosissimo; pedunculis divaricatis; foliis radicalibus caulinisque oblongis vel obovatis basi attenuatis spinuloso-dentatis nunc sinuatis, ramealibus ad bracteas minimas reductis; involucro tetraphyllo quadrifloro; acheniis 5-sulcatis scabriusculis pappo rigido sublongioribus. — Stony hills above El Paso; April. (1425.) — Root simple, annual or biennial. Leaves 6 to 10 lines long, glabrous. Stem soon deliquescent into a diffuse and corymbose compound panicle. Involucre 2 lines long, subtended by a minute bract, like those of the peduncles and branchlets; the scales oblong-lanceolate. Ligules short; the color not known, probably flesh-colored. Achenia cylindrical, scarcely narrowed at the base, truncate at the apex, the surface occupied by five very broad and flat ribs, separated by narrow grooves, minutely scabrous. Pappus bright white, of copious and very unequal bristles, which are unusually stiff and rigid, slightly thickened downwards, minutely scabrous, the smallest less than half the length of the longest, and these rather shorter than the achenium, at length separating in a ring. This plant seems to fall more readily into Prenanthes than into any other genus known to me; but it may not be a true congener of the European species.

Lygodesmia aphylla, var. Texana, Torr. & Gray, Fl. 2. p. 485. Stony hills of

the Pecos; June. (1302.)

Mulgedium Pulchellum, Nutt.; Torr. & Gray, Fl. 2. p. 498; Gray, Pl. Fendl. p. 115. Banks of the Limpio and of the Rio Grande; also at the copper mines, New Mexico. (1303.)

Pyrrhopappus Carolinianus, DC. Prodr. 7. p. 44; Torr. & Gray, Fl. 2. p. 495.

Along the Rio Grande, above El Paso; May. (1426.)