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A New Host for *Podosphaera euphorbiae* in Turkey

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Abstract

Euphorbia prostrata Aiton. is reported as a new host for the powdery fungi *Podosphaera euphorbiae* (Castagne) U. Braun & S. Taka. The macro and microscopical features of this fungi are described with figures.

Keywords: *Euphorbia prostrata,* new host, *Podosphaera* sp., Turkey.

Podosphaera euphorbiae için Türkiye'den Yeni Bir Konukçu

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Öz

Euphorbia prostrata Aiton. külleme mantarı olan *Podosphaera euphorbiae* (Castagne) U. Braun & S. Taka için yeni konukçu olarak rapor edilmiştir. Mikromantarın makro ve mikroskobik özellikleri şekillerle birlikte açıklanmıştır.

Anahtar Kelimeler : *Euphorbia prostrata,* yeni konak, *Podosphaera* sp., Türkiye.

1. Introduction

Powdery fungi (Erysiphales) obligate, biotrophic parasite are one of the most common plant pathogenic fungi in the world [13,6] They cause powdery diseases widespread on various hosts as crops, trees, herbs, shrubs, grasses, angiosperms [3]

Euphorbia is one of the most diverse genera of flowering plants with more than 2000 species occurring in temperate and tropical regions [17]. *Podosphaera euphorbiae* have been recorded on *Euphorbia* species in a wide range of habitats, in many parts of the world [10]. *P. euphorbiae* on *Euphorbia falcata* L.[7], on *Euphorbia helioscopia* L. [14-18], on *Euphorbia macroclada* Boiss.[5], on *Chrozophora tinctoria* (L.) A. Juss.[1, 15] were found in Turkey.
The aim of this paper is to report a new host; *Euphorbia prostrata* for powdery mildews species from Turkey.

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2. Materials and Methods

Fungi specimens and host plants were collected in Manavgat (Antalya, Turkey) between the years of 2015–2017. The host samples were prepared according to established herbarium techniques. The host samples were identified using [7-8] and powdery fungi were identified using [2, 3, 4]. For the morphological examination of hosts and microfungi stereo microscope (SM) (Nikon C-Leds) and of light microscope (LM) (Nikon Eclipse E100) were used. The samples are preserved at the Laboratory of Manavgat Tourism Faculty, Akdeniz University, in Turkey.

3. Results and Discussion

Podosphaera euphorbiae (Castagne) U. Braun & S. Takam. (Figure 1).

Mycelium on stems and leaves, amphigenous, dense, white, later a brown felt. Hyphae pigmented coarse. The mycelial appressoria were nipple-shaped or slightly lobed, foot- cells cylindrical, straight, followed by 1-3 shorter cells. Conidia formed in chains, with fibrosine bodies, 13-15×25-28µm diam. Chasmothecia immerded in dense mycelial patches or layers, 73-98 µm. it's one ascus containing 8 spores. Ascospores were ellipsoid-ovoid, colourless and 14-25×11-17µm.

Specimen Examined – On *Euphorbia prostrata* Aiton. (Euphorbiaceae) TURKEY: Antalya, Manavgat, Sorgun Pine Forest 12.10.2015, F.A. 3061.

Distribution: Cosmopolitan, mostly Asia and Europe

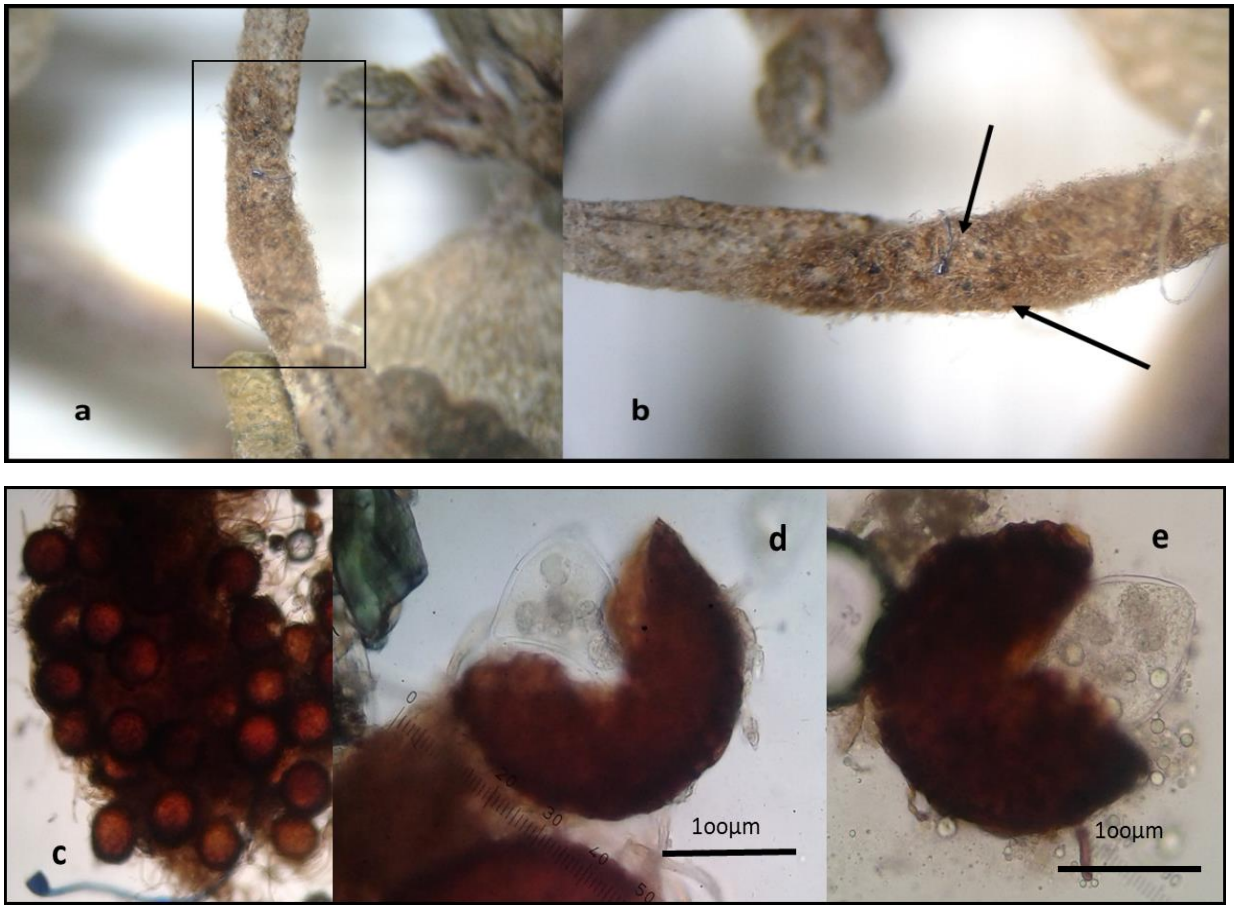

Figure 1. a- b. *Podosphaera euphorbiae* a brown felt on petiole of *Euphorbia prostrata* **c-d-e**. Chasmothecia on stems *Euphorbia* **d-e.** Ascus and ascospores

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