Türkiye Mikobiotası İçin Yeni Bir Askomiset Kaydı:

Rosellinia mycophila (Xylariaceae)

*Başaran DÜLGER, Görkem DÜLGER

Department of Biology, Faculty of Science and Arts, Canakkale Onsekiz Mart University, 17020 Canakkale - Turkey

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Özet: Mersin, Çamlıyayla'dan toplanan *Rosellinia mycophila* (Fr.:Fr.) Sacc. Türkiyeden ilk kez kaydedilmektedir.

Anahtar Kelimeler: Rosellinia mycophila, yeni kayıt

A New Ascomycete Record for The Mycobiota of Turkey: Rosellinia mycophila (Fr.:Fr.) Sacc. (Xylariaceae)

Abstract: Rosellinia mycophila (Fr.:Fr.) Sacc., collected from Çamliyayla, Mersin, was recorded for the first time in Turkey.

Kev Words: Rosellinia mycophila, new record

*E-mail: basarandulger@yahoo.com

Introduction

Rosellinia species are recorded all over the world, and are common in both temperate and tropical regions (Petrini 1993). Many species occur as saprobes, some live endophytically and occasionally turn into pathogens and only a few species are known to occur as root pathogens. Among the most well-known root pathogens are R. necatrix Prill. and R. desmazieresii (Berk. et Br.) Sacc., mostly known from temperate zones, and R. bunodes (Berk. et Br.) Sacc., R. pepo Pat.

and *R. arcuata* Petch, known only from the tropics. Root diseases caused by *Rosellinia* spp. occur on a wide variety of commercially important crops, trees and ornamentals (Ten Hoopen and Krauss 2006).

Although the mycobiota of Turkey has not been researched effectively, there is a great need for an increase in the frequency of taxonomical studied. In October 2008, during routine field trips to different localities of Mersin, many fungi samples were collected. On referring to the

literatures on Mycobiota of Turkey (Solak et al. 2007, Sesli and Denchev 2008), Rosellinia mycophila (Fr.:Fr.) Sacc. (Xylariaceae) was found to be a new record. The study aims to make contribution to the mycobiota of Turkey.

Materials and Methods

Fruit bodies of Rosellinia mycophila were collected from Camliyayla district of province (Turkey). Relevant morphological of the samples were recorded and they were photographed in their natural habitats. Then the samples were taken to the laboratory. Necessary macroscopic and microscopic measurement data were obtained by using a ruler, light microscope, micrometers and necessary chemicals (distillate water, Melzer's reagent, 5% KOH). This taxon identified according to Petrini (1993) and Petrini and Petrini (2005). The specimens cited are deposited in the Herbarium of Canakkale Onsekiz Mart University in Canakkale and in the author's personal collections.

Results and Discussion

Xvlariaceae

Rosellinia mycophila (Fr.:Fr.) Sacc., Syll. Fung. (Abellini) 1: 263 (1882)

Stromata usually densely gregarious, uniperitheciate, rarely fused together in a 2-3- peritheciate stroma, dark brown to black with a thin coating of pale subicular hyphae, subglobose with a broadly attached base, 0.6-0.7 mm high x 0.8-1 mm diam, with conspicuous folds and ridges in the lower part when dry; ectostroma rather thin, brittle; subiculum densely felted, purplish brown, of finely interwoven hyphae, persistent, widely spreading. Ostioles stout, broadly conical, darker than the stromatal

wall. Asci cylindrical, with apical apparatus urn-shaped with attenuated base, amyloid, 154-195 x 6.5-7.5 μm. Ascospores 17-21 x 5.5-6.5 μm, ellipsoid-inequilateral with one end slightly pinched, the opposite narrowly rounded with an inconspicuous cellular appendage 2 μm long, dark brown, with a short, straight germ slit 8-13 μm long on the less convex side; the whole spore surrounded by a conspicuous slimy sheath reducing with age (Figures 1 and 2).

Material examined were collected from Mersin, Çamliyayla, on dead twig of *Pinus nigra*, 37°14′49.21″ N, 34°37′44.08″ E, alt. 928 m, 25 October 2008, BD 681.

The genus Rosellinia is found mostly in temperate regions but can also be found in (sub)alpine and (sub)tropical regions. The comprises definite group occasional pathogens, which also live endophytically, e.g. R. thelena (Fr.:Fr.) Rabh. in Abies alba and Picea abies and possibly R. mycophila in conifers (Petrini, 1993; Ten Hoopen and Krauss, 2006). In addition, some species including R. mycophila known to be pathogens in temperate zones (Francis, 1986). In this study, R. mycophila is found on dead twig of *Pinus nigra*. The finding is parallel to those reported in literatures.

R. mycophila (Fr.:Fr.) Sacc. resembles R. thelena (Fr.) Rabenh in appearance, and it is easily distinguished by microscopical features of ascospores. Ascospores in R. mycophila are a bit shorter than those R. thelena, with a shorter germ inconspicuous blunt cellular appendage and a slimy sheath around the whole spore. Above all, they lack the distinctive pointed appendages typical of R. thelena and its var. microspora. R. mycophila was reported by Francis (1986) as a severe pathogen of conifers in Europe and North America. This pathogen activity seems to be an additional difference with R. thelena (Fr.) Rabenh, which has only been reported as a primary saprophyte.

According to relevant study, there is only one Rosellinia species (Rosellinia thelena (Fr.) Rabenh) in Turkey (Akata and Çetin 2009). With this study, the number of

> Fig. 1. Stereomicroscopic image of Rosellinia mycophila

reported Rosellinia species will be two in Turkey and a contribution was made to the knowledge of Turkish mycobiota.

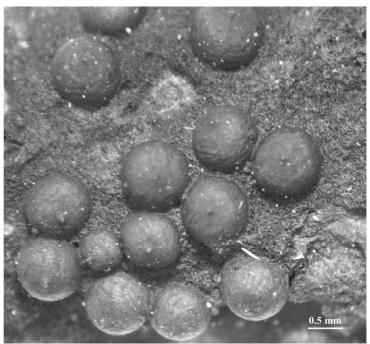
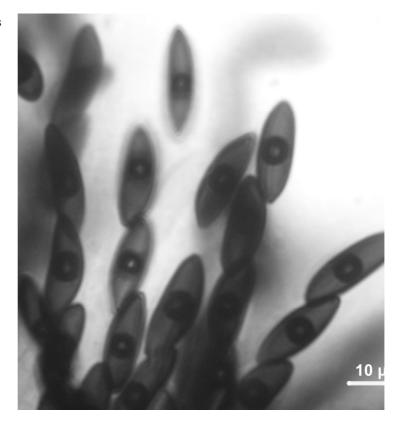


Fig. 2. A view of ascospores of Rosellinia mycophila



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