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## *Pseudohydropus floccipes* (Fr.) Vizzini & Consiglio, A New Record for Turkish Mycobiota

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**Abstract:** *Pseudohydropus floccipes* (Fr.) Vizzini & Consiglio is reported as a new record from Türkiye, based on the identification of the samples collected from Rize province. It is the first member of the genus *Pseudohydropus* Vizzini & Consiglio determined in Türkiye. A brief description of the species is provided together with the photographs, related to the macroscopy and microscopy.

**Key words:** Biodiversity, New record, *Porothelaceae*, Türkiye

### *Pseudohydropus floccipes* (Fr.) Vizzini & Consiglio, Türkiye Mikobiyotası İçin Yeni Bir Kayıt

**Öz:** *Pseudohydropus floccipes* (Fr.) Vizzini & Consiglio Rize'den toplanan örneklerin teşhis edilmesiyle, Türkiye'den yeni kayıt olarak rapor edilmiştir. Bu *Pseudohydropus* Vizzini & Consiglio cinsinin Türkiye'de belirlenen ilk üyesidir. Türün kısa bir betimlemesi, makroskopi ve mikroskobisine ilişkin fotoğrafları ile birlikte verilmiştir.

**Anahtar kelimeler:** Biyoçeşitlilik, *Porothelaceae*, Yeni kayıt, Türkiye

#### Introduction

The genus *Pseudohydropus* Vizzini & Consiglio was proposed by Consiglio et al. (2021), including the taxa, generally characterized by mycenoid habit; sinuate, adnexed to adnate lamellae with a decurrent tooth; white spore-print; globose to largely ellipsoid, colourless, inamyloid, non-dextrinoid basidiospores. sarcodimitic stipe trama. While proposing the new generic name, two new combinations, *Pseudohydropus floccipes* (Fr.) Vizzini & Consiglio (Basionym: *Agaricus floccipes* Fr.) and *Pseudohydropus globosporus* (A.C. Cooper, Desjardin & B.A. Perry) Vizzini & Consiglio (Basionym: *Hydropus globosporus* A.C. Cooper), and two newly erected species, *Pseudohydropus commenticius* J.A. Cooper and *Pseudohydropus parafunebris* J.A. Cooper were included in it (Consiglio et al., 2021). Among them, *Pseudohydropus floccipes* was first introduced as *Agaricus floccipes* by Fries in 1838. Later on it was presented within the genera *Collybia*, *Hemimycena*,

*Hydropus*, *Marasmiellus* and *Mycena* with the same epithet. Though IndexFungorum currently list this taxon as *Hydropus floccipes* (Fr.) Singer, Consiglio et al. (2021) proposed a new combination transferring the taxon to a newly erected genus, *Pseudohydropus* Vizzini and Consiglio.

The current Turkish fungal checklist (Sesli et al., 2020) and subsequent contributions (Akçay, 2020; Keleş, 2020; Sesli, 2020; Uzun et al., 2020; Acar et al., 2021; Demirak and Türkekel, 2021; Doğan et al., 2021; Kaygusuz et al., 2020, 2021; Keleş and Kaya, 2021) revealed that *Pseudohydropus floccipes* has not been reported from Türkiye before. A brief description of the species is provided together with its distribution and photographs related to its macro and micromorphologies. The work aims to contribute to the mycobiota of Türkiye by adding a new record.

The study aims to make a contribution to the macrofungal biodiversity of Türkiye.



### Material and method

The fruit bodies of *Pseudohydropus floccipes* were collected from Ardeşen district of Rize province, in 2017, during a field study. Fruit bodies were photographed at their natural habitats, and characteristics related to its ecology, morphology and geography. Then the samples were transferred to the fungarium. After letting them dry in an air conditioned room, they were prepared as fungarium material. Microscopic investigation were based on dry samples, and performed under a trinocular light microscope. Photographs related to micromorphology were obtained with the aid of a digital camera. The sample was identified with the help of (Moser, 1968; Machol and Singer, 1977; Singer, 1982; Hausknecht et al., 1997; Bas, 1999; Pérez-de-Gregório, 2001; Esteve-Raventós et al., 2002; Seok et al., 2005; Buczacki et al., 2012; Consiglio et al., 2021).

The specimen is kept at Karamanoğlu Mehmetbey University, Science Faculty, Department of Biology.

### Results

**Fungi** R.T. Moore

**Basidiomycota** R.T. Moore

### Agaricales Underw.

***Pseudohydropus floccipes*** (Fr.) Vizzini & Consiglio, RdM 64 (2): 99-190 (2021)

**Syn:** [*Agaricus floccipes* Fr., *Collybia floccipes* (Fr.) Gillet, *Hemimycena floccipes* (Fr.) Singer, *Hydropus floccipes* (Fr.) Singer, *Hydropus floccipes* var. *luteipes* A. Ortega & M. Zea, *Hydropus floccipes* f. *luteipes* (A. Ortega & M. Zea) Pérez-De-Greg., *Marasmiellus floccipes* (Fr.) Singer, *Mycena floccipes* (Fr.) Kühner]

**Macroscopic and microscopic features:** Pileus 7-23 mm in diam., conical to campanulate when young, convex, broadly convex to almost applanate at maturity some with an obtuse umbo, margin acute, surface smooth, brown to grey-brown when young, pale grey-brown to brown-beige when mature, mostly lighter towards the margin and darker at the center or towards the center, some with slightly hygrophanous appearance. Flesh thin, concolorous with the surface. Lamellae white, distant, adnexed. Taste mild, odor indistinct. Stipe (18-) 20-55(-60) × 0.9-2 mm, cylindrical, equal or slightly tapering towards the apex or base, surface smooth, whitish to pale greyish, context concolorous to somewhat hyaline, some whitish hairy at the base.



Figure 1. Basidiocarps of *Pseudohydropus floccipes*.



Basidiospores  $5.6-7.8 \times 5.5-7.5 \mu\text{m}$ , globose to subglobose, hyaline, inamyloid, smooth. Basidia  $25.5-32 \times 6-7 \mu\text{m}$ , clavate 4-spored, with basal clump. Cheilocystidia  $40-95 \times 9-23 \mu\text{m}$ , subcylindrical to clavate, with rounded apex. Pleurocystidia  $45-103 \times 11-20 \mu\text{m}$ , subcylindrical to sublageniform.

*Pseudohydropus floccipes* grows as solitary or gregariously on bark of stumps and trunks of deciduous and coniferous trees, from spring to autumn (Hausknecht et al., 1997; Seok et al., 2005; Consiglio et al., 2021).

**Specimen examined:** Rize, Ardeşen, Sinan village,  $41^{\circ}06'N-41^{\circ}05'E$ , 460 m, 12.08.2017, on *Fagus* sp. stump covered by mosses, Yuzun 5775.

## Discussions

*Pseudohydropus floccipes* was reported for the first time from Türkiye. It is also new for Türkiye at generic level. Macroscopic and microscopic characteristics of Turkish collection are generally in agreement with those presented before (Moser, 1968; Hausknecht et al., 1997; Seok et al., 2005; Buczacki et al., 2012; Consiglio et al., 2021). The usual substrate of *P. floccipes* is reported as *Quercus* L. sp. (Consiglio et al., 2021), but our collection was made on *Fagus* sp. It is reported to be a quite rare but widespread species in Northern Hemisphere, Europe, North Africa, Asia and America (Consiglio et al., 2021).

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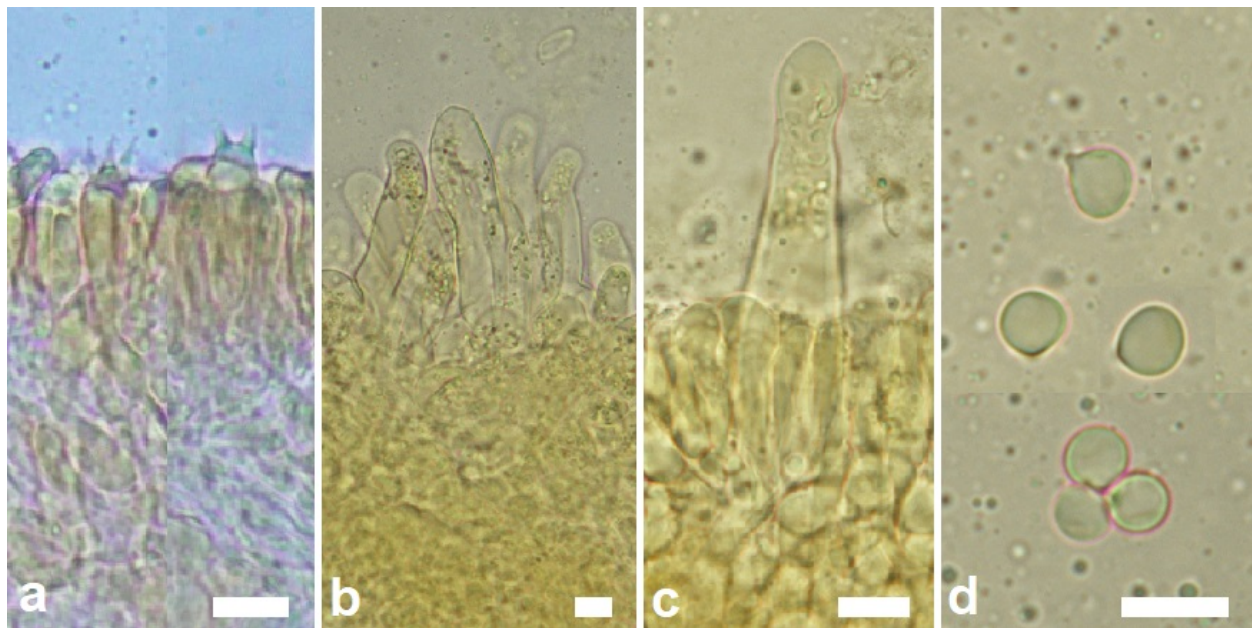


Figure 2. Basidia (a), cheilocystidia (b), pleurocystidium (c) and basidiospores of *Pseudohydropus floccipes* (bars:  $10 \mu\text{m}$ ).

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