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# THE ERIOCOCCIDAE SPECIES OF TURKEY

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## Abstract

Apart from ULGENTURK *et. al.* (2003), nearly there was no such a detailed data about Turkish Eriococcidae family. The scientific names, distributions and host plants of 16 Eriococcidae species which are recorded from Turkey up to date are gathered specifically for the first time with this study.

**Keywords:** Eriococcidae, Turkey, Species

## 1. INTRODUCTION

The family Eriococcidae currently contains about 556 species in 68 genera in the world (MILLER/GIPPEL 2004).

ULGENTURK *et. al.* (2003) studied on Eriococcidae family in Turkey. Apart from this, there are some reports concerning special Eriococcidae species. The systematic list of 16 species given in this research is arranged alphabetically. The scientific names of host plants and the data concerning their habitats are also updated.

CANAKCIOGLU (1977), reported that *Eriococcus buxi* (B. de F.) was present on *Buxus sempervirens* at Bolu-Gerede. But, afterwards this species is described as *Eriococcus williamsi* Danz. by DANZIG (1987).

*Eriococcus araucariae* Mask. and *E. spurius* (Mod.) are the species distributed in the European part of Turkey. The other species were only recorded in Asian part of Turkey.

From the zoogeographical standpoint, *Eriococcus araucariae* Mask. is a cosmopolitan species, *Cryptococcus fagisuga* Lind. and *Eriococcus supurius* (Mod.) are both nearctic and palearctic species and the others are palearctic.

*Cryptococcus fagisuga* Lind., *Eriococcus roboris* Goux, *E. supurius* (Mod.), *E. williamsi* Danz. and *Pseudochermes fraxini* (Kalt.) cause damage on forest trees while the other species on herbaceous plants.

The systematic list of 16 Eriococcidae species of Turkey found by various researchers are given below in alphabetical order:

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Genus **CRYPTOCOCCUS** Douglas, 1890

**Cryptococcus fagisuga** Lindinger, 1936

Ilgaz mountain and Bolu mountain on the bark of *Fagus sylvatica* subsp. *orientalis*.

Bodenheimer 1953: 134; Canakcioglu 1977: 49-50.

Genus **ERIOCOCCUS** Targioni-Tozzetti, 1869

**Eriococcus agropyri** (Borchsenius, 1949)

Aksaray-Guzelyurt on *Scobiosa* sp.

Kaydan *et al.* 2001: 255.

**Eriococcus araucariae** Maskell, 1879

Ankara, Istanbul-Kasimpasa on *Araucaria* sp. and *Artemisia vulgaris*.

Bodenheimer 1953: 116-117; Gul-Zumreoglu 1972: 26; Kohler 1998: 396-397.

**Eriococcus cingulatus** Kiritchenko, 1940

Ankara-Beynam on roots of *Stipa* sp.

Ulgenturk *et al.* 2003: 444.

**Eriococcus cynodontis** Kiritchenko, 1940

Ankara-Kalecik on leaves of *Cynodon* sp.

Ulgenturk *et al.* 2003: 444.

**Eriococcus greeni** Newstead, 1898

Ankara-Eymir on leaves of *Festuca* sp. and *Agropyron* sp.

Ulgenturk *et al.* 2003: 443.

**Eriococcus herbaceus** (Danzig, 1962)

Ankara-Sereflikochisar on leaves of *Cynodon dactylon*.

Ulgenturk *et al.* 2003: 444.

**Eriococcus micracanthus** (Danzig, 1975)

Ankara-Kalecik on roots of *Salvia* sp.

Ulgenturk *et al.* 2003: 443.

**Eriococcus munroi** (Boratynski, 1962)

Ankara-Beynam on roots of *Minuartia anatolica*.

Ulgenturk *et al.* 2003: 443-444.

**Eriococcus pseudinsignis** Green, 1921

Ankara-Beynam on leaves of *Dianthus crinitus*.

Ulgenturk *et al.* 2003: 444-445.

**Eriococcus roboris** Goux, 1931

Ankara-Kizilcahamam on stems and young twigs of *Quercus* sp.

Ulgenturk *et al.* 2003: 444.

**Eriococcus spurius** (Modeer, 1778)

Ankara (Ayas, Beypazari, Polatli, Beynam, Cankaya), Hatay-Harbiye, Nigde, Kastamonu, Eskisehir, Manisa, Afyonkarahisar, Isparta, Burdur, Istanbul-Belgrad Forest on the bark of *Ulmus* sp., *U. campestris*, *U. glabra*, *U. minor* and *Viscum album*.

Aysu 1950: 114; Bodenheimer 1953: 117-118; Duzgunes 1957: 316-324; Hoy 1963: 128-132; Canakcioglu 1977: 50-51; Williams 1985: 380-382; Jansen 1995: 134; Kohler 1998 : 388; Uygun *et al.* 1998: 187, Onder *et. al.* 2000: 501-509; Ulgenturk *et al.* 2003: 444.

**Eriococcus thymi** (Schrank, 1801)

Nevsehir, Ankara-Beynam on roots of *Anchusa* sp. and *Centaurea solstitialis*.

Kaydan *et al.* 2001: 255; Ulgenturk *et al.* 2003: 444.

**Eriococcus williamsi** Danzig, 1987

Bolu-Gerede on *Buxus sempervirens*.

Danzig 1987: 577-580.

**Eriococcus zernae** (Tereznikova, 1977)

Ankara (Beynam, Eymir, Bala, Cubuk) on leaves of *Agropyron* sp., *A. repens*, *Artemisia* sp., *A. vulgaris* and *Triticum orientale*.

Ulgenturk *et al.* 2003: 444.

Genus **PSEUDOCHERMES** Nitsche, 1895

**Pseudochermes fraxini** (Kaltenbach, 1860)

Bursa on *Fraxinus excelsior*.

Fahringer 1922: 305-307; Bodenheimer 1953: 127-128; Kohler 1998: 395.

## TÜRKİYE ERIOCOCCIDAE TÜRLERİ

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### Kısa Özet

Türkiye Eriococcidae familyasına ilişkin çalışmaları içeren literatür üzerinde yaptığımız incelemelerde ÜLGENTÜRK *ve ark.* (2003) hariç, bağımsız bir yayına rastlanmamıştır. Bugüne kadar çeşitli araştırmacılar tarafından yurdumuzda tespit edilen 16 Eriococcidae türünün isimleri, yayılışları ve konukçu bitkileri ilk kez bu çalışma ile toplu olarak ele alınmıştır.

**Anahtar Kelimeler:** Eriococcidae, Türkiye, Türler

### ÖZET

Dünyada Eriococcidae familyasına bağlı 68 cinsde dahil yaklaşık 556 türün bulunduğu bildirilmektedir (MILLER/GIPPEL 2004).

ÜLGENTÜRK *ve ark.* (2003) Türkiye Eriococcidae familyası üzerinde çalışmışlardır. Bazı Eriococcidae türlerine başkaca yazarların çalışmalarında da yer verilmiştir. Bu makalede verilen 16 türün sistematik sıralamasında alfabetik esas gözönünde tutulmuştur. Literatürden elde edilen konukçu bitkilerin bugün geçerli olan bilimsel adları ile yayılış alanlarına ait bilgiler güncellenmiştir.

ÇANAKÇIOĞLU (1977) *Eriococcus buxi* (B. de F.)'nin Bolu-Gerede'de *Buxus sempervirens* üzerinde tespit edildiğini bildirmektedir. Fakat bu tür daha sonra DANZIG (1987) tarafından *Eriococcus williamsi* Danz. olarak tavsif edilmiştir.

Türkiye'nin Avrupa'da kalan kısmında tespit edilen türler *Eriococcus araucariae* Mask. and *E. spurius* (Mod.)'dir. Diğer türler sadece Anadolu'da bulunmaktadır.

Zoocoğrafik bakımdan, kozmopolit tür *Eriococcus araucariae* Mask., hem nearttik hem de palearttik türler *Cryptococcus fagisuga* Lind. and *Eriococcus supurius* (Mod.) olup saptanan diğer türler palearttik türlerdir.

*Cryptococcus fagisuga* Lind., *Eriococcus roboris* Goux, *E. supurius* (Mod.), *E. williamsi* Danz. and *Pseudochermes fraxini* (Kalt.) orman ağaçlarında, diğerleri otsu bitkiler üzerinde zarar yapmaktadır.

Türkiye'de çeşitli araştırmacılar tarafından tespit edilen 16 Eriococcidae türü aşağıda alfabetik sıraya göre verilmiştir:

*Cryptococcus fagisuga* Lindinger, 1936  
*Eriococcus agropyri* (Borchsenius, 1949)  
*Eriococcus araucariae* Maskell, 1879  
*Eriococcus cingulatus* Kiritchenko, 1940  
*Eriococcus cynodontis* Kiritchenko, 1940  
*Eriococcus greeni* Newstead, 1898  
*Eriococcus herbaceus* (Danzig, 1962)  
*Eriococcus micracanthus* (Danzig, 1975)  
*Eriococcus munroi* (Boratynski, 1962)  
*Eriococcus pseudinsignis* Green, 1921  
*Eriococcus roboris* Goux, 1931  
*Eriococcus spurius* (Modeer, 1778)  
*Eriococcus thymi* (Schrank, 1801)  
*Eriococcus williamsi* Danzig, 1987  
*Eriococcus zernae* (Tereznikova, 1977)  
*Pseudochermes fraxini* (Keltenbach, 1860)

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