Turkish Journal of Botany

Volume 31 | Number 2 Article 10

1-1-2007

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Turk J Bot
31 (2007) 159-160

Research Note

Xanthoparmelia isidiovagans (Parmeliaceae), a New Lichen Record for Turkey

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Received: 03.05.2006
Accepted: 11.12.2006

Abstract: *Xanthoparmelia isidiovagans* O.Blanco, A.Crespo, Divakar & Elix, previously known only from Spain, has now been found at 2 localities in Eskişehir province, Turkey.

Key Words: *Xanthoparmelia isidiovagans*, lichen, biodiversity, Turkey

Türkiye İçin Yeni Bir Liken Kaydı, *Xanthoparmelia isidiovagans* (Parmeliaceae)

Özet: Günümüze kadar sadece İspanya'dan kaydedilmiş olan *Xanthoparmelia isidiovagans* O.Blanco, A.Crespo, Divakar & Elix, Türkiye'den, Eskişehir ilindeki iki lokaliteden rapor edilmektedir.

Anahtar Sözcükler: *Xanthoparmelia isidiovagans*, liken, biyoçeşitlilik, Türkiye

Introduction

Xanthoparmelia isidiovagans O.Blanco, A.Crespo, Divakar & Elix was recently described from Spain (Blanco et al., 2005), where it is very rare, having only been reported from the type locality. In this paper we report the discovery of this vagrant, free-growing species at 2 localities in Eskişehir province, Turkey (Figure 1).

Result and Discussion

Xanthoparmelia isidiovagans was found at Bozdağ, north of the city of Eskişehir in the province of the same name. This province is located in the central Anatolian plateau of Turkey and has a "cold winter" and "arid summer" climate.

Specimens Examined:

Xanthoparmelia isidiovagans O.Blanco, A.Crespo, Divakar & Elix, Lichenologist, 37: 97 (2005).

Spain, Guadalajara, Torremocha del Pinar, 40º55' N, 2º05' W, 1200 m, 22.05.2003, vagrant over decarbonated soils in open *Juniperus thurifera* L. and *J. hemisphaerica* J.Pressl. forest, O. Blanco, P. K. Divakar & A. Crespo 120603/7 (MAF 9956 – holotypus).

Turkey, Eskişehir, Bozdağ, 39°55' N, 30°39' E, 1230 m, 03.05.2003, vagrant on soil, A. Türk & M. Candan (ANES 6009); Bozdağ, 39°52' N, 30°38' E, 1160 m, 04.07.2001, vagrant on soil, A. Türk & V. John (ANES 5281).

Notes. Superficially, *Xanthoparmelia isidiovagans* closely resembles *X. vagans* (Nyl.) Hale from North and South America, and to a lesser extent the Brazilian species *X. catarinae* Hale and *X. conspersa* (Ach.) Hale (Hale 1990). Although all 4 species contain the stictic acid chemosyndrome in the medulla, *X. vagans* lacks isidia whereas the other 3 species all produce isidia on the upper surface of the lobes. Indeed, *X. isidiovagans* is the only vagrant species of *Xanthoparmelia* known to produce markedly convolute, linear-elongate lobes with an isidiate upper surface (Blanco et al., 2005).

One of the allied species, *X. conspersa*, is rather common in Turkey, but is adnate on rocks rather than being vagrant on soil. Furthermore, the isidia of *X.*

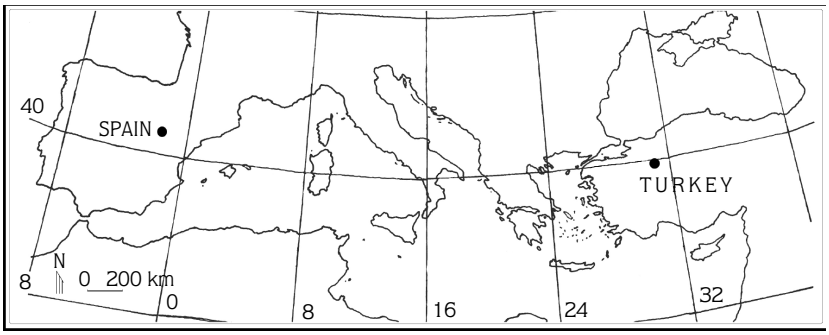

Figure 1. Distribution of *Xanthoparmelia isidiovagans*.

conspersa soon become cylindrical but are consistently globose in *X. isidiovagans*.

The specimen from the second locality recorded above was previously reported as *X. vagans* (Türk, 2002), but was re-examined and confirmed to be *X. isidiovagans*.

Both Turkish localities are exposed to sun and have a sparse population of *Juniperus excelsa* subsp. *excelsa*. Common associated lichens growing on soil in these localities included *Aspicilia hispida* Mereschk., *Cladonia foliacea* (Huds.) Willd., *C. rangiformis* Hoffm. and *Cetraria aculeata* (Schreb.) Fr. In addition, *Aspicilia desertorum* (Kremp.) Mereschk. was found on pebbles at both localities, whereas *X. pokornyi* (Körb.) O.Blanco et al. was only present on soil at the first locality. *Cetraria islandica* (L.) Ach. also occurred on soil sheltered by *J. excelsa* Bieb. subsp. *excelsa* at this location.

These localities have similar climate, vegetation cover and xeric conditions to the type locality of *X. isidiovagans* (Blanco et al., 2005).

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