



Two Agaricomycetous fungi new to India

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ABSTRACT

Two species viz: *Albatrellus ovinus* and *Xanthoporus peckianus* collected from Uttarakhand (North Western Himalayas) are described and illustrated. These are being reported for the first time from India.

Key words: Agaricomycetes, New record, Uttarakhand, India.

INTRODUCTION

Two agaricomycetous fungi viz: *Albatrellus ovinus* (Schaeff) Kotl & Pouzar and *Xanthoporus peckianus* (Cooke) Audel, are described and illustrated from Uttarakhand (N.W. Himalayas). *Albatrellus ovinus* Kotl & Pouz. is a new specific report for India where as *Xanthoporus peckianus* (Cooke) Audel is a new generic as well as specific record for India.

MATERIALS AND METHOD

The materials of two fungi were collected from Nainital and Mussoorie (Uttarakhand). The methods for the identification and study of the specimens are the same as described in Prasher & Lalita 2012.

RESULTS

TAXONOMY

Albatrellus ovinus Kotl. & Pouz., Česka Mycol. 11: 154, 1957.

Plate1: Figs. (1-4), Fig. A

Fructification annual, terrestrial, laterally stipitate, soft, fleshy when fresh, on drying brittle, solitary to caespitose. Pileus dimidiate, flabelliform, flat or depressed in the center. Stipe white when fresh, dark creamish after drying, solid, pores decurrent; upper surface yellow when fresh, pale yellow to yellowish brown after drying, glabrous, smooth or

roughened; margin acute, concolorous with the upper surface, incurved on drying. Pore surface uneven, white when fresh, on drying white orange, if touched when fresh color changes to reddish brown; pores angular to irregular, 3-4 per mm. Context homogeneous, light yellow, color changes to reddish brown in KOH. Hyphal system monomitic; generative hyphae hyaline to subhyaline, simple septate, clamps absent, branched regular to irregular, (2.3) 3.4-7.5 μm in diameter, acyanophilous. Hyphae in subhymenium are short septate and inflated in the context. Cystidia and setae absent. Basidia clavate to clavate-cylindric, cyanophilous, 4-spored, oil granules present, 18.3-21.2 (-24.5) \times 5.8-7.0 μm . Basidiospores hyaline, smooth, nonamyloid, globose to subglobose to ovoid, uniguttulate small apiculus, 3.0-4.3 \times 2.9-4.0 μm .

Collection examined: Nainital (Uttarakhand); on soil, Lalita 38089(PAN), July 19, 2012.

Remarks: The species is characterized by annual, stipitate, terrestrial, soft and fleshy fructifications; glabrous, yellow upper surface; white pore surface; pores 3-4 per mm; monomitic hyphal system with irregularly inflated hyphae; globose to ovoid basidiospores. *A. ovinus* is close to *A. confluens* (Fr.) Kotl. & Pouz. However, the latter differ in having pale orange to reddish pileus; clamped hyphae; and weakly amyloid basidiospores. Earlier, the species has been reported from Norway, Finland and Europe. The species is being reported for the first time from India.

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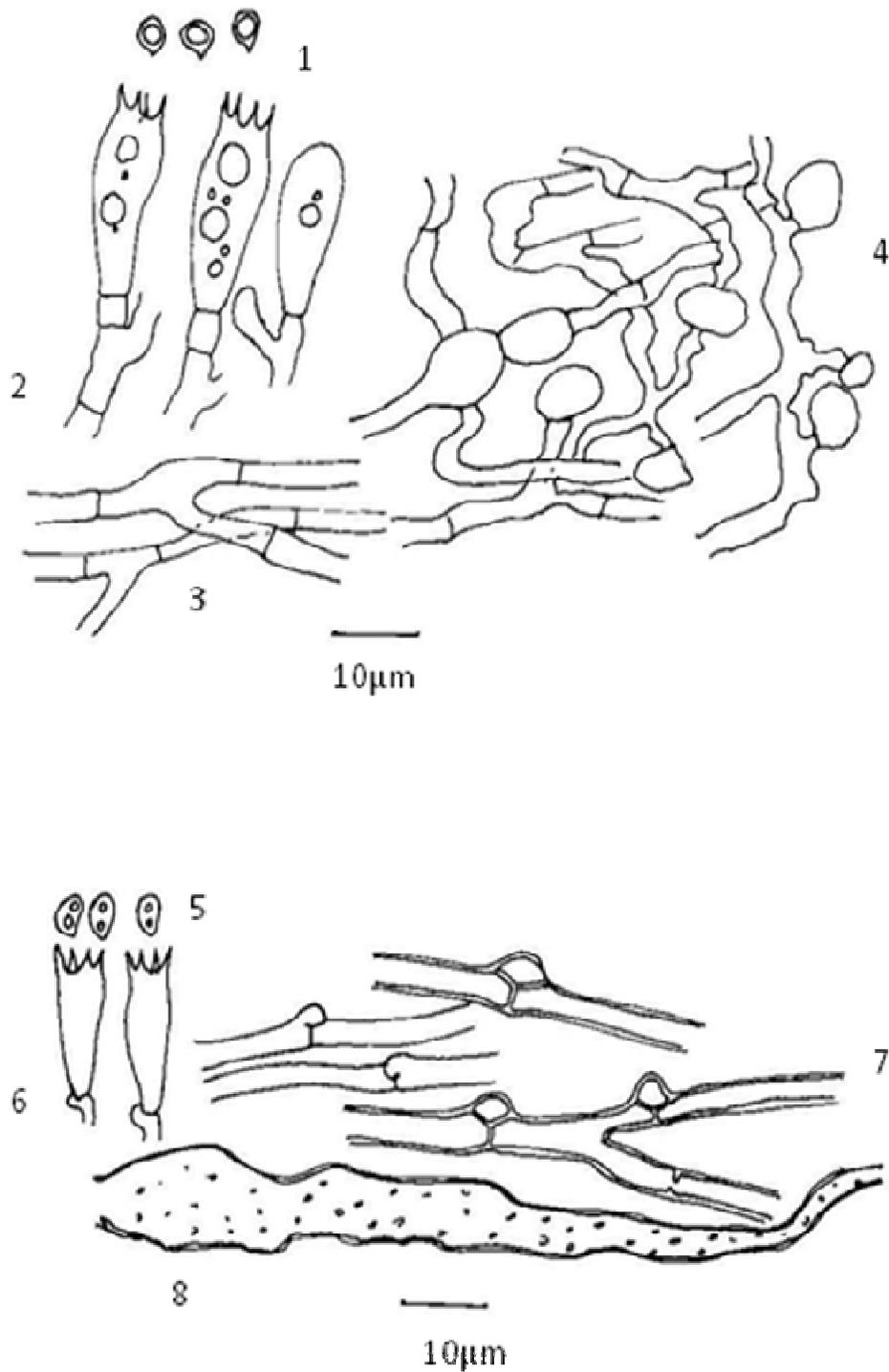


Plate 1. *Albatrellus ovinus* (1-4) 1. Basidiospores, 2 Basidia, 3 Generative hyphae, 4 inflated hyphae; *Xanthoporus peckianus* (5-8) 5 Basidiospores, 6 Basidia, 7 Thin to thick-walled generative hyphae, 8 Gloeoporus hyphae



Fig.10. Agaricomycetous fungi. **A)** *Albatrellus ovinus*; **B)** *Xanthoporus peckianus*.

Xanthoporus peckianus (Cooke) Audel,
Mycotaxon 111: 451, 2010

= *Albatrellus peckianus* (Cooke) Niemelä, Annales
Botanica Fennica 7: 54, 1970.

Plate 1: Figs. (4-8), Fig. B

Fructification annual, pileate, centrally to laterally stipitate, solitary; pileus thick near the base, circular to reniform, concave to reniform, concave to infundibuliform; abhymenial surface smooth, whitish to grayish brown zones when fresh, darkening on drying; stipe cylindrical whitish when fresh, orange white on drying. Hymenial surface poroid, whitish to grayish orange when fresh, becomes grayish orange to brownish orange on drying; pores round to angular, 2-5 per mm. Context whitish; pores tubes concolorous with hymenial surface; margins acute, regular to somewhat lobed. Hyphal system monomitic; generative hyphae up to 6 µm wide, branched, clamped, septate, thin to thick-walled, sub hyaline; gloeoporus hyphae present. Cystidia absent. Basidia 10.2-14.0×3.9-5µm, clavate to sub cylindrical, 4-sterigmate, clamped. Basidiospores 3.8-5×2-2.6 µm, ellipsoid, smooth, subhyaline, with oily contents, inamyloid, acyanophilous.

Collection examined: Mussoorie-Dehra Dun (Uttarakhand), on log of *Cedrus deodara*, Lalita 38090 (PAN), August 25, 2009.

Remarks: The species is characterized by centrally to laterally stipitate fructification, smooth, whitish to yellowish white with zones of brownish grey to grayish brown and small sized, ellipsoid basidiospores. The species has been reported previously from China, Japan and Europe. However, it is being reported for the first time from India.

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REFERENCES

Prasher I B and Lalita 2012. Four New Records of Agaricomycetous Fungi from Uttarakhand (Himalayas). J New Biol Rep 1(1): 06-08.

Sharma, J. R. 2000. Genera of Indian Polypores. Botanical Survey of India, Ministry of Environment and Forests. 188.

Sharma, J. R. 2000a. Wood-decomposition and succession in wood-rotting fungi. Ind. J. Forest. 23(1): 123-128.

Sharma J.R. 2012. Aphyllophorales of Himalayas. Botanical Survey of India, Dehra Dun.

Thind K.S. and Dhanda R.S. 1979. The Polyporaceae of India-XII. The Genus *Albatrellus* Indian Phytopathol 32: 55-60.