

Astragalus duranii (Fabaceae), a new species from Central Anatolia, Turkey

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Astragalus duranii E. Hamzaoglu & L. Kurt *sp. nova* (Fabaceae) is described from Central Anatolia (Yozgat) in Turkey. It belongs in the section *Proselius* Bunge and is related to *A. czorochensis* Charadze, from which it mainly differs in its very long legumes.

Key words: *Astragalus*, Fabaceae, taxonomy

Introduction

A peculiar *Astragalus* specimen with fruit was collected during the floristic study of the Kazankaya canyon, Yozgat, carried out in 1999 and 2000. The area was revisited in 2001 and some flowering specimens were collected. These specimens were examined in the herbaria of ANK, GAZI, HUB and ADO, and compared with the descriptions of species of *Astragalus* in Schischkin (1965), Chamberlain and Matthews (1970), Townsend and Guest (1974), Zohary (1987), and Aytac (2000). The specimens represent a species new to science.

Astragalus duranii E. Hamzaoglu & L. Kurt, *sp. nova* (Figs. 1 and 2)

Affinis *A. czorochensis* Charadze *sed stipula 6–8 mm longa (non 8–9 mm), vexillo 21–23 mm longo (non c. 25 mm), legumine 30–44 mm longo (non 16–21 mm) et rostrumo 4–6 mm longo (non c. 3 mm) differt.*

HOLOTYPE: Turkey. A5 Yozgat: Aydıncik, Kazankaya–Alan koyu arasi 7. km, 1020 m, 10.VI.2001 E. Hamzaoglu 2690 (ADO; isotypes GAZI, ANK, HUB and Hrb. Yıldırımli).

PARATYPE: Turkey. A5 Yozgat: Kazankaya–Alan koyu arasi yol kenarlari, 1000 m, 24.VI.2000 E. Hamzaoglu 2521 (ADO).



Fig. 1. *Astragalus duranii*. — A: Habit. — B: Fruit. — C: Calyx. — D: Standard. (Same scale bar for all elements.)

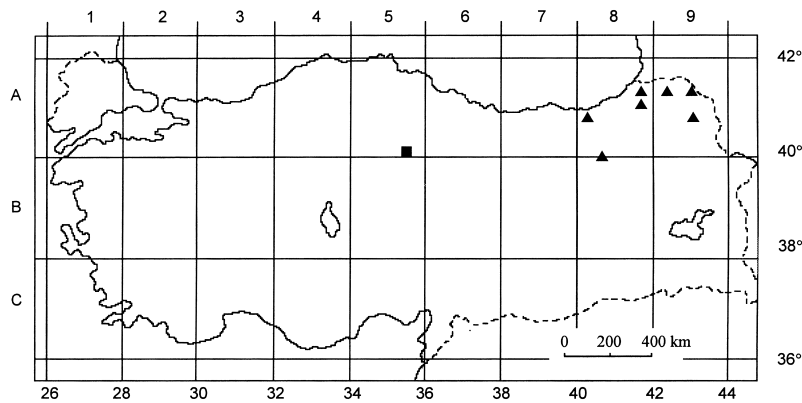


Fig. 2. Distribution of *Astragalus duranii* (■) and *A. czorochensis* (▲) in Turkey.

Mat-forming, 6–10 cm, scapose perennial herb with a woody base. Leaves oblong to oblong-lanceolate in outline, 5–10 cm long, petioles 1–3 cm, leaflets 3–6 mm long, broadly obovate to orbicular, sparsely adpressed bifurcate-hairy below, glabrous above, glaucous, obtuse, 5–10 paired; stipules 6–7 mm long, triangular-lanceolate. Peduncles 2.5–6.5 cm. Inflo-

rescence a 4–9-flowered raceme. Pedicels 3–4 mm. Bracts 3–4 mm long, lanceolate. Bracteoles 2.5–4 mm long, linear to linear-lanceolate. Calyx 12–16 mm long, tubular, sparsely hairy, hairs white, adpressed, bifurcate, teeth 4–6 mm long, linear. Corolla purple, standard 21–23 mm long, attenuate above, lamina ovate-lanceolate, 13–16 mm long, bilobed at apex, claw 7–8 mm

Table 1. Differences between *Astragalus duranii* and *A. czorochensis*.

Characters	<i>Astragalus duranii</i>	<i>Astragalus czorochensis</i>
Leaflet length	3–6 mm	5–8 mm
Stipule length and shape	6–7 mm triangular-lanceolate	8–9 mm lanceolate
Number of flowers in inflorescence	4–9	3–5
Bract length	3–4 mm	2–3 mm
Colour of calyx hairs	white	black or white
Calyx tooth length	4–6 mm	ca. 4 mm
Standard length	21–23 mm	ca. 25 mm
Legume length, shape, attitude and colour	30–44 mm oblong erect to erect-patent with dark blotches	16–21 mm lanceolate ± spreading without dark blotches

long; wings 15–17 mm long, lamina oblong, claw 8–10 mm long; keel 13–14 mm long, claw 8–9 mm long. Legume 30–44 × 2.5–3 mm, oblong, laterally compressed, straight or slightly incurved, sparsely hairy, hairs white, adpressed, bifurcate; with dark blotches, erect to erecto-patent, 16–22 seeded; beak 4–6 mm long. Seeds compressed, reniform, ca. 2 mm broad, brown.

HABITAT AND LIFE FORM: Calcareous soils, *Quercus* openings and steppes, 1000–1020 m altitude, flowers and fruits May–June, chamaephyte.

DISTRIBUTION: Endemic, Irano-Turanian element.

Astragalus duranii is closely allied to *A. czorochensis* Charadze, an endemic of NE Anatolia. The differences are presented in Table 1.

ETYMOLOGY: This new species is named after Dr. Ahmet Duran, a celebrated Turkish botanist.

Representative specimens examined of *Astragalus czorochensis*. — **Turkey.** A8 Coruh: in rupestribus ad ripam dextram fl. Czoroch (Coruh Cayi) infra Artvin, IV.1908 *Woronow 819* (holotype, TBI); A8 Coruh: nr. Artvin, Turkevicz 499; A8 Artvin: Borcka'dan Artvin'e 13 km, Coruh vadisi, 120 m, III.1983 *Guner 4654* (HUB); A8 Trabzon: Surmene, Koprubasi, Arpali koyu ustu, 2050 m, V.1983 *Guner 4931* (HUB); A8 Erzurum: c. 8 km above Ilica, Kackar group, 2400 m, *Cheese & Watson 215* (ANK); A9 Artvin: Savsat-Ardahan arasi, Lasat deresi mevki, 1700 m, V.1983 *Guner 4841* (GAZI); A9 Kars: Posof, Saricicek koyu, Gonulacan ormani-

Dogrular koyu yaylasi, Posof merkez yayla yolu boyunca, 1900–2200 m, V.1986 *Demirkus 3465* (GAZI).

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