

A new species of *Scorzonera* (Asteraceae) from Anatolia, Turkey

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Scorzonera aytatchii sp. nov. is described from the Aydos Mountain (C4: Konya) in Turkey. It is related to *S. rigida*, from which it mainly differs in its hairy achene.

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Introduction

The authors collected very unusual specimens of the genus *Scorzonera* L. growing in the rock crevices in the vegetation season in 2001. These specimens have been compared with many specimens of supposedly related species in the Herbaria of Gazi University (GAZI), Ankara University (ANK), Hacettepe University (HUB) and Kirikkale University (ADO) and with the literature (Chamberlain 1975; Tutin et al. 1976; Davis et al. 1988; Güner 2000). The study showed that these specimens are represent a species new to science.

Since the genus *Scorzonera* was revised by Chamberlain (1975) for the Flora of Turkey, some other new species, such as *S. pisidica* Hub.-Mor., *S. latifolia* (Fisch. & Mey.) DC. var. *angustifolia* Prilipko apud Lipsch., *S. sandrasica* Hartvig & Strid, *S. longiana* Sümbül and *S. ekimii* A. Duran (Davis et al. 1988; Güner 2000; Duran 2002) have been added to the Flora of Turkey. In this paper, the new *Scorzonera* species is described and illustrated.

The authors of plants names were checked from Brummitt & Powell (1992).

Scorzonera aytatchii A. Duran & Sagiroglu sp. nov.

Herbae perennes. Folium integerum, pubescens. Capitulum 1 in quoque caule, 10-14 mm longus. Pili in quoque phyllario albi et ateri. Achenia 6-7 mm longa, pubescentia. Pappus barbellatus. – Fig. 1.

Types: Turkey. C5 Konya: Eregli, Aydos Dagi, Kayasaray village, Dügünlük Dere, 1750 m, 7.vii.2001, crevices of marble rocks, 37°22' N, 34°16' E, A. Duran 5797 & Sagiroglu (ADO holotype, GAZI, ANK, HUB isotypes); Turkey. C5 Konya: Eregli, Aydos Dagi, Kayasaray village, Sayintas mevkii, 2500 m, 15.vii.1977, S. Erik 2602 (HUB paratype).

Note: Flowering specimens belonging to the new species were mistakenly labeled as *S. rigida* Aucher in HUB.

Plant subscapigerous perennial herb, 10-18 cm long and 0.5-1 mm diam., pubescent, more densely so below. Scape lateral at base of a rosette, rootstock tick, cylindrical, crowned by persistent old leaf bases and scape, 2-4 cm long and 1-2.5 cm wide. Leaves entire, 2-7 × 0.1-0.2 cm, linear, pubescent especially at below, decreasing to capitula. Capitula 1 per stem, ho-

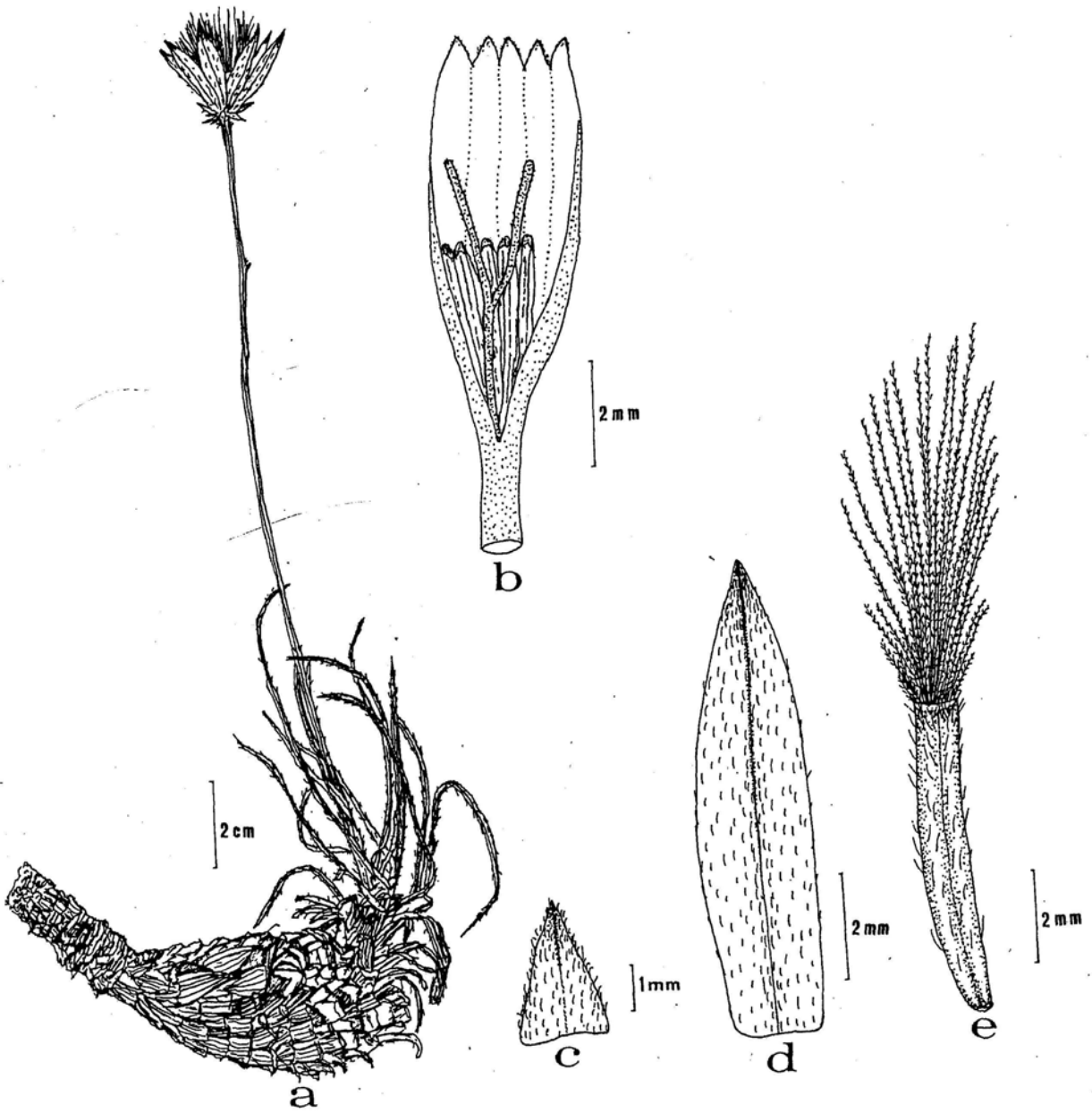


Fig. 1. *Scorzonera aytatchii*, (a) habit, (b) corolla, (c) outer phyllary, (d) inner phyllary, (e) achene.

mogamous, ligulate, 10-14 mm long, 8-12 mm wide. Outer phyllaries 2-3.5 mm long, 1.5-2 mm wide below, lanceolate, sparsely white and black hairs, $1/3-1/4 \times$ inner phyllaries; inner phyllaries 10-12 mm long, c. 2 mm wide below, lanceolate, acute, sparsely white and black hairs. Corolla yellow, slightly longer than involucre, c. 10 mm long, ligules 5 toothed, lobes 0.4-0.5 mm long; style branches filiform, c. 2.5 mm long per branch, papillose, obtuse,

shorter than ligule. Achenes $6-7 \times 0.7-1$ mm, cylindrical, slender, ridged, sparsely hairs, especially upper part; pappus 6-7 mm long, dirty white, pappus hairs entirely barbellate. Flowering: june, fruiting: july.- Fig. 1.

Habitat: Crevices of marble rocks, 1750-2500 m.

Etymology: The species is named in honour of the

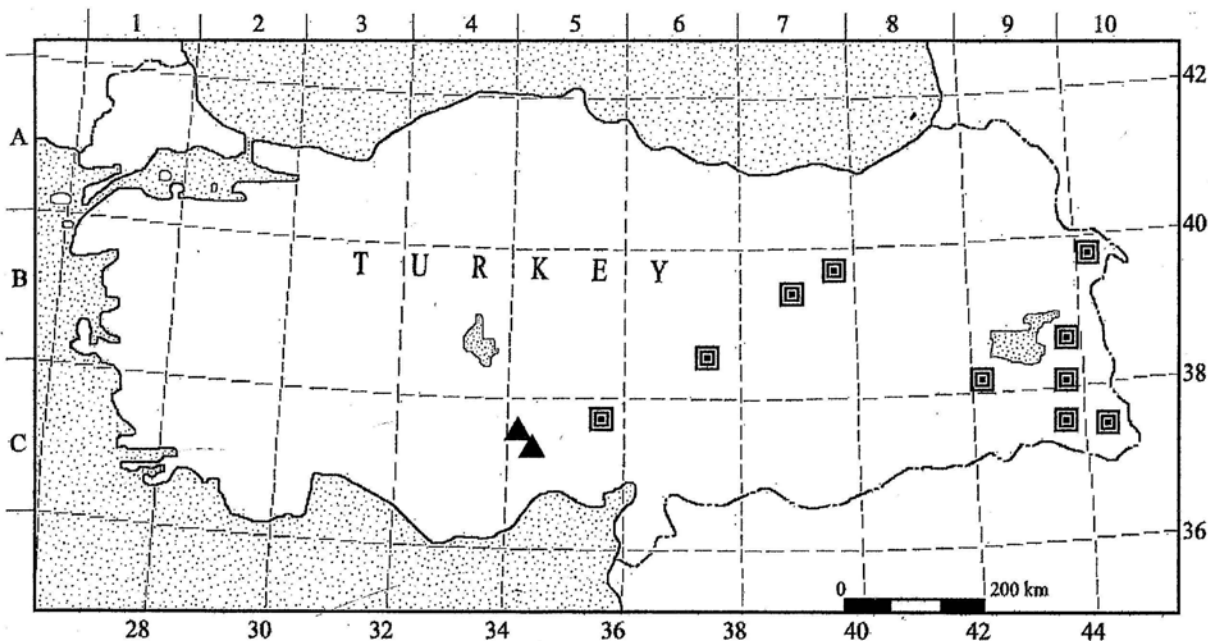


Fig. 2. Distribution map of *Scorzonera aytatchii* (▲) and *S. rigida* (■).

eminent Turkish botanist Prof. Dr Zeki Aytaç (Biology Department, Gazi University) who is an expert on the Leguminosae.

Distribution and suggested conservational status: Endemic. It is found in the Middle Toros Mountains (Eregli, Konya province)(Fig. 2). Ir.-Tur. element. This species is only known from the type locality and has to be classified as Critically Endangered (CR) category according to the new categories (IUCN 2001).

Ecology: *Scorzonera aytatchii* grows in crevices of marble rocks with *Hesperis kotschyi*, *Polygala pruinosa* subsp. *pruinosa*, *Silene pharnaceifolia*, *Potentilla libanotica*, *Ferula elaeochytris*, *Laserpitium petrophilum*, *Centaurea mucronifera*, *C. drabifolia*, subsp. *cappadocica*, *Scrophularia libanotica* subsp. *libanotica*, *Onosma isauricum*, *Euphorbia herniariifolia* var. *herniariifolia*, *Melica ciliata* subsp. *ciliata*.

Discussion: *Scorzonera aytatchii* is related to *S. rigida*, which is especially widespread in East Anatolia. *S. aytatchii* differs from *S. rigida* in being a scape pubescent, more densely so below (not glabrous or sparsely pubescent); in having a with leaves pubescent, 2-7 × 0.1-0.2 cm, (not glabrous or

sparsely pubescent, 5-10 × 0.1-0.3 cm); capitula 10-14 mm long (not 12-20 mm); outer phyllary greenish, white and black hairs (not greenish or purplish, sparsely white hairs); inner phyllary greenish, white and black hairs, 10-12 mm long (not greenish or purplish, sparsely white hairs, 10-15 mm); corolla yellow, slightly longer than involucre, c. 10 mm long (not pale yellow, clearly longer than involucre, 12-15 mm); achenes 6-7 mm long, sparsely hairs (not 7-9 mm, glabrous); pappus 6-7 mm long (not 9-10 mm). It differs from *S. rigida* in the features below (Table 1).

S. aytatchii looks like *S. pygmaea* Sibth. & Sm. in some vegetative characters, but its leaves are linear, 0.1-0.2 cm wide, pubescent (not linear to linear-lanceolate, 0.2-0.3 cm, lanate); outer phyllary 2-3.5 mm long, lanceolate (not 3-5 mm, ovate-lanceolate); achenes hairs (not glabrous); pappus dirty white, pappus hairs entirely barbellate (not pink tinged, pappus hairs barbellate above, plumose below).

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Table 1. A comparison of *Scorzonera aytatchii* with the relevant species.

Characters	<i>S. aytatchii</i>	<i>S. rigida</i>
Scape	pubescent, more densely so below, 10-18 cm long	glabrous or sparsely pubescent, 10-30 cm long
Leaves	2-7 × 0.1-0.2 cm, pubescent	5-10 × 0.1-0.3 cm, glabrous or sparsely pubescent
Capitula	10-14 mm long	12-20 mm long
Outer phyllary	greenish, white and black hairs	greenish or purplish, sparsely white hairs
Inner phyllary	greenish, 10-12 mm long, white and black hairs	greenish or purplish, 10-15 mm long, sparsely white hairs
Corolla	yellow, slightly longer than involucre, c. 10 mm long	pale yellow, clearly longer than involucre, 12-15 mm long
Ligules	lobes 0.4-0.5 mm long	lobes 0.5-1 mm long
Achenes	6-7 mm long, hairs	7-9 mm long, glabrous
Pappus	6-7 mm long, dirty white	9-10 mm long, yellow

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