

Turcomania: vicinity of Aschabad, Mt. Kopet-dagh, Karanki Canyon or Valley, near Ludus, 1500 m, *Litwinow 1410* (Lenin, UCF) type; mts. near Cheirabad, *Litwinow 1564* (Lenin, CA). Other stations given by Krascheninnikov (*loc. cit.*) are: between Firusa (= Firuze ?) and Czaisendag; and near the village of Obruzevo.

Minor Variant of C. turcomanica

1. (*C. sonchifolia* var., C. Winkl., in herb.) Plant low, from a thick pluricipitate caudex; caudical and lower cauline leaves numerous, lance-linear; branches few-headed; fruits lacking. More detailed study may show this plant to be some other species, even though it resembles *C. turcomanica* more than *C. sonchifolia* in caudex and leaves. Accordingly, it is cited here provisionally. *A. Regel* (F1), north of Kul-i-Kalan, 3030–3333 m, Sarawschan (Sarafschan ?), E. Turkestan.

Relationship

Crepis turcomanica is closest to *C. Guioliana* of the W. Balkans, from which it is easily distinguished by the longer involucre with very long outer bracts, the inner bracts glabrous within, the much longer florets, style branches, anther tubes and appendages, and the strongly ciliate receptacle. It is less close to *C. sonchifolia* of subsection C.

85. *Crepis Guioliana* sp. nov.

(Fig. 128.)

Herba perennis 4–4.5 dm alta; radix tenua lignea; caudex brevis; folia caudicalia numerosa interdum 15 cm longa 2 cm lata oblanceolata acuta vel acuminata sinuata dentata glanduloso-pubescentia, pilis brevissimis, caulina similia vel linearia; caules erecti ramosi, ramis elongatis pedunculatis 10–35 cm longis; capitula mediocria circa 40-flora; involucre cylindricum 10–13 mm longum 7–9 mm latum tomentosum, squamis exterioribus 10–12 inaequalibus lanceolatis acuminatis, interioribus 12–16 lanceolatis acutis viridis ventrale pubescentibus in maturitate spongioso-incrassatis; receptaculum planum areolatum, fimbriis breve ciliatis; corolla circa 13 mm longa, ligula 8.5 mm longa interdum 3 mm lata, tubo pubescenti; antherae circa 5 mm longae; rami styli 2.5 mm longi flavi; achenia fulva 7 mm longa fusiformia ad apicem constricta 16–20-costata; pappus albus 5–7 mm longus copiosus persistens.

Perennial, 4–4.5 dm high; root woody, slender; caudex short, divided at crown, covered with brown bases of old petioles; caudical leaves numerous, ascending, up to 15 cm long, 2 cm wide, oblanceolate, tapering into a slender petiole equal to or longer than the blade with broad clasping base, acute or acuminate, pinnately sinuate-dentate, teeth acuminate and mucronate, sparsely canescent-tomentulose, minutely gland-pubescent on both sides, glands brown; lower cauline leaves similar, upper cauline leaves linear, entire, short petioled or sessile; stems 2 from each division of the caudex, erect, branched below, branches 2–5, long, pedunculate; peduncles 10–35 cm long, naked or with 1 small bract about midway and sometimes with 1 or 2 minute bracts below head, slightly swollen at base of head, finely striate; heads erect, medium, about 40-flowered; involucre cylindric, 10–13 mm high, 7–9 mm wide, canescent-tomentose; outer bracts 10–12, unequal, the longest $\frac{1}{2}$ – $\frac{2}{3}$ as long as inner bracts, lanceolate, acuminate; inner bracts 12–16, lanceolate, acute, dark green, becoming dorsally spongy-thickened near base, ventrally pubescent with coarse shining hairs; receptacle flat, areolate-fimbriate, fimbriellae membranous and shortly ciliate; corolla about 13 mm long; ligule up to 3 mm wide; teeth 0.3–0.4 mm long; corolla tube 4.5 mm long, sparsely beset with papilliform hairs 0.1 mm long; anther tube about 5.2×1.3 mm dis.; appendages 0.45 mm long, acute, united; filaments short, stout; style branches 2.5 mm long, 0.1 mm wide, attenuate, yellow; achenes tawny, 7 mm long, fusiform, definitely attenuate near the constricted apex, with delicate expanded pappus disk, constricted at base, 16–20-ribbed, ribs narrow

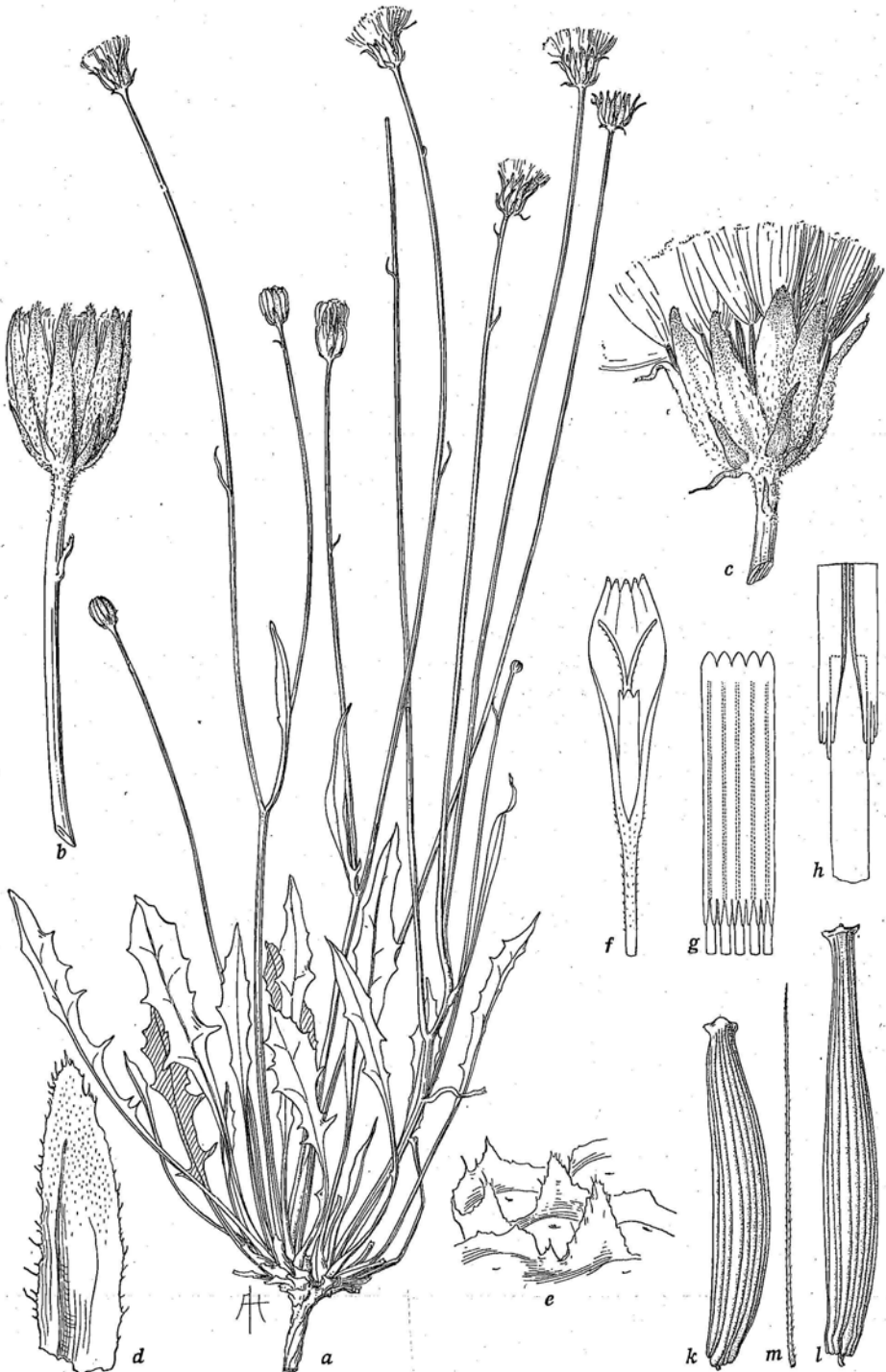


Fig. 128. *Crepis Gujoliana*, from type (UC 476304): a, plant, $\times \frac{1}{2}$; b, young flower head, $\times 2$; c, mature head, $\times 2$; d, inner involucre bract, ventral face, $\times 4$; e, detail of receptacle, $\times 25$; f, floret lacking ovary, $\times 4$; g, anther tube, $\times 8$; h, detail of appendages, $\times 32$; k-m, 2 achenes and a pappus seta, $\times 8$.

or alternate ones wider, somewhat thickened at the base; pappus white, unequal, 5–7 mm long, copious, fine, persistent, coming away in clumps. Flowering July; flowers yellow.

Known only from the type specimen. Named for my friend, F. G. Guiol, who collected it July 29, 1931.

Monomorphic.

Greece: Epirus, Mt. Smolika, above Sumarina, *Guiol 1952* (UC 476304) type.

Relationship

Crepis Guioliana, although so similar in habit and leaves as to be easily mistaken for the little-known species *Crepis athoa* Boiss., is very distinct from it in its larger heads, broader lanceolate involucre bracts with the inner bracts ventrally pubescent, in its wider ligules, larger paler achenes, longer and coarser pappus, and much longer style branches. Also, in *C. athoa* the tawny wool between the bases of the old leaves and at lower bifurcations of the stems is sometimes conspicuous, whereas in the type of *C. Guioliana* this wool is absent or at most very minute. The two species, however, are closely related, and they are also near, but less close, to *C. crocifolia*. *Crepis Guioliana* also exhibits general resemblance to *C. turcomanica*, but differs from it in many details.

86. *Crepis crocifolia* Boiss. et Heldr.

Diag. Pl. Or. Nov. ser. 1, 7: 14. 1846. (Fig. 129.)

Perennial, up to 2.6 dm high, root vertical, very slender, 0.5–3 mm wide below the much thicker caudex; caudex 0.3–2 cm wide including the numerous brown bases of old leaves, simple or divided, 1–4-stemmed; caudical leaves numerous, caespitose, 4–8 cm long, 2–4 mm wide, linear or the lowest narrowly oblanceolate, acute or somewhat obtuse, entire, gradually narrowed into the winged petiole, with broader scarious or purplish base, grayish-glaucous; lowest cauline leaves similar, up to 6 cm long, 1–2 mm wide, the others remote, gradually reduced or bractlike; stems stiffly erect or sinuate, slender, terete, striate, glabrous, bearing a terminal flowering or fruiting head and developing a very slender 1–2-headed branch in the axil of each cauline leaf; peduncles 3–13 cm long, definitely thickened upward but constricted at base of head, glabrous; heads erect, small, 11–14-flowered; involucre campanulate, about 10 mm high, brownish-black in sic., sparsely canescent-tomentulose; outer bracts about 8, unequal, longest $\frac{1}{3}$ as long as the inner, lanceolate, acute; inner bracts 9–10, lanceolate, acute, glabrous on inner face, becoming weakly carinate and spongy-thickened at base in fruit; receptacle glabrous; corolla about 14 mm long; ligule about 2.5 mm wide; teeth about 0.6 mm long; corolla tube 4 mm long, glabrous; anther tube 5×1.7 mm dis.; appendages 0.6 mm long, lanceolate; filaments 0.6 mm longer; style branches 2 mm long, 0.1 mm wide, yellow; achenes stramineous, 5–5.5 mm long, 0.6–0.7 mm wide, slightly curved or straight, subterete, more strongly attenuate upward, 0.3–0.4 mm wide below the expanded pappus disk, slightly narrowed at the thin-calloused hollow base, about 20-striate, striae weak, smooth; pappus pale yellowish, about 5 mm long, 2-seriate, setae unequal in width, coarsest about 50μ , finest about 16μ at base, outermost setae coarser, rather rigid and brittle, persistent. Flowering July–Aug.; flowers yellow.

Hieraciodes crocifolium O. Kuntze, Gen. 1: 345. 1891.

Greece, Morea (Peloponnesus), in the Pentadaktylon Mts. (Oros Taygetos or Taygetus), between Messenia and Laconia, at a high altitude, among rocks.

Although there is a confusion of place names on the labels with the original col-