

PEZIZA FIMETI (PEZIZALES: PEZIZACEAE): NEW RECORD OF A CUP FUNGUS FROM NEPAL

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ABSTRACT

Peziza fimeti (Fuckel) Seaver, a member of wild coprophilus cup fungi belonging to the family Pezizaceae, has been recently collected growing on cow dung at Bhanimandal, Lalitpur. This species is reported here as a new record from Nepal.

Key words: Mushroom, ascomycetes, *Peziza*, Nepal.

INTRODUCTION

Many papers have appeared on the fungal flora and its richness in Nepal (Adhikari 2000, 2009, 2012). Recently a cup fungus has been collected, which falls under the order Pezizales and the family Pezizaceae. The genus *Peziza* is commonly known as 'batuke chyaw' (cup like) in Nepali.

The previous records of *Peziza* Dill.:Fr. from Nepal include *Peziza ampliata* Pers. on rotten wood from Ramche and Dhunche (Otani 1982); *Peziza atrovinosa* Cooke and Gerard on soil from Dakchhinkali, Kathmandu (Waraitch and Thind 1977); *Peziza badia* Pers.: Fr. on soil from Ban Thanti (Otani 1982); *Peziza cerea* Sow. : Mérat, on soil, Dhunche, Sing Gompa (Otani 1982); *Peziza petersii* Berk., on burnt place, in *Quercus semecarpifolia* forest, Chandragiri, Thankot (Adhikari 1988); *Peziza repanda* Wahlenb., on logs, Sundarijal (Singh and Nisha 1976) and *Peziza vesiculosa* Bull.; Fr., on soil, Kirtipur (Singh and Nisha 1976) and Matatirtha (1640 m) (Adhikari *et al.* 1996). There is no record of any coprophilus *Peziza* reported till now from Nepal.

MATERIALS AND METHODS

In course of investigation of fungi in Kathmandu valley a *Peziza* (cup fungi) was gathered growing on cow dung, in Bhanimandal, Lalitpur, Nepal. The photographs were taken immediately *in situ*. The specimen was studied under microscope consulting various literature noted below. The gathered specimen has been deposited in National Herbarium and Plant Laboratories (KATH), Godawari, Nepal.

RESULTS AND DISCUSSION

Description of the species

Peziza fimeti (Fuckel) Hansen, *Vidensk. Meddel. Dansk. Naturhist. Foren. Kjøbenhavn*: 267, 1876. [sensu Doveri, Gamundi, Donadini] 2011, 23:26; Arora, *Mushrooms demystified*. 823, 1986. (Fig. 1 A, B and C) *Peziza fimeti* (Fuckel) Seaver, *North Am. Cup-fungi*: 232, (1928); Barseghyan and Wasser, The genus *Peziza* Dill. ex Fr. (Pezizales, Ascomycota) in Israel, *Ascomycete. org*, 2 (4):39-50 (2011); = *Humaria fimeti* Fuckel,

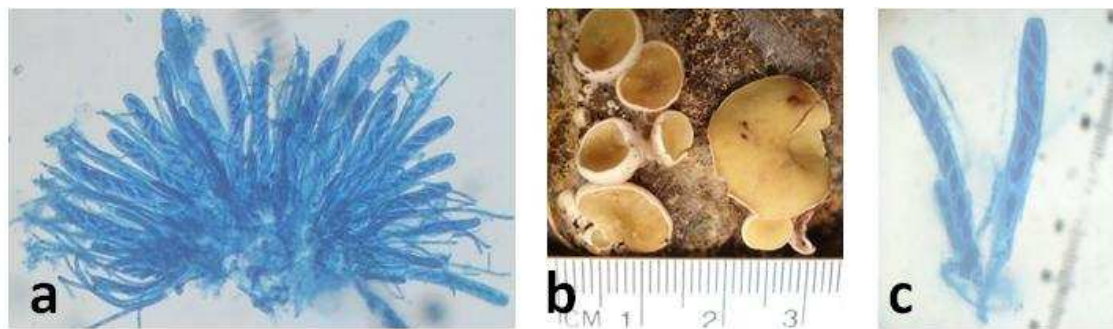


Fig. 1. Fruit body in natural habitat (a) Paraphyses and asci (10×10) (b) ascospores (c) (10 × 40).

Symbolae Mycolog. p.50,1871; *Jb. Nassau. Ver. Naturk.*, 25-26: 338 (1871); *Plicaria fimeti* (Fuckel) Rehm, *Rabenh. Krypt.- Fl.*, 3: 1009 (1896); *Galactinia fimeti* (Fuckel) Svrček and Kubička, *Česká Mykol.*, 15: 74 (1961).

= *Peziza bovina* W. Phillips, *Man. Brit. Discom.*: 308 (1887); *Humaria bovina* (W. Phillips) Sacc., *Syll. Fung.*, 8: 146 (1889).

Apothecia solitary to gregarious, smaller. Ascocarp 0.5-2 cm across, inner surface light brown to grey brown, outer surface whitish, granular. Pseudostipe none to sometimes with very small. Asci 230-260 × 15-18 μm, inoperculate, cylindrical, hyaline, thin walled, curved and narrow at base, with 8 spores. Paraphyses 230-260 × 3-4 μm, filiform, septate, hyaline, simple, thin walled, curved. Spores 18-24 × 8-10 μm. ellipsoid, hyaline, smooth, guttules none.

Specimen examined - Growing on cow dung, Bhanimandal, Lalitpur, Nepal, (22/5/2013), No. 2070201 (NHPL), Adhikari.

Distribution - Asia (Israel, Kazakhstan). Australasia (Australia, New Zealand), Europe (Austria, Bulgaria, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Iceland, Italy, Norway, Poland, Spain, Sweden, Switzerland, Ukraine, United Kingdom), North America and South America.

New to Indian subcontinent. New to Nepal.

Comments

Very few species of fungi is known to inhabit dung of animals. In *Peziza* only two species are reported to inhabit dungs. They are *P. vesiculosa* Bull.:Fr. and *P. fimeti*. *P. vesiculosa* differs from the present species in having apothecia 5-10 cm across, thick-fleshed, incurved margin, hymenium commonly separating and becoming vesiculose with age; spores mostly 21-24 × 11-14 μm wide. *P. varia* grows on the wood and has minutely roughened spores. Donadini (1977) placed *P. bovina* as synonym of *P. fimeti*. *P. bovina* has distinctly larger ascospores (20 μm long) than *P. fimeti*. It can be easily confused with *P. moravecii* (Svrček) Svrček, *P. merdae* Donadini, *P. fimetosa* Fr., and *P. chlorophysa* (Clem.) Sacc. and D. Sacc. Taxonomic position of this whole *Peziza* group is still questionable and needs of critical revision (Barseghyan and Wasser 2011)

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