

**LICHEN RECORDS FROM SOUTH-EAST ANATOLIA (BINGÖL AND ŞIRNAK)****GÜLŞAH ÇOBANOĞLU, MUSTAFA YAVUZ**

**Abstract.** A list of 13 lichen taxa is reported from two provinces, Şırnak and Bingöl. 7 taxa from Şırnak and 11 taxa from Bingöl are all new records for these provinces.

**Key words:** Lichenized fungi, diversity, South-East Anatolia.

**Rezumat. Prezentarea lichenilor din sud-estul Anatoiei (Bingöl și Şırnak).** Lista prezintă 13 taxoni de licheni din două provincii, Şırnak și Bingöl. 7 taxoni din Şırnak și 11 taxoni din Bingöl, toți fiind noi pentru aceste provincii.

**Cuvinte cheie:** licheni, diversitate, Sud-Estul Anatoiei

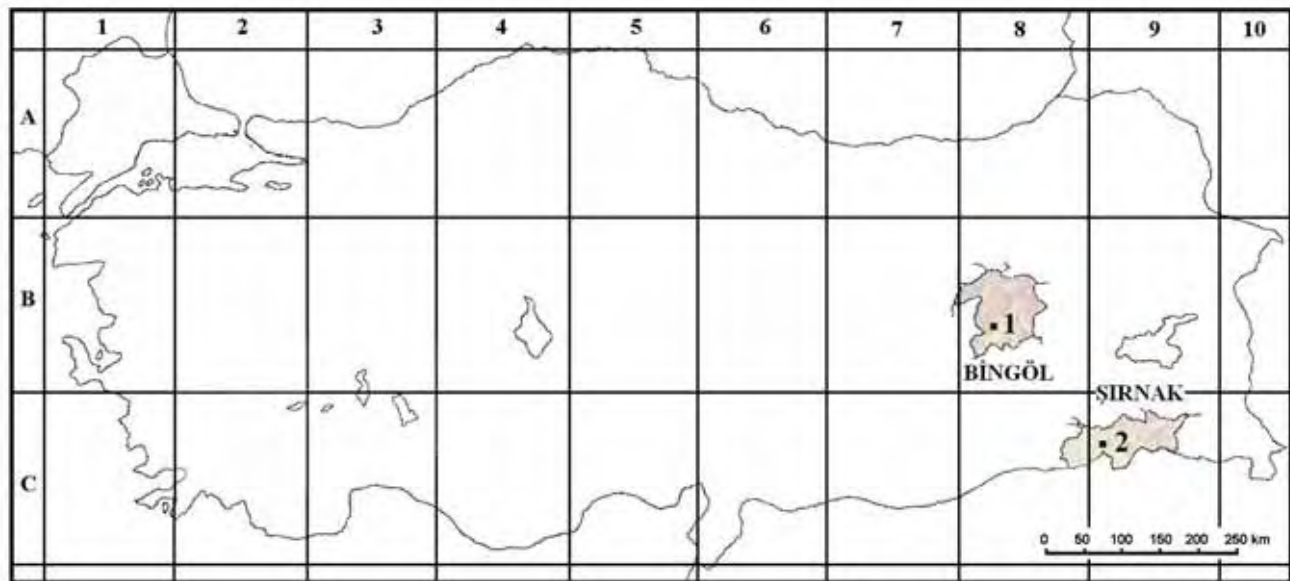
**Özet Şırnak ve Bingöl'den Liken Kayıtları.** Şırnak ili Cizre ilçesi ve Bingöl ilinden toplam 13 liken taksonu listesi rapor edilmiştir. Şırnak için 7, Bingöl için 11 taksonun tümü bu iller için yeni kayıttır.

**Anahtar Sözcükler:** Likenleşmiş mantarlar, biyoçeşitlilik, Doğu Anadolu.

**INTRODUCTION**

Lichen records from many provinces of Turkey have been in an increase in recent years. However, there are still a high number of lacking records for lichen species. In only one paper, there is only one lichen species recorded from Şırnak province (MAYRHOFER & LEUCKERT 1895), but no records from Bingöl. This study aims at a contribution to the first lichen records in these two provinces.

The study areas in both provinces (Şırnak and Bingöl) are situated in the Southeastern Region of Turkey (Figure 1).



**Figure 1.** The Collecting Sites

**Figura 1.** Localizarea provinciilor de unde s-a colectat materialul

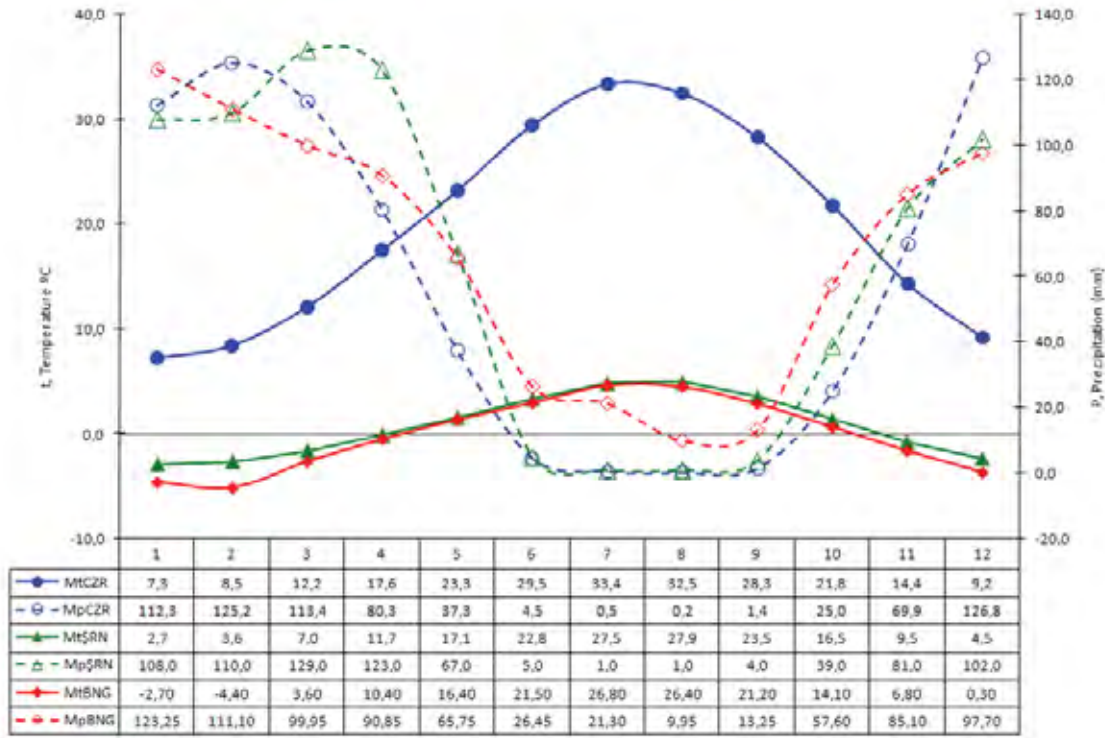
The general climatic features of Şırnak, Cizre and Bingöl are presented in a diagram in Figure 2.

Cizre is a city in Şırnak province, closer to Iraq – Syria border and the study area in Cizre represents similar aspects of Arid Mediterranean Maquis Vegetation although Şırnak and Bingöl represent Continental Steppe Vegetation. Cizre district (400 m) has a lower altitude than Şırnak (1380 m) and than that of Bingöl (770).

According to data from Cizre meteorological station, the climate is generally Arid Mediterranean with low values of humidity in the south. The average annual mean temperature is 19.8 C°. The annual precipitation is about 696.6 mm. (SÜZGEÇ et al., 2002, EM et al., 2007 and TASKESEN et al. 2005).

Şırnak Province has a continental climate with hot summers and cold winters. The average annual mean temperature is 14.5C°. The annual precipitation is about 770.

Bingöl also has a continental climate with hot summers and cold winters. The average annual mean temperature is 11.7 °C. The annual precipitation is about 802.3 mm.



**Figure 2.** Climatic Diagram of Şırnak, Cizre and Bingöl  
**Figura 2.** Climadiagrama provinciilor Şırnak, Cizre și Bingöl

## MATERIALS AND METHODS

The lichen material was collected from one site in Bingöl and from Cizre in Şırnak province, in the years 2003 and 2004. The geographic coordinates and elevations were recorded as well as the substrate types. The taxa were identified with the aid of flora books and identification keys (CLAUZADE & ROUX, 1985; PURVIS et al., 1992; WIRTH, 1995). The lichen specimens are preserved in the Herbarium of the Faculty of Science and Arts, Marmara University, Istanbul (MUFE) with numbers given by GÜLŞAH ÇOBANOĞLU, (G.Ç.).

## RESULTS

13 lichen taxa from two provinces, Bingöl (11 taxa) and Şırnak (7 taxa), are listed alphabetically. Six taxa are new records for Bingöl, 2 taxa are new for Şırnak and 5 taxa are new for the both provinces. An asterisk (\*) indicates a new record for the province of Bingöl and a number sign (#) indicates a new record for the province of Şırnak.

The names of authors are abbreviated according to BRUMMITT & POWELL (1992). The nomenclature follows the recent literature (BLANCO et al., 2004A, B; SANTESSON et al., 2004).

### List of Taxa

#### ## *Acarospora rufescens* (ACH.) BAUSCH

Bingöl: Kültür Mahallesi Kız Meslek Lisesi Bahçesi, 1150 m, on siliceous rock, 38° 53' 05.64" N, 40° 29' 47.15" E, 24.VI.2004, (G.Ç. 1690). Şırnak: Cizre, Cafer-i Sadık Hill, 540 m, on siliceous rock, 37° 19' 01.74" N, 40° 10' 16.90" E, 04.V.2003, (G.Ç. 1683).

**#\* *Aspicilia caesiocinerea* (NYL. ex MALBR.) ARNOLD**

Bingöl: Kültür Mahallesi Kız Meslek Lisesi Bahçesi, 1150 m, on siliceous rock, 38° 53' 05.64" N, 40° 29' 47.15" E, 24.VI.2004, (G.Ç. 1691). Şırnak: Cizre, Cafer-i Sadık Hill, 540 m, on siliceous rock, 37° 19' 01.74" N, 40° 10' 16.90" E, 04.V.2003, (G.Ç. 1684).

**#\* *Aspicilia cinerea* (L.) KÖRB.**

Bingöl: Kültür Mahallesi Kız Meslek Lisesi Bahçesi, 1150 m, on siliceous rock, 38° 53' 05.64" N, 40° 29' 47.15" E, 24.VI.2004, (G.Ç. 1692). Şırnak: Cizre, Cafer-i Sadık Hill, 540 m, on siliceous rock, 37° 19' 01.74" N, 40° 10' 16.90" E, 04.V.2003, (G.Ç. 1685).

**\* *Aspicilia contorta* (HOFFM.) KREMP.**

Bingöl: Kültür Mahallesi Kız Meslek Lisesi Bahçesi, 1150 m, on siliceous rock, 38° 53' 05.64" N, 40° 29' 47.15" E, 24.VI.2004, (G.Ç. 1693).

**# *Caloplaca crenularia* (WITH.) J.R. LAUNDON**

Şırnak: Cizre, Cafer-i Sadık Hill, 540 m, on siliceous rock, 37° 19' 01.74" N, 40° 10' 16.90" E, 04.V.2003, (G.Ç. 1686).

**\* *Caloplaca lactea* (A. MASSAL.) ZAHLBR.**

Bingöl: Kültür Mahallesi Kız Meslek Lisesi Bahçesi, 1150 m, on siliceous rock, 38° 53' 05.64" N, 40° 29' 47.15" E, 24.VI.2004, (G.Ç. 1694).

**# *Caloplaca thallicola* (WEDD.) DU RIETZ**

Şırnak: Cizre, Cafer-i Sadık Hill, 540 m, on siliceous rock, 37° 19' 01.74" N, 40° 10' 16.90" E, 04.V.2003, (G.Ç. 1687).

**#\* *Candelariella vitellina* (HOFFM.) MÜLL. Arg.** Bingöl: Kültür Mahallesi Kız Meslek Lisesi Bahçesi, 1150 m, on siliceous rock, 38° 53' 05.64" N, 40° 29' 47.15" E, 24.VI.2004, (G.Ç. 1695). Şırnak: Cizre, Cafer-i Sadık Hill, 540 m, on siliceous rock, 37° 19' 01.74" N, 40° 10' 16.90" E, 04.V.2003, (G.Ç. 1688).

**\* *Lecanora horiza* (ACH.) LINDS.**

Bingöl: Kültür Mahallesi Kız Meslek Lisesi Bahçesi, 1150 m, on *Quercus* sp., 38° 53' 05.64" N, 40° 29' 47.15" E, 24.VI.2004, (G.Ç. 1696).

**\* *Physcia stellaris* (L.) NYL.**

Bingöl: Kültür Mahallesi Kız Meslek Lisesi Bahçesi, 1150 m, on *Quercus* sp., 38° 53' 05.64" N, 40° 29' 47.15" E, 24.VI.2004, (G.Ç. 1697).

**\* *Physconia grisea* (LAM.) POELT**

Bingöl: Kültür Mahallesi Kız Meslek Lisesi Bahçesi, 1150 m, on *Quercus* sp., 38° 53' 05.64" N, 40° 29' 47.15" E, 24.VI.2004, (G.Ç. 1698).

**#\* *Protoparmeliopsis muralis* (SCHREB.) M. CHOISY**

Bingöl: Kültür Mahallesi Kız Meslek Lisesi Bahçesi, 1150 m, on siliceous rock, 38° 53' 05.64" N, 40° 29' 47.15" E, 24.VI.2004, (G.Ç. 1699). Şırnak: Cizre, Cafer-i Sadık Hill, 540 m, on siliceous rock, 37° 19' 01.74" N, 40° 10' 16.90" E, 04.V.2003, (G.Ç. 1689).

**\* *Xanthoria candelaria* (L.) TH.FR.**

Bingöl: Kültür Mahallesi Kız Meslek Lisesi Bahçesi, 1150 m, on *Quercus* sp., 38° 53' 05.64" N, 40° 29' 47.15" E, 24.VI.2004, (G.Ç. 1700).

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