

species; but on account of its stature and lack of detailed observations it is now provisionally listed as m.v. 1.

Asia Minor: Armenia (Hierae ? or Thezae ?), *Aucher-Eloy 3280* (DC type, Bo, UCf, P); Armenia turcica, *Sintenis 1210* in 1889 (K) m.v. 1.

Minor Variant of C. armena typica

1. Plant 2.5–3 dm high; otherwise typical (?). *Sintenis 1210* in 1889 (K) Armenia turcica.

99, *b. Crepis armena longibractea* subsp. nov. Herba perennis 2.5 dm alta; caudex ligneus foliosus, folia omnia caudicalia dense glanduloso-hispidulosa; caulis scapiformis vel 1-furcatus; capitulum medium erectum ad basim dense hirsutum;

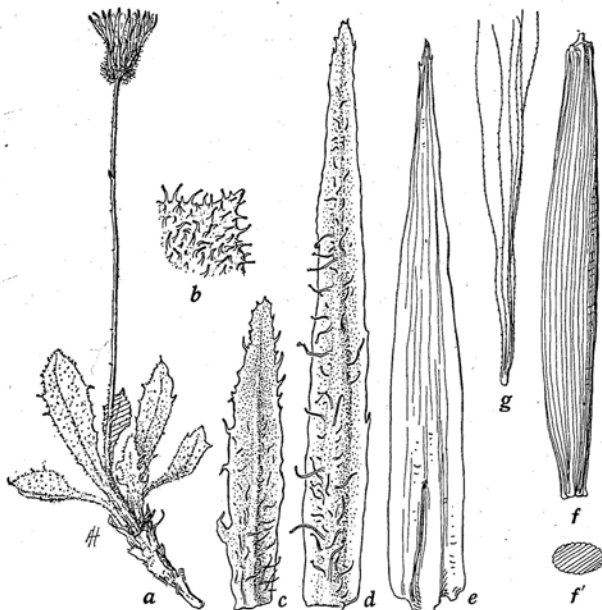


Fig. 145. *Crepis armena longibractea*, from isotype (Bo): a, plant, $\times \frac{1}{2}$; b, lateral tooth and adjacent area of a leaf showing papilliform setae, $\times 8$; c, d, outer and inner involucral bracts, outer face, $\times 4$; e, innermost involucral bract, inner face, $\times 4$; f, achene, with f', cross-section outline, $\times 8$; g, pappus setae, $\times 8$.

involucrum campanulatum 12–15 mm longum 6–8 mm latum, squamis exterioribus 10–15 inaequalibus ovatis vel lanceolatis ciliatis et pubescentibus, interioribus 14–18 lanceolatis acuminatis in maturitate carinatis et spongioso-incrassatis; achaenia fusca pallida circa 7 mm longa 1 mm lata fusiformia subteretia circa 20-striata; pappus 5–7 mm longus flavo-albus tenuis mollis 3-seriatus persistens.

Leaves densely hispidulous, with coarse white setae 0.3–0.5 mm long bearing small brown glands; stem scapiform or 1-furcate, fistulose, shortly gland-pubescent near base, glabrescent above, near the head densely hirsute with fine yellow glandular or glandless hairs; involucre 12–15 mm long, 6–8 mm wide at middle, densely hirsute at base, with long curled yellow mostly glandless hairs; outer bracts 10–15, unequal, longest $\frac{1}{2}$ as long as inner ones, outermost ovate, innermost lanceolate, acute, irregularly ciliate on margin, like inner bracts finely pubescent with longer glandless and shorter glandular hairs; inner bracts 14–18, in 2 series, lanceolate, long acuminate, slightly exceeding pappus in mature heads, dorsally keeled, spongy-thickened at maturity; florets lacking in type collection (see m.v. 3); achenes very pale brown, about 7 mm long, 0.8–1 mm wide, fusiform, somewhat

curved, definitely attenuate to the broad summit, narrowed to the calloused hollow base, subterete, about 20-striate, smooth, finely rugulose under lens; pappus 5-6 (7) mm long, yellowish-white. Flowering June-July; flowers yellow in m.v. 3. See fig. 145.

Asia Minor, in E. Anatolia, mountains. The type locality is described as "region alpine de l'aslan Dach (l'un des jucs de l'anti-Taurus) à 12 lieues à l'ESE du mont Argée."

Anatolia: Anti-Taurus reg., Aslan-Dagh, about 70 km east of Mt. Argaeus, alpine, *Balansa* 771, Aug. 6, 1856 (Bo type, UGf, P, PC); Armenia turcica, Sandschak Gümüşkhane, Mt. Aktasch, *Sintenis* 6184 (UWG) m.v. 2, 3; *ibid.* (B) m.v. (?); Taurus, Farasch, 2000 m, *Siehe* (Hayek); Kurdistan, *Brant and Strangways* in 1840 (K) m.v. 3 (?).

Minor Variants of *C. armena longibractea*

2. Plant 2.5 dm high, stem 1-furcate; inner involueral bracts scarcely exceeding pappus. *Sintenis* 6184a in 1894 (UWG) Mt. Aktasch, Sandschak Gümüşkhane, Armenia turcica.

3. Outer involueral bracts shorter and broader than in type, achenes lacking. This is the only specimen of this subspecies in which florets are available, but on account of the absence of achenes and the atypical involuere this material was not used in writing the foregoing description. Corolla 15 mm long; ligule 2.5 mm wide; corolla tube 5 mm long, pubescent with short acicular hairs; anther tube about 4 × 1.5 mm dis.; appendages 0.6 mm long, oblong, obtuse or truncate; filaments 0.5 mm longer; style branches 2 mm long, 0.15 mm wide, yellow. *Sintenis* 6184b in 1894 (UWG) Mt. Aktasch, Szandschak Gümüşkhane, Armenia turcica. Another collection, probably of this variant, appears to have similar florets; achenes (immature) brown, slightly attenuate upward; pappus 5-6 mm long, dusky, rather coarse, 3-seriate, united at base. *Brant and Strangways* in 1840 (K) Kurdistan.

Relationship

Crepis armena (or the complex represented here) finds its closest relative in *C. heterotricha*, from which it is very distinct in the uniformly colored involueral bracts, the glandular indumentum of the leaves, the more numerous smaller florets, and the broader achenes with longer pappus.

100. *Crepis demavendi* Bornm.

Bull. Herb. Boiss. ser. 2, 7: 435. 1907. (Fig. 146.)

Perennial, 0.7-1.5 dm high; caudex short, woody, 0.3-0.8 cm wide, simple or divided, apparently attenuate into a taproot; caudical leaves numerous, 4-8 cm long, 0.8-1.5 cm wide, oblong-spatulate, acute or obtuse-mucronate, repand-denticulate or entire, very gradually attenuate into a narrowly winged petiole, light green, thin, glabrous, with prominent white midvein; cauline leaves few, all reduced, bractlike, or 1 at first bifurcation 1-3 cm long, lance-linear, acuminate; stems 1-4, very slender, sinuate, scapiform, 1-headed, or 2-3-furcate from near or above the middle, 2-5-headed, glabrous or often gland-pubescent above; peduncles 2-10 cm long, very slender, arcuate, densely gland-pubescent near the head; heads erect, small, about 30-flowered (estimated); involuere nearly cylindrical, 8-9 mm long, about 4 mm wide at middle in fruit, pubescent with long glandless and short glandular hairs; outer bracts about 6, very unequal, longest 1/2 as long as the inner, deltoid to lance-linear, acute; inner bracts 10-12, lanceolate, acute, white-ciliate at apex, glabrous on inner face, becoming weakly carinate dorsally and pale spongy-thickened confluent with the base; receptacle glabrous; corolla about 10 mm long; ligule 1.3 mm wide; teeth 0.5 mm long; corolla tube about 3 mm long, glabrous; anther tube 5 × 1 mm dis.; appendages 0.6 mm long, oblong, obtuse; filaments 0.6 mm longer; achenes stramineous, 4-4.5 mm long, 0.7 mm wide, curved or nearly straight, subterete, the marginal somewhat flattened on inner face and with the median and marginal ribs slightly stronger, 18-20-ribbed, ribs weak, with 4-6 a