

## A New Species of *Ribes* L. (*Grossulariaceae*) from East Anatolia, Turkey

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Received: 01.02.2000

Accepted: 24.11.2000

**Abstract :** *Ribes anatolica* Behçet is described and illustrated as a new species (*Grossulariaceae*) from East Anatolia, Turkey.

**Key Words:** *Ribes*, *Grossulariaceae*, Turkey

### Doğu Anadolu Bölgesinden Yeni Bir *Ribes* L. (*Grossulariaceae*) Türü

**Özet :** Doğu Anadolu bölgesinden bilim dünyası için yeni olan *Ribes anatolica* Behçet (*Grossulariaceae*) türü tanımlandı ve şekilleri verildi.

**Anahtar Sözcükler:** *Ribes*, *Grossulariaceae*, Türkiye

### Introduction

Specimens of a species of *Ribes*, in flower and fruit, were collected in 1987 from Süphan Dağ. Initial attempts to name it using the Flora of Turkey (Davis, 1972; Davis, Mill & Tan, 1988) were not successful and after studying herbarium specimens at Ege University (EGE) and Gazi University (GAZI), it was concluded that it was a species new to science. Geographically, it is very distinct from most of the other 7 Turkish species of the genus. Likewise, there are no records of *Ribes* species in neighbouring areas of Iran (Schönbeck-Temesy, 1967; Assadi, 1998). On account of the spiny habit, it appears to be related to *R. uva-crispa* L. (gooseberry), but it differs from it in a number of characters. The locality is 2500 m above sea level. The area, consisting of volcanic origin basalt, andesite blocks and lava flows, is affected by the heavy winter season and is covered by prolonged snow. Altitude, which delays growing and maturing, the shortness of the vegetation period and erosion caused by sharp slope, altogether halt cultivation around the slope of the mountain cone. Apart from rock-free and bare places, steppe is the most common vegetation formation (dominated by *Astragalus microcephalus* Willd., *A. aureus*

Willd., *A. lagurus* Willd., *A. gummifer* Lab., *A. barchycalyx* Fisch. *Acantholimon venustum* Boiss. var. *laxiflorum* (Boiss. ex Bunge) Bokhari, *Salvia multicaulis* Vahl., *Stipa pontica* P.Smironov, etc.) in the area. It is clear that this species is not an escape from cultivation to the area where some shrubs resisting extreme conditions grow rarely.

***Ribes anatolica* Behçet spec. nov.** Figure

Type: Turkey, B9, Bitlis, Adilcevaz, Süphan Mountain north of Kışkılı village 2500 m, volcanic stony places, 09.07.1987 Behçet 318 (Holo typus VANF).

Affinis *R. uva-crispa* L. sed ab *R. uva-crispa* folia, flabellata, irregulariter dentata in apex vel 3-5 lobata, glabra, basi cuneata, foliorum lamina 1-2.5 cm x 1-2 cm, in florescentia racemis, racemi 3-5 cm longi, 8-15 flori; hypanthium ± planus, sepala 2-2.3 mm, glabra, viridi - flavus, petala ± dimidium sepalorum aequantia, ovarium et bacca glabra, bacca 5-8 mm differt.

Spiny shrub, 1-1.5 m, stem with 1-2 slender, straight to slightly curved spines at the node sometimes between the nodes too, spine 2-6 mm (sometimes absent). Leaves 1-2.5 x 1-2 cm, glabrous, irregularly dentate at apex or

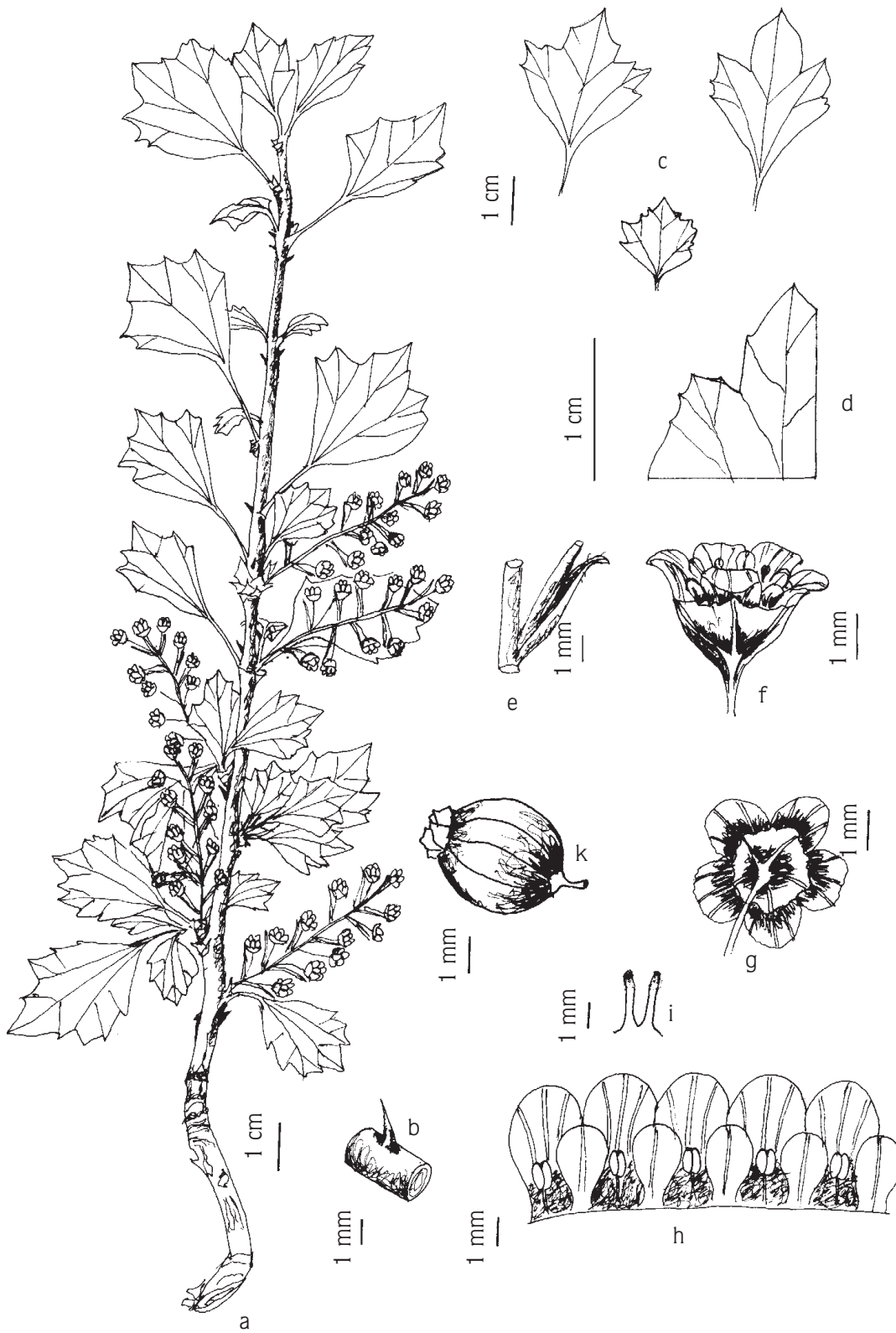


Figure *Ribes anatolica* a- habit, b-spine, c-leaves, d-leaf margin, e-bract, f-flowers (lateral view), g-flowers (dorsal view), h-sepals, petals and stamens in dissected flower, i-pistil, k-fruit.

3-5 lobed and with a cuneate base. Inflorescence erect or slightly curved, 8-15 flowered raceme (3-5 cm) with a glabrous axis. Bract 3-5 mm, glabrous or ciliate in upper part. Flower hermaphrodite, hypanthium almost flat, sepal 2-2.3 mm  $\pm$  spreading, greenish yellow, glabrous, petal c.  $\frac{1}{2}$  as long as sepal, whitish, style glabrous, fruit glabrous, globose, red or yellowish red, 5-8 mm, Fl. 5-6. Fr. 7.

Endemic, known only from the type collection

*Ribes anatolica* is close to *R. uva-crispa* but the inflorescence is a slightly curved 8-15 flowered raceme with a glabrous axis, not in axillary clusters of 1-3. The leaves 1-2.5 cm x 1-2 cm, glabrous, base cuneate, not 4 x 4-6.5 cm, pubescent, base rotundate, truncate or subcordate. The hypanthium is flat, not campanulate. The sepals 2-2.3 mm greenish yellow, not 5-7 mm pale or pinkish green, petals are c.  $\frac{1}{2}$  as long as sepals, not  $\frac{1}{3}$  sepals. The fruit is glabrous, not hispid or glandular-hispid. This species is isolated geographically from *R. uva-crispa*, which is known from West, Central and South Europe, Caucasia, North Iran and Turkey (Istanbul (A2), Ankara (A4) and Kars (A9)).

### Ecology

Süphan Dağ (4053 m), where the specimens of *Ribes anatolica* were collected, is the second highest mountain in Turkey after Ağırı Dağ (5123 m), among volcanic-origin mountains. The mountain has higher erosion

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because of sharp slopes and absence of forest. The large groups of soil in the area consist of brown soils without lime, and have volcanic ashes, blocs of basalt and andesite. The region has prolonged winters and snow cover, and the summer drought from June to mid-October limits the plant growth in the area. The dominant vegetation formation in the area is steppe and some rare species of shrub (*Cotoneaster nummularia* Fisch. & C.A.Mey., *Rhamnus kurdicus* Boiss. & Hoh., *Amygdalus trichamygdalus* (Hand.-Mazz.) Woronov var. *tirchamygdalus*, etc.) are collected by the villagers for fuel. It is in great danger because of the shrub's properties and grazing of *Ribes anatolica*.

Recommended IUCN Threat Category listing: Critically Endangered (CR).

The residents of the villages near the distribution area of the species (less than 100 km<sup>2</sup>) use it as fuel. Moreover, the area is under pressure from early and excessive grazing. Since the species, which has a limited distribution area, is destroyed to an important degree because of the reasons above, it should be included in the critically endangered (CR) category.

### Acknowledgements

I thank Doç. Dr. Hayri DUMAN (Gazi University Faculty of Science and Art, Department of Biology) for his critical discussion.

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