

Pimpinella isaurica subsp. *sumbuliana* (Apiaceae), a new taxon from Turkey

R. Süleyman Göktürk

Akdeniz University, Faculty of Science and Arts, Department of Biology, Antalya, Turkey (e-mail: gokturk@akdeniz.edu.tr)

Received 26 June 2007, revised version received 18 Sep. 2007, accepted 26 Sep. 2007

Göktürk, R. S. 2008: *Pimpinella isaurica* subsp. *sumbuliana* (Apiaceae), a new taxon from Turkey. — *Ann. Bot. Fennici* 45: 293–295.

Pimpinella isaurica V.A. Matthews subsp. *sumbuliana* R.S. Göktürk *subsp. nova* (Apiaceae) is described and illustrated from Anatolia, Turkey. It is closely related to *P. isaurica* subsp. *isaurica*, also an endemic of Anatolia. The diagnostic morphological characters of subsp. *sumbuliana* and subsp. *isaurica* are discussed and their geographic distributions are presented.

Key words: Apiaceae, new subspecies, *Pimpinella*, taxonomy

I collected specimens of *Pimpinella* in Kahramanmaraş province of Turkey during a botanical field trip in the summer of 2003. After examination of the material in the herbarium of GAZI, and studying the pertinent literature (Tutin 1968, Matthews 1972, Zohary 1987, Özhatay *et al.* 1999, Özhatay & Kültür 2006), I concluded that it was probably a subspecies new to science. On a visit to the same locality in August 2004 and September 2004, additional material was collected, providing a range of specimens with good flowers and mature fruits. Approximately 35 herbarium specimens (ca. 40 individuals) were collected from the type locality. Detailed examination and comparison with the material of similar taxa in herbaria of ANK, HUB, ISTF, ISTE and AKDU (Herbarium of the Biology Department of Akdeniz University) indicated that my earlier conclusion was correct.

***Pimpinella isaurica* V.A. Matthews subsp. *sumbuliana* R. S. Göktürk, *subsp. nova* (Fig. 1)**

Ab P. isauricae umbellis 8–15 radiis (non 4–7 radiis), pedicellis 1–1.5 × longioribus quam fructis maturis (non aequalibus cum fructis maturis vel non brevioribus quam fructis maturis), fructis ellipside-oblongis (non ovatis) et non attenuatis ad apice (attenuatis ad apice in subsp. isaurica), stylopodiis elongatis (non hemisphaericis) differt.

HOLOTYPE: Turkey. C6 Kahramanmaraş: Göksun, 22 km from Göksun to Kahramanmaraş, in calcareous rock crevices, 1350–1450 m, 37°56′32″N, 36°34′52″E, 5.VIII.2003 R. S. Göktürk 5150 (holotype AKDU; isotypes ANK, HUB, GAZI).

ETYMOLOGY. The subspecies is named in honour of the Turkish botanist Prof. Dr. Hüseyin Sümbül (Biology Department, Akdeniz University).

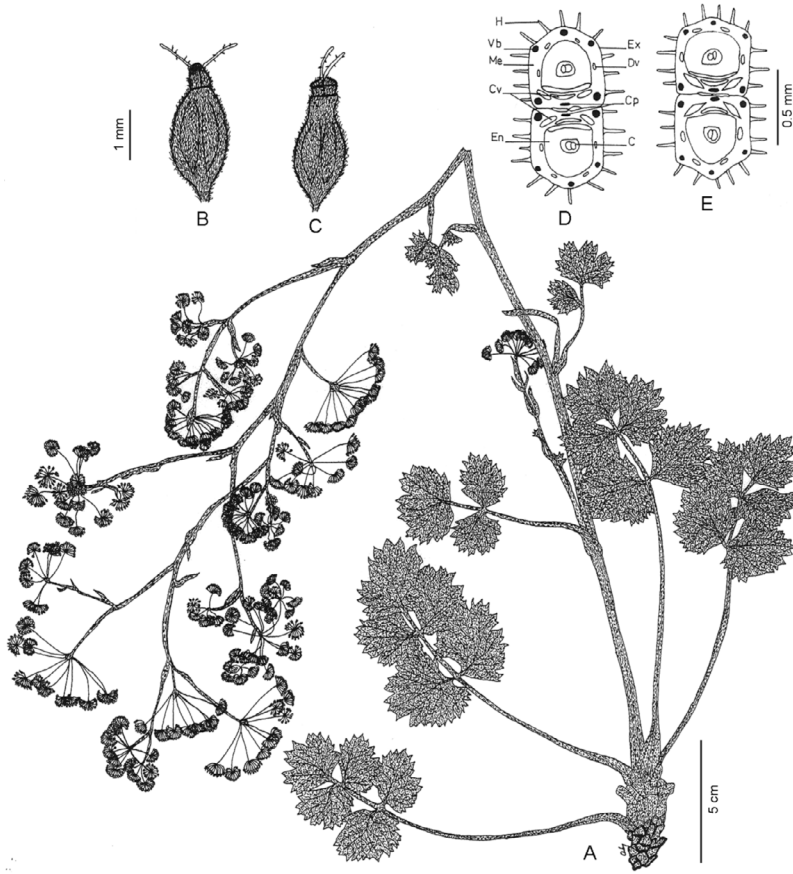


Fig. 1. — **A:** Habit of *Pimpinella isaurica* subsp. *sumbuliana* (from the holotype). — **B:** Fruit of *P. isaurica* subsp. *sumbuliana* (from the paratype Göktürk 5949, AKDU). — **C:** Fruit of *P. isaurica* subsp. *isaurica* (Göktürk 5952, AKDU). — **D:** Transverse section of fruit of *P. isaurica* subsp. *sumbuliana* (from the paratype Göktürk 5949, AKDU). — **E:** Transverse section of fruit of *P. isaurica* subsp. *isaurica* (Göktürk 5952, AKDU). C = cotyledon, Cp = vascular bundle of carphophore, Cv = commissural vittae, Dv = dorsal vittae, En = endosperm, Ex = exocarp, Me = mesocarp, Vb = vascular bundle, H = hair.

Bushy perennial herb, woody at base. Stem up to 60 cm tall, densely canescent-tomentose hairy. Basal leaves coriaceous, 5–30 cm long (with petiole), 1-pinnate with 1–2 pairs of ± orbicular to cuneate, petiolate, sessile or subsessile leaflets, tomentose hairy, lacinate or toothed, 1–7 × 1–7.5 cm. Cauline leaves becoming smaller, 1.5–9 cm long (with petiole), 1-pinnate with 1–2 pairs of ± orbicular to cuneate petiolate, sessile or subsessile leaflets, densely tomentose hairy, lacinate or toothed, 1–1.5 × 1–1.4 cm, reduced to sheath at top of stem; sheath lanceolate or oblong-lanceolate, 4–15 mm, long acuminate. Lateral branches of inflorescence paniculate. Umbels dense, 8–15-rayed, rays unequal, tomentose, 0.5–3.5 cm in flowering time. Bracts and bracteoles absent. Flowers white, 10–20 per umbellule; petals densely hairy over whole dorsal surface. Fruiting pedicel 1–1.5 × longer than mature fruit. Fruit 2.5–3 mm long, green-brownish, ellipsoid-oblong, pubescent, not

attenuate at apex. Exocarp entire and hairy; dorsal vittae 4, commissural vittae 3; stylopodium elongate.

Pimpinella isaurica subsp. *sumbuliana* is endemic to Anatolia (Fig. 2). While *P. isaurica* subsp. *isaurica* occurs in Karaman and İçel provinces, the author collected the new subspecies from a single location in Göksun district in Kahramanmaraş province. *Pimpinella isaurica* subsp. *sumbuliana* is chasmophytic and associated with plants such as *Arabis caucasica* subsp. *caucasica* (not endemic), *Hieracium pannosum* (not endemic), *Lamium garganicum* subsp. *nepetifolium* (endemic), *Michauxia tchihatchewii* (endemic), *Onosma polioxanthum*, (endemic), *Potentilla speciosa* var. *speciosa* (not endemic), *Teucrium chamaedrys* subsp. *tauricum* (endemic), and *Silene brevicaulis* (endemic). It flowers in July–August, and fruits in August–September.

Pimpinella isaurica subsp. *sumbuliana* is

Table 1. Morphological comparison of *Pimpinella isaurica* subsp. *sumbuliana* and *P. isaurica* subsp. *isaurica*.

	subsp. <i>sumbuliana</i>	subsp. <i>isaurica</i>
Umbel	8–15-rayed	4–7-rayed
Fruiting pedicel	1–1.5 × longer than mature fruit	as long as or shorter than mature fruit
Fruit	ellipsoid-oblong, not attenuate at apex	ovoid, attenuate at apex
Stylopodium	elongate	hemispherical

clearly different from subsp. *isaurica* by the characters indicated in Table 1. The genus *Pimpinella* in Turkey was revised by Matthews (1972). The present contribution raises the total number of *Pimpinella* taxa in Turkey to 28.

ADDITIONAL SPECIMENS EXAMINED (paratypes). — **Turkey.** C6 Kahramanmaraş: Göksun, 22 km from Göksun to Kahramanmaraş, in calcareous rock crevices, 1350–1450 m, 37°56'32"N, 36°34'52"E, 1.VIII.2004 R. S. Göktürk 5945 (flowering, AKDU); same locality, 37°56'32"N, 36°34'52"E, 29.VIII.2004 R. S. Göktürk (5949) & A. Aksoy (mature fruiting specimens, AKDU).

REPRESENTATIVE SPECIMENS EXAMINED of *P. isaurica* subsp. *isaurica*. — **Turkey.** C4 İçel: Anamur-Kazancı, kalker kaya çatlakları, 1550 m, 19.VIII.1994 M. Vural 7150, M. Koyuncu, N. Adıgüzel & A. A. Dönmez (GAZI). C4 Karaman: Ermenek, Kebene çeşmesi, kaya üzeri, 1400 m, 3.IX.2004 R. S. Göktürk 5952, O. Ünal & K. Caniş (AKDU).

Acknowledgements

This study was supported by TÜBİTAK (Project Number TBAG-2074) and Akdeniz University Scientific Research Project Units (Project Number 21.01.0121.24). The author is grateful to Prof. Dr. H. Duman (Gazi University) for checking the specimen and his constructive comments on the manuscript, Dr. R. Tekoğlu (Akdeniz University) for help with the Latin diagnosis and Dr. O. Ünal (Akdeniz University) for preparing the illustrations.

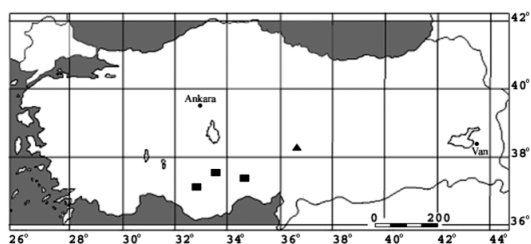


Fig. 2. Geographical distribution of *Pimpinella isaurica* subsp. *sumbuliana* (▲) and *P. isaurica* subsp. *isaurica* (■) in Turkey.

References

- Matthews, V. A. 1972: *Pimpinella* L. — In: Davis, P. H. (ed.), *Flora of Turkey and the East Aegean Islands* 4: 352–364. Edinburgh Univ. Press, Edinburgh.
- Özhatay, N., Kültür, Ş. & Aksoy, N. 1999: Check-list of additional taxa to the Supplement Flora of Turkey I. — *Turkish Journal of Botany* 23: 158.
- Özhatay, N. & Kültür, Ş. 2006: Check-list of additional taxa to the Supplement Flora of Turkey III. — *Turkish Journal of Botany* 30: 281–316.
- Tutin, T. G. 1968: *Pimpinella* L. — In: Tutin, T. G., Heywood, V. H., Burges, N. A., Moore, D. M., Valentine, D. H., Walters, S. M. & Webb, D. A. (eds.), *Flora Europaea* 2: 331–333. Cambridge Univ. Press, Cambridge.
- Zohary, M. 1987: *Pimpinella* L. — In: Zohary, M. & Feinbrun-Dothan, N. (eds.), *Flora Palaestina*: 424–427. Jerusalem Acad. Press.