

PIMPINELLA KURDICA (APIACEAE), A NEW RECORD FOR THE FLORA OF TURKEY

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Pimpinella kurdica (Apiaceae) is described as a new record to the Flora of Turkey (C9, Hakkâri). The detailed morphological and fruit anatomical characters, along with distribution map are given.

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Key words: Apiaceae; *Pimpinella kurdica*; taxonomy; new record; Flora of Turkey

گزارش جدید گونه *Pimpinella kurdica* از خانواده چتریان (Apiaceae) برای فلور ترکیه

مهمت فیرات: دپارتمان بیولوژی، دانشکده آموزش، دانشگاه وان یوزونکو ایل، وان، ترکیه

گونه *Pimpinella kurdica* از خانواده چتریان به عنوان گزارش جدید برای فلور ترکیه (C9, Hakkâri) شرح داده می شود. مشخصات دقیق صفات مورفولوژیکی و تشریحی میوه، به همراه نقشه پراکندگی جغرافیایی گونه ارایه می گردد.

INTRODUCTION

Apiaceae is one of biggest plant families which has approximately 400 genera and 3500 species (Constance 1971, Pimenov and Leonov 1993). It is distributed widely especially in temperate climate regions.

Turkey is one of the main diversification centers of Apiaceae which encompasses 102 genera and 434 species (Erik and Tarikahya 2004). Of these, 4 genera and 140 species are endemic to this country (Pimenov and Leonov 2004).

The genus *Pimpinella* L. (Apiaceae) is a big genus which represents 150 species in the world. This genus includes 31 species in Turkey. Of these, 9 species are endemic to this country. Species of the genus are diverse especially in habit. (Tutin 1968; Matthews 1972; Pignatti 1982; Hartvig 1986; Velayos 2003; Ertekin & Kaya, 2005; Menemen 2012; Yeşil & al., 2016).

MATERIALS AND METHODS

The material of *Pimpinella kurdica* Rech.f. & Riedl, was collected in Zap valley (fig. 1), Hakkâri in July 2013, July 2014 and August 2015. According to the description of Flora of Turkey and the East Aegean

Islands (Matthews 1972), Flora of Turkey and the East Aegean Islands (Supplement) (Güner 2000) it was concluded that collected materials were new record for Turkey flora. Detailed investigation of literatures (Engstrand 1987, Menemen 2012) showed that collected materials have been described as *Pimpinella kurdica* from Kurdistan region of Iraq. Collected materials are deposited at the Herbarium of Yüzüncü Yıl University Science Faculty (VANF).

RESULTS

Pimpinella kurdica Rech.f. & Riedl, Anz. Österr. Akad. Wiss., Math. -Naturwiss. Kl. xcvi. 249 (1961). (fig. 2)

Type: Iraq; Kurd. Mosul, Ad confines Turciae prov. Hakari, in ditione pagi Sharanish, in montibus calc. N Zakho, Jabal Khantur, in rupium fissuris, 1200 m, RECH. 12100, W!

Perennial herb with woody hizome, erect, up to 30-65 cm high, white-hairy-pubescent, branched from near the base, branches long, erect-patent, alternate or opposite to verticillate. Basal leaves numerous, 14-29 cm long, petiol as long as lamina, lamina 1-pinnate, segment 9-30 mm long, ovate to rhomboid-ovate,

serrate, rounded to cuneate; lower stem leaves pinnate, lobes linear or narrowly oblanceolate, 1 lobed or trifid; uppermost cauline leaves entire, linear to subulate, umbel numerous, rays 14-21, 10-28 mm long, with white patent crisped hair, pedicels \pm equal, 10-22, 1-5 mm long, furnished with white patent hairs. Bract 0-1, linear, 3-8 mm, bracteole absent. Petal white, \pm ovate,

curved at the apex, hairy at the middle, c. 1 mm in diameter. Ovary ovoid, white pubescent; both mericarps mostly well-developed. Mature fruit oblong to broadly elliptic, 1.6-2 mm x 0.9-1.1 mm, pubescent, dark brown, with lateral and dorsal filiform and light brown ridges.



Fig. 1. Geographical distribution of *Pimpinella kurdica* in Turkey (blue) and in Kurdistan region of Iraq (green).

Examined materials: Turkey. C9 Hakkâri; Zap valley, rocky cliffs, 37°30'14" N, 043°43'03" E, 1215 m, 15.07.2014, M. Firat 31182, VANF & private herb M. Firat; ibid. 20.08.2015. M. Firat 32626. VANF & private herb M. Firat (in fruit).

Habitat: Rocky slopes

Flowering time: July

Distribution in Turkey: Hakkâri

General distribution: Kurdistan region of Iraq and East of Turkey.

Associated with: *Campanula radula* Fisch., *Gypsophila baytopiorum* Kit Tan, *Campanula acutiloba* Vatke, *Clinopodium hakkaricum* Dirmenci & Firat, *Silene araratica* Schischk. subsp. *davisii* (Chowdhuri) Ghaz.,

Saxifraga sp.

Vernacular name: In Hakkâri province, indigenous people call the plant "Meyane" (Firat, 2013).

DISCUSSION

In this study, the description of *P. kurdica* is emended. The measure of fruit is explained for the first time. Now in Turkey, the genus *Pimpinella* is represented by 31 taxa, including 27 species (9 endemics), 5 subspecies, and 4 varieties. The number of taxa in our country has risen to 31 with this new record. This new record has contributed to both the flora of Turkey and the flora of Hakkâri area where limited information is known.

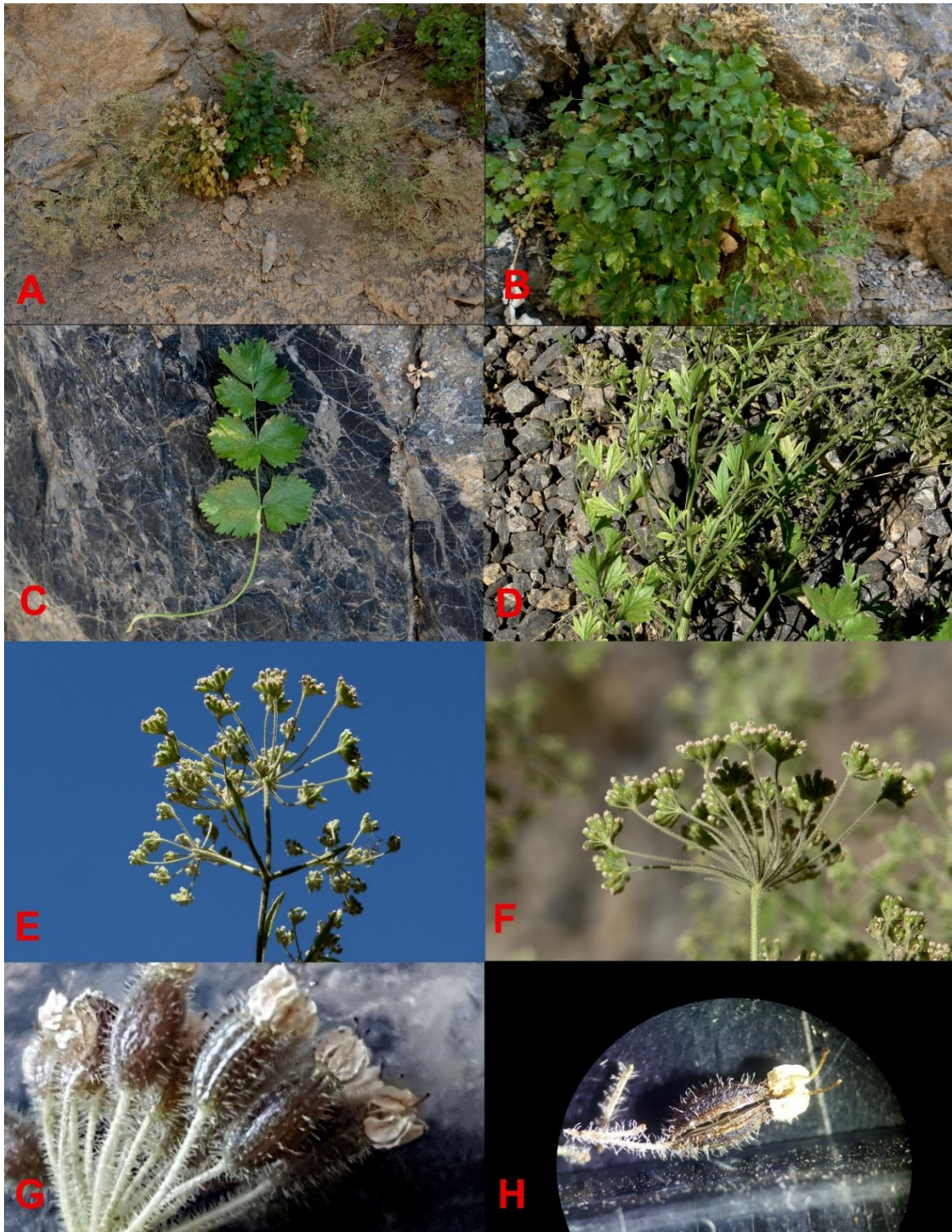


Fig. 2. *Pimpinella kurdica*, A-B, habit; C, basal leaf; D, stem leaves and bracts; E, a part of inflorescence; F, An umbel in early fruiting time; G-H, an umbellet and a fruit with dried petals.

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