



Fig. 1. *Crepis foliosa* sp. nov. *a*, upper part of the type specimen, $\times 1$; *b*, floret lacking ovary, $\times 4$; *c*, anther tube, split and opened out, $\times 8$; *d*, detail of appendages, $\times 32$; *e*, immature achene, $\times 8$; *f*, inner involucre bract, from outer series, $\times 4$; *g*, *g'*, an innermost inner bract, outer and inner faces, $\times 4$. (Drawings by the author; inking by Miss Anna Hamilton.)

western Madeira and hence may have been still more widespread in the island in recent times.

C. foetida L. subsp. *vulgaris* (Bisch.) Bab. One specimen, *Pravitz 859* (S), collected in Iran: Prov. Gilan; Enseli (shore of Caspian Sea), provides further evidence of the eastward extension of range of this subspecies. Gilan lies just west of Mazanderan Province.

***Crepis foliosa* sp. nov.** Herba annua, 2.3 dm. alta, pubescens pilis tenuis glandulosis; folia caudicalia ephemeres; folia caulina 5–9 cm. longa 2 cm. lata, infera oblanceolata petiolata, supra lanceolata sessiles auriculares, auriculis longis acuminatis; caulis erectus fistulosus sulcatus remote et recte ramosus, ramis 6–8 cm. longis arcuatis foliosis bi- vel tricepitibus; pedunculi

4–12 cm. longi tomentulosi; capitula erecta parva multiflora; involucreum campanulatum, 7–8 mm. longum, 4 mm. latum tomentulosum et dense pubescens, pilis fuscis glandulosis, squamis exterioribus 6–7 circa $\frac{1}{3}$ interiorum aequantibus subulatis, squamis interioribus 13–14 lanceolatis acutis ventre pubescentibus; corolla 11 mm. longa, ligula 1 mm. lata, dentibus 0.2–0.5 mm. longis, tubo 3 mm. longo pubescente; antherae 3.5–4 mm. longae, appendicibus 0.5 mm. longis lanceolatis acutis, filamentis 0.4 mm. longioribus; rami styli 2 mm. longi 0.1 mm. lati viridi; achaenia (immatura) 2.75 longa 0.5 mm. lata paululum attenuata 10-costata tenue spiculata; pappus albus 4 mm. longus 1-seriatus tenuis mollis.

Annual, 2.3 dm. high, pubescent throughout with fine short pale gland-hairs; caudical leaves few, ephemeral (only remnants remaining on this specimen), oblanceolate or spatulate, long-petiolate; lowest cauline leaves (1–5 cm. from base) *ca.* 7 cm. long, oblanceolate, shortly petiolate and auriculate, middle cauline leaves *ca.* 9 cm. long, 2 cm. wide near the base, lanceolate, acuminate, irregularly dentate and denticulate, sessile, amplexicaul, auriculate, the auricles about as long as the width of the blade, narrow, acuminate, upper cauline leaves similar to the middle ones, mostly *ca.* 5 cm. long; stem erect, terete, fistulose, sulcate, tomentulous, remotely and regularly branched beginning near the base, branches 6–8 cm. long, arcuate, terminating in 2 or 3 heads on short peduncles subtended by leaves similar to the upper cauline leaves; aggregate inflorescence racemiform; peduncles 4–12 mm. long, tomentulous; heads erect, small, many-flowered; involucre campanulate, 7–8 mm. long, 4 mm. wide at base, tomentulous, densely pubescent with longer and shorter pale brown gland-hairs; outer involucral bracts 6 or 7, subulate, $\frac{1}{3}$ as long as the inner ones, acuminate, becoming lax; inner bracts 13 or 14, lanceolate, acute or acuminate, appressed-pubescent on inner face; corolla 11 mm. long; ligule 2 mm. wide, teeth 0.2–0.5 mm. long; corolla tube 3 mm. long, pubescent with short (up to 0.15 mm.) 1- or 2-celled aciculate trichomes; anther tube 3.5–4 mm. long, 1 mm. wide when opened out, appendages 0.5 mm. long, lanceolate, acute, filaments 0.4 mm. longer; style branches 2 mm. long, 0.1 mm. wide, green; achenes (not fully mature) light brown, 2.75 mm. long, 0.5 mm. wide, moderately attenuate to both ends, with slightly expanded pappus disk and finely calloused hollow base, 10-ribbed, the ribs rather prominent, rounded, finely spiculate; pappus white, 4 mm. long, 1-seriate, the setae equally fine, soft, united at base. Flowering July–August, flowers yellow. See plate 46 and figure 1.

Known only from the type specimen in Herb. Mus. Palat. Vindob. (W), Th. Teploukhoff, Plantae Uralenses, no. 37, Utka, prope Pratsoufinsk (?), July 24, 1892, flowers and immature achenes. Utka River is a tributary of the Volga and is the boundary between the Tatar Republic and Mordwin Province to the south. It flows through the Volga flax lands.

This station is within the geographic area of *C. tectorum*, but the plant shows more resemblance to *C. nicaeënsis* in its involucre, flowers, and, especially, its achenes. At the same time, it is very distinct from both of those

TABLE 1
SYNOPTICAL COMPARISON OF *CREPIS FOLIOSA* WITH *C. TECTORUM* AND *C. NICAEËNSIS*

| <i>Crepis tectorum</i> | <i>Crepis foliosa</i> | <i>Crepis nicaeënsis</i> |
|---|--|--|
| Upper cauline leaves linear or filamentous, with no or very small auricles | Upper cauline leaves lanceolate, with conspicuous auricles | Upper cauline leaves linear or bractlike, with no or very small auricles |
| Stem usually branched above the middle, lower branches longer, aggregate inflorescence corymbiform | Stem remotely branched from base upward, branches equally short, forming a racemiform panicle | Stem branched near the top or from the middle, aggregate inflorescence corymbiform |
| Indumentum: stem tomentulous and sometimes finely pubescent; leaves glabrous, tomentulous or puberulent | Indumentum: stem tomentulous and glandular pubescent with fine short pale hairs; leaves with similar gland-hairs | Indumentum: stem densely hispidulous below; basal leaves hispidulous with short yellow glandless hairs |
| Outer involucrel bracts about 12 | Outer involucrel bracts 6 or 7 | Outer involucrel bracts 7-9 |
| Inner involucrel bracts pubescent on inner face | Inner involucrel bracts pubescent on inner face | Inner involucrel bracts usually glabrous on inner face |
| Corolla 13 mm. long, ligule 2.5 mm. wide, anther appendages oblong, obtuse | Corolla 11 mm. long, ligule 2 mm. wide, anther appendages lanceolate, acute | Corolla 11 mm. long, ligule 1.6 mm. wide, anther appendages lanceolate, acute |
| Achenes 3-4 mm. long, dark purplish brown, strongly attenuate to the apex | Achenes (not fully mature) 2.75 mm. long, light brown, moderately attenuate to both ends | Achenes about 3 mm. long, golden brown, moderately attenuate to both ends |
| Pappus 4-5 mm. long, 1-seriate | Pappus 4 mm. long, 1-seriate | Pappus 4-5 mm. long, 2-seriate |

species in its large upper cauline leaves with conspicuous auricles, its racemiform branching habit, and its indumentum (see table 1). Therefore, *C. foliosa* is classified in section 24 (Phytodesia), between *C. nicaeënsis* and *C. capillaris*. Since the pollen grains are 3-pored and about 30 μ in diameter, this is a diploid plant and the diploid chromosome number is probably 8, possibly 6.

This only known station for the species is about 1,700 kilometers from the nearest known stations for other species in section 24. It would be of interest to learn of the distributional area of *C. foliosa* and to observe the plant under cultivation. In the light of the evidence now available on the processes of speciation in *Crepis*, it is very probable that *C. foliosa* is more closely related to the species of section 24 than to *C. tectorum*, *C. Bungei*, and *C. irtutensis*.