

A NEW SPECIES OF *SCORZONERA* L. (ASTERACEAE) FROM ANATOLIA, TURKEY

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Abstract

Scorzonera adilii A. Duran sp. nov., is described from the Aydos Mountain (C5: Konya) in Turkey. It is related to *S. rigida* Aucher, from which it mainly differs in its lanceolate leaves and features of pappus.

Introduction

During an excursion some *Scorzonera* L., specimens were collected from Konya province, Turkey in the vegetation season of 2001. These specimens have been compared with many specimens of supposedly related species in the Herbaria of Ankara University (ANK) and Gazi University (GAZI) and with the description of plants given in the Flora of Turkey and East Aegean Islands (Chamberlain, 1975; Davis *et al.*, 1988; Güner *et al.*, 2000) and Flora Europaea (1976). The results showed that these specimens represent a species new to science.

Since the genus *Scorzonera* was revised by Chamberlain (1975) for the Flora of Turkey, one other new species, such as *Scorzonera 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 *et al.*, 2000; Duran *et al.*, 2002) have been added to the *Flora of Turkey*. In this paper, the new *Scorzonera* species is described and illustrated.

Scorzonera adilii A. Duran sp.nov.

Figs. 1 & 2

Herbae perennes. Scapus 12-22 mm longus. Folia integra, lanata, lanceolata. Capitulum 1 in quoque caule, c. 12 mm longo. Corolla lutea. Achenia 6-7 mm longa, glabra.

Plant subscapigerous perennial herb. Rootstock tick, cylindrical. Scape 12-22 cm long and 1-2 mm diam., striate, crowned by persistent old leaf bases, mostly at below c. 1/2-1/3 with leaves and similar to base leaves, greenish densely lanate. Leaves entire, densely lanate, lanceolate, linear to lanceolate, gradually attenuating towards and semiamplexicaul at base, 2-7 x (0.2-)0.3-0.5 cm. Capitula 1 per stem, homogamous, ligulate, c. 12 mm long, 8-10 mm wide. Outer phyllaries 3-6 mm long, 1-1.5 mm wide below, lanceolate, densely lanate, 1/2-1/3 x inner phyllaries; inner phyllaries 10-12 mm long, c. 1.5 mm wide, lanceolate, acute, scarious margin, greenish, lanate. Corolla yellow, equalling or slightly longer than involucre, 8-10 mm long, ligules 5 toothed, lobes c. 0.25 mm long; style branches filiform, 4-5 mm long per branch, papillose, obtuse, shorter than ligule or equal. Achenes 5-6 x 1 mm, cylindrical, slender, ridged, glabrous; pappus 5-7 mm long, brownish, pappus hairs barbellate and plumose or rarely barbellate below, barbellate above. Fl. 6, Fr. 7, Crevices of marble rocks, 1750 m.

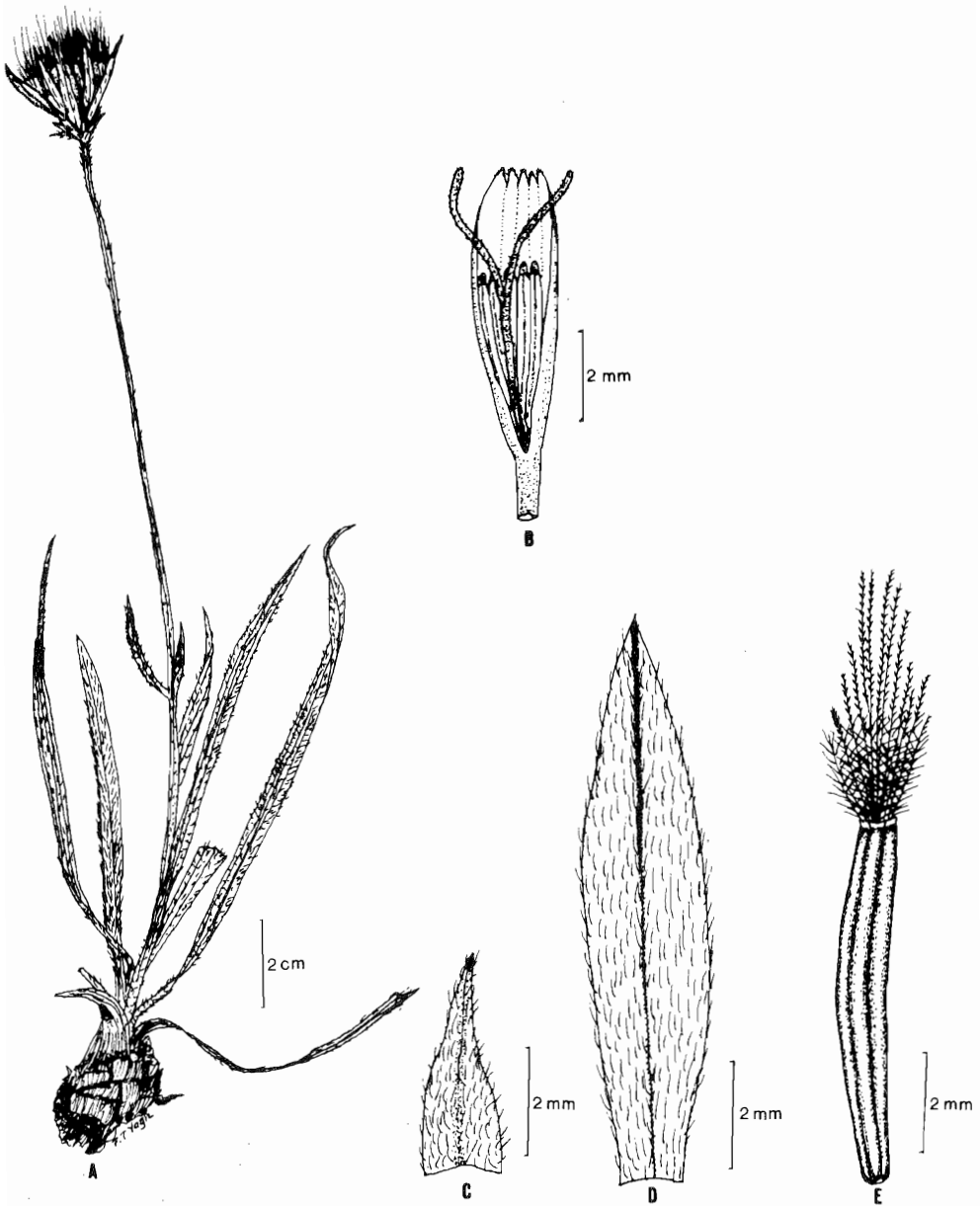


Fig. 1. *Scorzonera adilii* A. Duran (a) Habit, (b) Corolla, (c) Outer phyllary, (d) Inner phyllary.

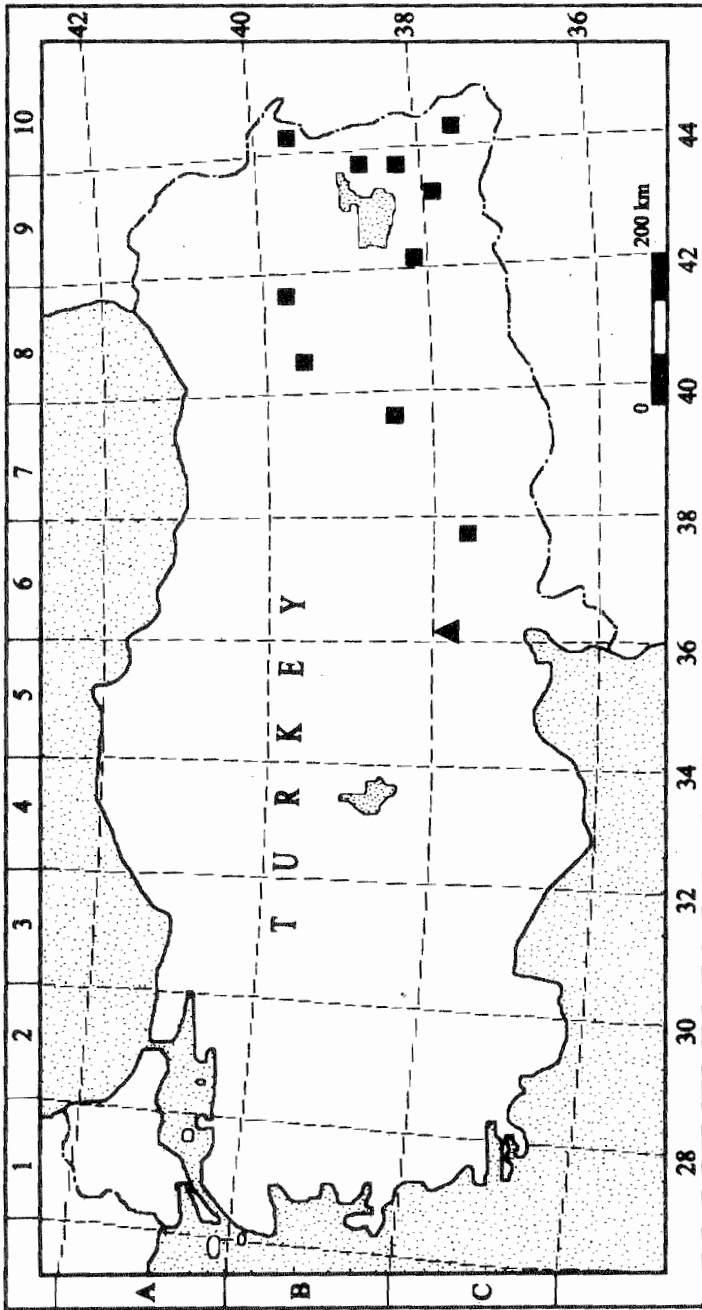


Fig. 2. Distribution map of *Scorzonera adilii* (▲) and *S. rigida* (■).

Type: Turkey. C5 Konya: Ereğli, Aydos Dağı, Kayasaray village, Dügünlük Dere, 1770 m, crevices of marble rocks, 37 22.04'N, 34 16.33'E, 7.viii. 2001, A. Duran 5798 & Sağıroğlu, (holotype: ADO, isotypes: GAZI, ANK, HUB), ibid., 18. VII. 2002, A Duran 5960 (ADO).

Endemic: It is found in the Middle Toros Mountains (Konya province, Ereğli). 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 2002).

Ecology

Scorzonera adilii grows in crevices of marble rocks with *Hesperis kotschyi* Boiss., *Polygala pruinosa* Boiss. subsp. *pruinosa*, *Silene pharnaceifolia* Fenzl, *Potentilla libanotica* Boiss., *Ferula elaeochytris* Korovin, *Laserpitium petrophilum* Boiss. & Heldr., *Centaurea mucronifera* DC., *C. drabifolia* Sm. subsp. *cappadocica* (DC.) Wagenitz, *Scrophularia libanotica* Boiss. subsp. *libanotica*, *Onosma isauricum* Boiss. & Heldr., *Euphorbia herniariifolia* Willd. var. *herniariifolia*, *Melica ciliata* L. subsp. *ciliata*.

Discussion

Scorzonera adilii is related to *S. rigida*, which is especially widespread in East Anatolia. It differs from *S. rigida* in the features given in Table 1.

Table 1. A comparison of *Scorzonera adilii* with the related species *S. rigida*.

Characters	<i>Scorzonera adilii</i>	<i>Scorzonera rigida</i>
Scape	Greenish densely lanate	Glabrous or sparsely pubescent
Leaves	2-7x0.3-0.5 cm, densely lanate, lanceolate, linear to lanceolate, gradually attenuating towards the base	5-10 x 0.1-0.3 cm, glabrous or sparsely pubescent, linear
Capitula	c. 12 mm long	12-20 mm long
Outer phyllary	Densely lanate	Greenish or purplish, sparsely white hairs
Inner phyllary	Greenish, 10-12 mm long, lanate	Greenish or purplish, 10-15 mm long, sparsely white hairs
Corolla	Yellow, equalling or slightly longer than involucre, 8-10 mm long	Pale yellow, clearly longer than involucre, 12-15 mm long
Ligule lobes	c. 0.25 mm long	0.5-1 mm long
Style branches	Shorter than ligule or equal	Shorter than ligule
Achenes	6-7 mm long	7-9 mm long
Pappus	5-7 mm long, brownish	9-10 mm long, yellow
Pappus hairs	Barbellate and plumose or rarely barbellate below, barbellate above	Entirely barbellate

Etymology

The species is named in honour of the eminent Turkish botanist Prof. Dr. Adil Güner (Biology Department, Abant İzzet Baysal University) who is an expert on the Flora of Turkey.

Specimens examined

S. rigida: Turkey. B9 Bitlis: 10 km S.E. of Pelli, 2600 m, 8 vii. 1954, *D.* 22544 & *Q. Polunin* (ANK!); B9 Van: Baskale, İspiriz Dağı, 3200 m, 31. vii. 1954, *D.* 23763 & *Q. Polunin* (ANK!); C10 Hakkari: Cilo Tepe, 3700 m, 9. viii. 1954, *D.* 24216 & *Q. Polunin* (ANK!); B9 Van: Çatak, Kavuşşahap Dağı, 3100 m, 23. vii. 1954, *D.* 23142 & *Q. Polunin* (ANK!); B9 Van: Gevaş, Artos Dağı, 2286 m, 41. vii. 1954, *D.* 22681 & *Q. Polunin* (ANK!); B9 Van: between Van-Hoşap, 40th km, steppe, 22. viii. 1993, *Y. Altan* 5562 (GAZI!).

Acknowledgements

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