

449. *STEPHANOMERIA RUNCINATA*, *Nutt.*; *Torr. & Gray, Fl. 2. p. 472.* (*Jamesia pauciflora*, *Nees in Newwied. Trav.*) Foot of dry hills, Santa Fé; June, July.*

round with triangular rigid teeth; the rameal leaves much smaller and oblong. Heads numerous in a broad corymb, half an inch long. Corolla, &c., as in the foregoing. Bristles of the pappus copious, rigid, equally serrulate from the base to the apex, not at all penicillate. — This plant is doubtless an *Acourtia* of De Candolle, who, although he adopts the character “setis apice penicillatis” of Don, yet represents nothing of the kind in the figure of *A. hebeclada* in Delessert’s *Icones*. The copious pappus of this plant also differs from his generic character in that the bristles certainly occupy more than one series. If, therefore, the characters of the pappus of *Acourtia* are rightly laid down, this plant does not belong to that genus. If not, there remains apparently no valid distinction between it and *Perezia*.

* *Stephanomeria elata*, *Nutt. in Jour. Acad. Philad. (n. ser.) 1. p. 173*, from the character is evidently the same as the earlier published *S. virgata*, *Benth. Bot. Voy. Sulph. p. 32*. It also occurs in the Californian collections of Coulter, Fremont, and of the Exploring Expedition.

The Oregon collection made by the Rev. Mr. Spalding contains specimens of two very interesting *Cichoraceæ*, which may be mentioned here, viz. an undescribed *Calais*, but which I suspect is the *Hymenonema*? *glaucum* of Hooker, and a new congener of *Scorzonella* (*Ptilophora*, *Torr. & Gray, ined.*) *nutans*, *Geyer, in Hook. Lond. Jour. Bot. 6. p. 253*.

CALAIS MACROCHÆTA (sp. nov.): subscaposa, glabrata; foliis linearibus acuminatis integerrimis vel sæpius remote pinnatilobatis subglaucis, junioribus villo molli caduco pubescentibus; scapo apice furfuraceo; involucri squamis extimis tertia parte brevioribus; acheniis lævibus apice rostrato-attenuatis; pappi paleis oblongis apice bifidis arista ex sinu exserentibus triplo brevioribus. (*Hymenonema*? *glaucum*, *Hook. Fl. Bor.-Am. 1. p. 300?* & *Scorzonella glauca*, *Nutt.?*) — Clearwater, on the Kooskooskee, Oregon, *Mr. Spalding*. — Root annual. The smaller specimens, with scapes 6 or 10 inches high, exhibit entire leaves, much like those of *C. linearifolia*. The larger, with scapes or peduncles 18 or 20 inches high, have broader and flat leaves, which mostly bear three or four short lobes or salient teeth on each side. The foliage is scarcely glaucous. The involucreal scales are broadly lanceolate. The paleæ of the pappus are only five, just as in *Calais*, except that they are shorter and the naked awn is longer. These points being more or less at variance with the little that is known of Hooker’s *Hymenonema*? *glaucum*, I do not venture to employ that specific name, nor to append it as a synonyme except with much doubt. — The shorter but long-awned paleæ of the pappus in this species, along with the lanceolate involucreal scales of *Scorzonella* § *Ptilophora* might naturally suggest the propriety of uniting all these plants with *Calais*. This genus, however, consists of annual plants, with the conspicuous paleæ of the pappus only five in number and convolute around the base of the corolla, and the elongated achenium has a tapering or beaked summit. *Scorzonella* consists of tuberous-rooted perennials, with the barely oblong achenia not at all narrowed above, and with a pappus of *ten* paleæ which are so short as to appear merely like an abruptly dilated base to the long capillary awns. These are minutely denticulate: while in the section *Ptilophora* (which, now confirmed by a second species, may be raised to the rank of a genus, still more nearly allied to *Scorzonera*) the awns are plumose and from 14 to 22 in number.

PTILOPHORA, *Nov. Gen.*

Involucrum 20–40-florum, duplex; exterius brevius laxè calyculiforme, squamis ovato-subulatis; interius uniseriale, squamis lanceolatis sensim acuminatis. Receptaculum nudum, planum, subalveolatum. Ligulæ

†450. *HIERACIUM LONGIPILUM*, *Torr.*; *Torr. & Gray, Fl. 2. p. 477.* Eighty miles west of Independence, &c. (489, 503.)

†451. *NABALUS ASPER*, *Torr. & Gray, l. c. p. 483.* High prairies west of Council Grove; Sept. (473.)

452. *LYGODESMIA JUNCEA*, *Don*; *Torr. & Gray, l. c. p. 484.* Around Santa Fé; June, July (497): also Poñi Creek (496).—The juice, according to Fendler, is greenish-yellow.

†453. *MALACOTHRIX (LEPTOSERIS, Nutt.) SONCHOIDES*, *Torr. & Gray, Fl. 2. p. 486.* Low, sandy banks of the Rio del Norte; May. (490.)—This is also in Coulter's Californian collection; which likewise contains a remarkable undescribed species, apparently of this genus.* I notice a singular character in *M. sonchoides*, *M. Coulteri*, and espe-

exsertæ. Achenia lineari-oblonga, teretia, multicostata, erostria, callo sublaterali. Pappus simplex uniserialis, niveus, e setis 14–22 gracillimis eleganter plumosis basi paleato-dilatatis constans.—Herbæ perennes glabræ; caule e radice fusiformi tuberosa erecto, ramoso; foliis integris vel pinnatilobatis, ramis superne longe nudis pedunculiformibus apice subincrassato monocephalis; capitulis ante anthesin nutantibus; floribus flavis.

1. *P. NUTANS*: gracillima; foliis angustissime linearibus elongatis e basi subamplexicauli sensim filiformi-attenuatis integerrimis seu pinnatilobatis, lobis filiformi-subulatis; involucreo cylindrico 20-floro glabrato, squamis exterioribus subquinque, interioribus 8; acheniis scabridis extimis puberulis; paleis pappi oblongis seta plumosa 5–6-plo brevioribus.—*Scorzonella* (§ *Ptilophora, Torr. & Gray, Mss.*) *nutans, Geyer, Mss.* (under *Crepis*), *Hook. in Lond. Jour. Bot. 6. p. 253.*—“Dry, sunny, loamy declivities of Spokane and Cœur d’Aleine Mountains; June. Root nearly as large as the little finger, succulent and almost transparent, full of a bitterish milky juice, eaten raw by the Indians.” *Geyer*. Also collected by the Exploring Expedition between Spokane and Colville.—The involucre when young, like the base of the stem, is slightly and minutely glandular-pulverulent; otherwise glabrous.

2. *P. MAJOR* (sp. nov.): foliis spatulato-lanceolatis inferne attenuatis vel in petiolum marginatum angustatis integerrimis seu laciniato-dentatis; involucreo campanulato glanduloso-puberulo multifloro, squamis exterioribus 8–9, interioribus 10–13 subulato-acuminatis; ovariis glaberrimis; pappi setis ima basi tantum scarioso-dilatatis.—*β. LACINIATA*: foliis elongato-lanceolatis laciniato-pinnatilobatis, supremis integerrimis lineari-attenuatis; involucreo fere glabro.—Clear Water, on the Kooskooskee, Oregon, *Mr. Spalding*.—Stems a foot or more in height, or in the var. *β.* lower. Leaves half an inch or more in width. Heads three fourths of an inch long, larger than in the foregoing species. Mature achenia unknown; but the fructified ovaries are very short, abrupt at both ends, and perfectly glabrous. The smoother involucre and the more slender foliage of the variety here indicated tend to unite this with *P. nutans*; but in the extremely short chaffy base of the setæ of the pappus, and in the more numerous involucral scales and flowers, it entirely accords with *P. major*.

Allied to this genus, but nearer to *Oporinia*, is no. 1815 of Hartweg's Californian collection, which before this, probably, has been characterized by Mr. Bentham.

* *MALACOTHRIX?* (*MALACOLEPIS*) *COULTERI, Harv. & Gray, Pl. Coult. ined.*: glaberrima, glaucescens; caule superne ramoso; foliis lanceolatis oblongisve inferne dentatis seu pinnatifidis basi auriculata amplexicaulibus, ramealibus cordato-amplexicaulibus acuminatis fere integerrimis; capitulis (magnis) subcorymbosis breviter pedunculatis; squamis involucri subglobosi multiflori pluriseriatim imbricatis omnino nisi costa