A New Taxon for Turkey: Galium recurvum Req. ex DC. (Rubiaceae)

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Abstract: It is reported here that *Galium recurvum* Req. ex DC., collected from Ayvalık (province of Balıkesir), is new to the Turkish flora. In this article a photograph, a short morphological description, including an illustration of the plant parts, and a distribution map are presented.

Key Words: Rubiaceae, Galium recurvum, new record, Turkish flora.

Türkiye İçin Yeni Bir Takson: Galium recurvum Req. ex DC. (Rubiaceae)

Özet: Ayvalık'tan (Balıkesir) toplanan *Galium recurvum* Req. ex DC.'un Türkiye florası için yeni olduğu bildirilmektedir. Makalede bitkinin fotoğrafına, kısa bir morfolojik tanıtımına, kısımlarına ait çizimlere ve yayılış haritasına yer verilmektedir.

Anahtar Sözcükler: Rubiaceae, Galium recurvum, yeni kayıt, Türkiye florası.

In the Flora Europaea (1) and Flora of Cyprus (2), published in 1976 and 1977, respectively, it is stated that *Galium recurvum* Req. ex DC. was recorded in Turkey (W. Anatolia). However, there are no records of the presence of *G. recurvum* in Turkey found in the Flora of Turkey and the East Aegean Islands (3), its Supplement (4) or published sources of additions made to the Turkish flora. The genus *Galium* L. is represented by 102 species in the "Flora of Turkey" area and 3 of them (e.g. *G. recurvum* Req. ex DC., *G. samothracicum* Rech. fil. and *G. verrucosum* Hudson) are cited from the Aegean Islands but not from the Turkish mainland (3, 4).

Of the plants collected by the author from Ayvalık (province of Balıkesir) in May 1995, one specimen was identified as *G. recurvum* and thus turned out to be new to the Turkish flora. The specimen was identified after comparison with a voucher specimen collected near the type locality of the species [Ins. Nea Kammeni (Cyclades), in graminosis, 9.5.1973, S.Papatsou (1149)!].

The known geographical distribution area compiled from various sources (4-8) and the new locality in Turkey are shown below (Fig. 1). The new locality and a brief description of the species mainly based on the Turkish collections kept in the Herbarium of the Faculty of Pharmacy, Istanbul University (ISTE) are also given below.

Galium recurvum Req. ex DC., Prodr. 4: 609 (1830). Fig. 2.

Type: [Greece] in rupestribus Archipelagi Graeci ad montem Ignivomum ins. novae Camini (Santorini), [Prope Theram, 1819], d'Urville (holo.G-DC).

New Locality: B1 BALIKESİR: Ayvalık, NNE of Alibey Island, Çataltepe, igneous rock crevices, 40 m, 9 May 1995, K. Alpınar, ISTE 67870; W of Alibey Island, Karaada, southern point, 20 m, 30 April 1997, K. Alpınar, ISTE 74047.

Annual. Flowering stem 4-16 cm, prostrate, ascending, \pm angular, branched and \pm retrorsely scabrid at base, hirsute towards apex. Leaves 5-6(-7) in a whorl, 2-7 x 0.5-2 mm, lower spatulate, usually larger, upper oblong-obovate, mucronate, glabrescent or with bristles except towards revolute and \pm antrorsely aculeolate margins. Flowers in axillar cymes forming a narrow interrupted inflorescence. Peduncules 0.5-2 mm, pedicels 1-4 mm, 3 flowered and deflexed after anthesis. Peduncules and pedicels densely hispidulous with \pm uncinate tips. Corolla yellow, 0.7-0.9 mm diameter, hispidulous outside, glabrous inside, lobes ovate-oblong, acute. Fruit didymous, oblong-reniform, mericarps separating readily at maturity, 0.6-1 x 0.5 mm, densely covered with uncinate bristles, blackish.

Since there is a close phytogeographical relationship between the Aegean Islands and W. Anatolia, the occurrence of *Galium recurvum* in Ayvalık is not surprising.

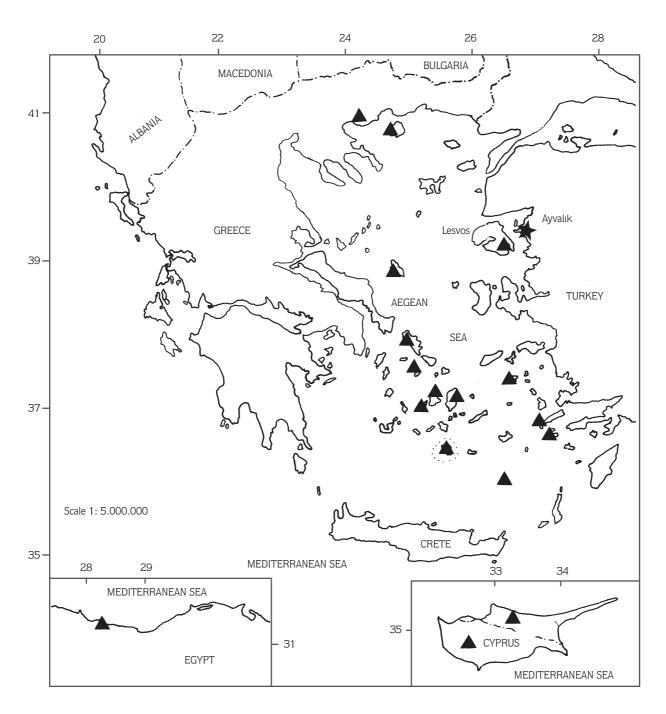


Figure 1. Distribution of Galium recurvum Req. ex DC. (\bigcirc) Type area; (\bigstar) New locality.

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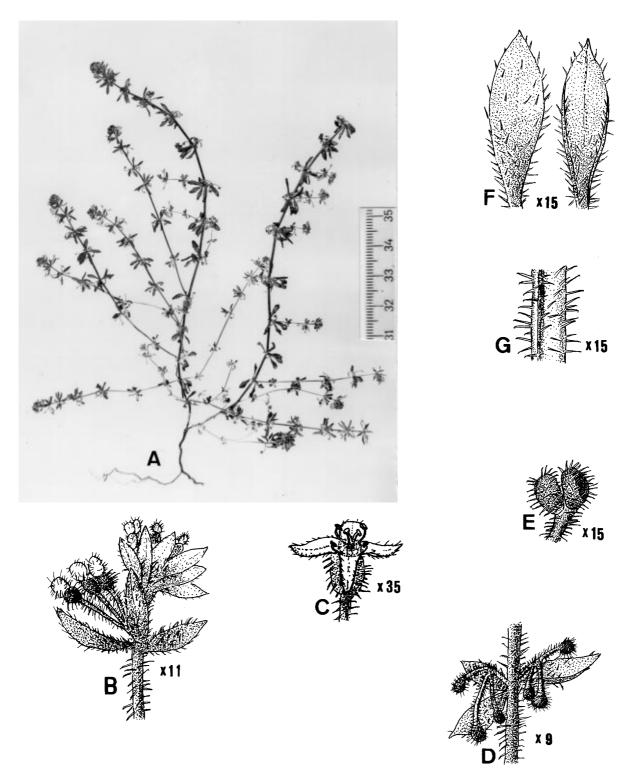


Figure 2. Galium recurvum Req. ex DC. (ISTE 74047)

A. Plant; B. Upper part of a young flowering stem; C. Flower; D. Part of fruiting stem; E. Fruit; F. Leaf, upper surface (a), lower surface (b); G. Indumentum of stem.

References

- 1. Ehrendorfer, F., Krendl, F., Galium L. in Tutin et al. (eds.), Flora Europeae, 4, 14-36, Cambridge University Press, Cambridge (1976).
- 2. Meikle, D., Galium L. in Flora of Cyprus, 1, 780-790, The Bentham-Moxon Trust, Royal Botanic Gardens, Kew (1977).
- 3. Ehrendorfer, F., Schönbeck-Temesy, E., Galium L. in Davis, P.H. et al. (eds.), Flora of Turkey and the East Aegean Islands, 7, 767-849, Edinburgh University Press, Edinburgh (1982).
- 4. Davis, P.H., Mill, R.R., Tan., K. (eds.), Flora of Turkey and the East Aegean Islands, 10 (Suppl.), 216, Edinburgh University Press, Edinburgh (1988).
- 5. Halàcsy, E.V., Conspectus florae graecae, 1, 720-721, Lipsiae (Leipzig), Sumptibus Guilelmi Engelmann (1901). [Reprinted 1968 by Verlag J. Cramer.]

- 6. Halàcsy, E.V., Conspectus florae graecae, Supplementum secundum, Magyar Bot. Lapok 11, 154 (1912). [Bound together with vols. 2-3 and suppl. 1 in the reprinted edition, 1968 by Verlag J. Cramer].
- 7. Boissier, P.E., Flora orientalis, 3, 68, Basileae, Genevae & Lugduni (1875).
- 8. Boissier, P.E., Flora orientalis, supplementum, 283, Basileae, Genevae & Lugduni (1888).
- 9. Rechinger, K.H. fil., Flora Aegaea. Flora der Inseln und Halbinseln des ägäischen Meeres, Akad. Wiss. Wien, Math.-Naturwiss. Kl., Denkschr., 105(1), 568-580 (1943).