

Chabrolin in 1930 (UC); Sidi Tabet, near Tunis, *Chabrolin* in 1931 (UC); Zougag, near Kelibia, *Chabrolin* in 1932 (UC); Sbeitla, east of Feriana, *Chabrolin* in 1932 (UC); Bou Ficha, *Chabrolin* in 1935 (UC); S.W. Tunisia, Wadi Gafsa, *Eig* in 1931 (HU); Sfax *Pitard 611* (Mu). Tripolitania: Tripolis, *Krause* (B).

Minor Variant of C. amplexifolia

1. (*C. amplexifolia* var. *decumbens* Batt. in herb.) Typical of the species, except that the plants are often low and more or less decumbent. This habit, at least in some plants, may be genetically determined; but a tendency toward decumbent habit is found in collections from various localities. *Battandier* (UC ex Herb. Alger) El Outaya, near Biskra, S.W. Constantine.

Relationship

Crepis amplexifolia is intermediate between *C. aculeata* and *C. atheniensis* in degree of reduction in size of florets and achenes. The fruits are generally similar to those of *C. aculeata* but much more reduced.

186. *Crepis atheniensis* sp. nov.

(Fig. 290.)

Herba annua, circa 4.5 dm alta; radix tenua fibrosa in caudicem foliosum circa 1.5 cm latum abrupte delatanda; folia caudicalia interdum 12 cm longa 3 cm lata lanceolata acuta irregulariter runcinato-pinnatifida breve petiolata tenuiter pubescentia; folia caulina numerosa parva lanceolata acuminata sessilia acute auriculata; caules numerosi semi-decumbentes arcuatae ascendi glabri remote 4-6-ramosi, ramis inferioribus elongatis, superioribus cymoso-corymbiformibus; pedunculi 1-7 cm longi glabri vel tomentosi; capitula erecta parva multiflora; involucria cylindrica in fructu 9-10 mm longa 5-6 mm lata, squamis exterioribus numerosis 0.5-0.8 mm latis lanceolatis acuminatis glabris stramineis ad apicem purpurinis, interioribus circa 13 lanceolatis acutis valde setosis, setis 1.5-2 mm longis flavis eglandulosis, in facie interiore dense pubescentibus ad maturitatem valde carinatis incurvatis et spongioso-incrassatis; receptaculum alveolatum ciliatum; corolla circa 11 mm longa, ligula circa 8 mm longa 1.25 mm lata flava in dorso rubescenti, tubo pubescenti pilis albis brevissimis; antherae 2.75 mm longae; rami styli circa 1.25 mm longi flavi; achaenia biformia, marginalia flavida 4.5 mm longa 0.5 mm lata ad apicem gradatim attenuata vel breve rostrata a latere compressa, interiora fusca 5.5-6.5 mm longa 0.4-0.5 mm lata tenuiter rostrata fusiformia 10-costata; pappus albus 4-5 mm longus 1-seriatus tenuissimus mollis barbellulatus caducus.

Annual, 4.5 dm high; root slender, fibrous, abruptly expanded into the leafy caudex; caudex 1.5 cm wide; caudical leaves up to 12 cm long, 3 cm wide, lanceolate, acute, irregularly runcinate-pinnatifid, the segments close, retrorse and denticulate, attenuate into a short winged petiole with broader base, finely pubescent with short pale glandless hairs; cauline leaves numerous, small, lanceolate, acuminate, sessile, subamplexicaul, acutely auriculate, denticulate or entire, sparsely pubescent or glabrous, uppermost bractlike; stems numerous, semidecumbent at base, arcuately ascending, terete, striate, glabrous, remotely 4-6-branched, lower branches elongated, cymosely 2-3-headed, upper branches cymose-corymbiform; peduncles 1-7 cm long, glabrous or tomentulose, slightly thickened near head; heads erect, rather small, many-flowered; involucre cylindric, 9-10 mm long, 5-6 mm wide in fruit; outer bracts 10-14 with 2-3 closely subtending, nearly equal in anthesis, $\frac{1}{3}$ - $\frac{1}{2}$ as long as inner bracts in fruiting heads, 0.5-0.8 mm wide, lanceolate, acuminate, stramineous, purplish at tip, glabrous, rounded-carinate before anthesis, becoming lax in fruit; inner bracts 12-14, lanceolate, acute, membranous at margin, with a median dorsal row of strong yellow glandless setae 1.5-2 mm long, becoming strongly carinate and incurved, enclosing marginal achenes, spongy-thickened at

base, densely pubescent on inner face with yellow shining hairs, not reflexed at maturity; receptacle aveolate, alveolae 0.4–0.5 mm wide, fimbriatae low, membranous, very finely ciliate, cilia 0.1 mm long, white; corolla about 11 mm long; ligule about 1.25 mm wide; teeth 0.2–0.3 mm long; corolla tube 3–3.5 mm long, pubescent

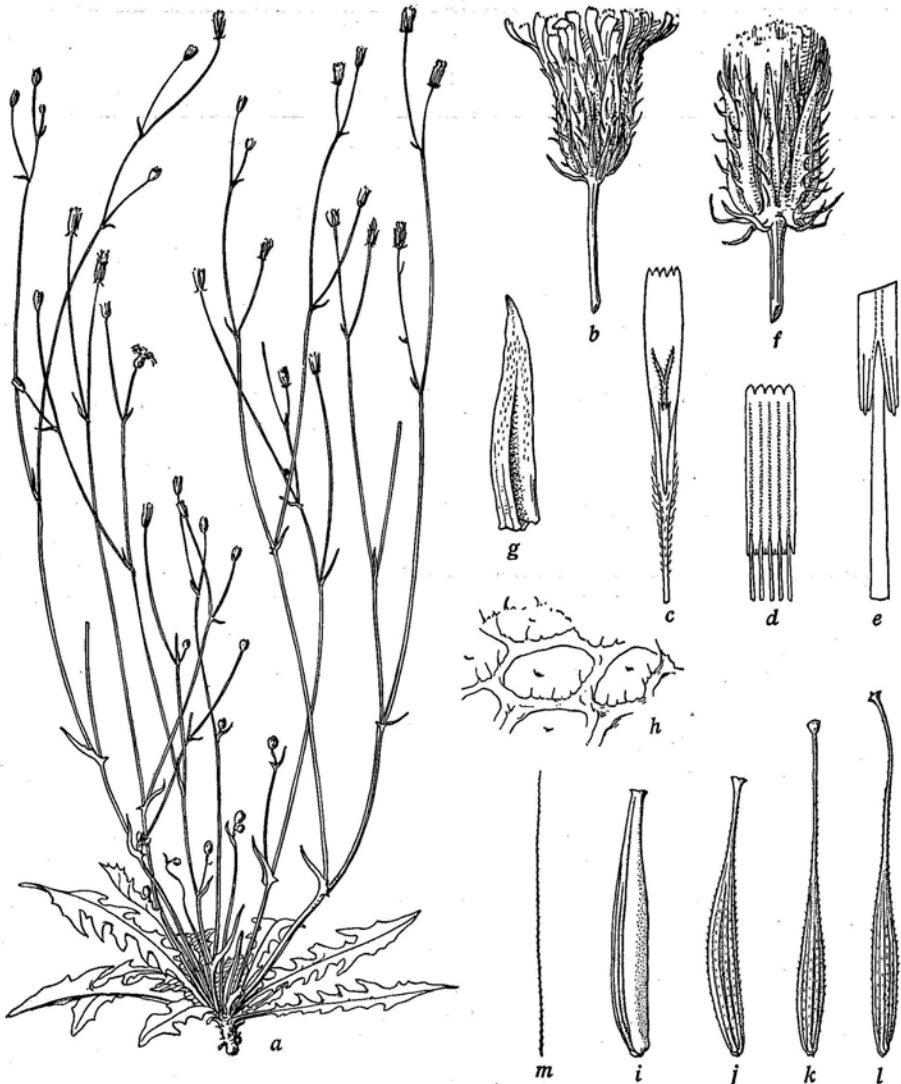


Fig. 290. *Crepis atheniensis*, from type (B): a, plant, $\times \frac{1}{4}$; b, flowering head, $\times 2$; c, floret lacking ovary, $\times 4$; d, anther tube, $\times 8$; e, detail of appendages, $\times 32$; f, fruiting head, $\times 2$; g, inner involucre bract, inner face, $\times 4$; h, detail of receptacle, $\times 25$; i, j, marginal and, k, l, inner achenes, $\times 8$; m, pappus seta, $\times 8$.

with white acicular hairs up to 0.3 mm long, extending onto ligule; anther tube 2.7×0.8 mm dis.; appendages 0.3 mm long, lanceolate, acute; filaments 0.75 mm longer; style branches 1.25 mm long, 0.1 mm wide, yellow; achenes biform, marginal yellowish, 4.5 mm long, 0.5 mm wide, gradually attenuate upward or with a coarse beak about 1 mm long, laterally compressed, ventrally paler and striate or faintly ribbed, dorsally ribbed and spiculate, inner achenes tawny, 5.5–6.5 mm long,

0.4–0.5 mm wide, finely beaked, beak equal to or slightly longer than body, body fusiform, 10-ribbed, ribs rounded, strongly spiculate on upper half and somewhat thickened near the narrow oblique slightly calloused base, beak nearly smooth, 0.05–0.1 mm wide near summit, conically expanded into the 0.25 mm wide pappus disk; pappus white, 4–5 mm long, 1-seriate, very fine, soft, finely barbellulate, caducous. Flowering May–June; flowers yellow, ligules purplish on outer face.

Known only from the type locality.

Monomorphic.

Greece: Athens, in a place planted with olives "loc. pr. Hag. Anna," *Heldreich*, June 6, 1848, flowers and fruits, a single specimen (B, Ucf) as "*Pterotheca nemausensis*, *cf. Rodigia*."

Relationship

C. atheniensis is related to *C. amplexifolia*, *C. aculeata*, and *C. aspera*, but it is very distinct, especially in the outer involucreal bracts, which are, like those in *C. foetida commutata*, numerous, narrow, and definitely carinate. But in no other respect does this species approach closely to *C. foetida*. To *C. amplexifolia* it shows considerable resemblance in floral characters and in the shape of the marginal achenes; but it is very different from that species in habit and leaf shape, in several involucreal characters, and in the strongly ribbed inner achenes and longer pappus. *C. atheniensis* is also distinct from *C. aculeata* and *C. aspera* in leaf shape, in floral characters, and in the marginal achenes. In size and shape of the fruiting heads, as well as in the long yellow setae on the inner involucreal bracts, this species approaches *C. aculeata*. In surface of the receptacle and size and shape of the inner achenes it resembles *C. aspera*. In habit it also resembles some forms of *C. aspera*. The possible identity of this species with *Endoptera intermedia* Boiss. (Diag. Pl. Or. Nov. ser. 2, 3: 99. 1856) has been considered. It seems more probable that Boissier's plants represent one of the variable races of *C. aspera* (*cf. m.v. 3* of that species). The possibility that *C. atheniensis* originated through hybridization between *C. amplexifolia* and either *C. aculeata* or *C. aspera* may be noted, but the marginal achenes of *C. atheniensis* show no influence of either *C. aculeata* or *C. aspera*, both of which have highly distinctive marginal achenes, and in floral characters *C. atheniensis* is very different from those species. Furthermore, natural hybrids between the three species have not been reported in nature, although *C. aspera* has been crossed artificially with the other two and the hybrids are somewhat fertile. But none of those species is a native of Greece. Moreover, *C. amplexifolia* is widely separated geographically from the other two species. Hence a natural hybrid involving *C. amplexifolia* is practically out of the question. It seems remarkable that *C. atheniensis* has not been collected previously. The type specimen was very fruitful and would have produced hundreds of fertile achenes. It seems hardly possible that it could be a strictly local species, unless, being indigenous on some island, it may have been adventive in the vicinity of Athens.

187. *Crepis aspera* L., Sp. Pl. ed. 2, 1133. 1763.

(Fig. 291.)

Annual, 0.5–7 dm high; root vertical, very slender to robust; caudex 0.1–1 cm wide; caudical leaves few to numerous, (2) 6–12 (24) cm long, (0.5) 1–3 (5) cm wide, oblanceolate, obtuse or acute, denticulate, irregularly dentate or \pm pinnatifid with oblong or lanceolate dentate lateral lobes, glabrous or scabridulous, especially on margin, the teeth corneous-mucronate; lowest cauline leaves similar, the others gradually reduced toward summit of plant, oblanceolate, oblong or lanceolate, acute or obtuse, denticulate or coarsely dentate to pinnately parted with narrow