

***LENTINUS VELUTINUS* FR. LINN (POLYPORACEAE) A NEW RECORD FOR MAHARASHTRA STATE OF INDIA**

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Abstract: During the field survey of Ratnagiri district of Maharashtra, India on 01st September 2018 a polypore is found. It is identified as *Lentinus velutinus* Fr. Linn. (Polyporaceae). A thorough study of literature⁸ revealed that this species is not reported from Maharashtra state of India. Therefore we are reporting *Lentinus velutinus* Fr. Linn (Polyporaceae) a new record for Western Ghats of Maharashtra state of India.

Keywords: *Lentinus velutinus*, Ratnagiri, polypore, Western Ghats.

I. INTRODUCTION

As a part of Ph. D. work authors visited Ratnagiri district of Maharashtra, India on 01st September 2018. During field survey authors came across a stipitate wood rotting aphyllporaceous fungus. The morphological and cytological examination revealed its identity as *Lentinus velutinus* Fr. Linn. A careful review of literature had shown that this species is not yet reported from Maharashtra State of India⁸. Therefore we are reporting *L. velutinus* Fr. Linn. a new record for Western Ghats of Maharashtra state of India. *Lentinus velutinus* Fr. Linn. 5 : 510 (1830) was first documented by Berkeley from West Bengal¹. He described it as *L. hookerianus* Berk. Later Hennings described it from Madhya Pradesh³ and Pegler from Uttar Pradesh⁵. It's morphological and cytological characters are discussed in detail.

II. MATERIALS & METHODS

Specimen collection and analysis

The specimen was collected from Tropical moist deciduous forest of Dhopeswar village in Rajapur Taluka of Ratnagiri district of Maharashtra, India (16^o38'57"N 73^o29'47"E), which is situated on the foot hills of Western Ghats. The specimen was studied for macro and micro morphology. For micro morphology basidiocarp was cut into thin sections and studied in 1% Phloxine, Melzer's reagent and 5% KOH under compound microscope.

III. RESULTS

Morphology of Basidiocarp

Basidiocarp stipitate, in cluster and brown coloured. Pileus 1.5-8 cm wide, convex with umbilicate centre, infundibuliform and dry. Upper surface brown, azonate, striated, short hispid, margin smooth or wavy, involute, rimose at maturity. Hymenial surface cream coloured, lamellate, gills purple. Gills radiating from apex of the stipe, decurrent,

narrow, 0.5-1 mm wide. Stipe central, brown, 2-8 cm long x 4-10 mm thick, solid, attached firmly to the substratum. Stipe surface is velutinate with long thick hairs. Basidiocarp thin fleshy when young and tough, leathery at maturity. No specific smell. On a piece of wood in the forest area.

Cytology

Hyphal system dimitic, generative hyphae thin walled, hyaline, branched, septate, clamped, 3-4 μm in diameter, skeletal hyphae sparingly branched, dark brown, thick-walled, 5-7 μm wide, concentrated in the context and stipe. Hymenium with club shaped basidia. Some sterile, thin walled cheilocystidia and thick walled sclerocystidia intermingled with basidia in hymenium. Spores oblong, 8-9 μm x 3-4 μm , negative in Melzer's reagent. Abundant hyphal pegs are present on either side of gill. Hairs on pileus as well as stipe are one cell thick, multicellular, thick walled and clamped.

Type of rot: White rot of wood log.

Remarks: It is identified in the field by infundibuliform, stipitate brown basidiocarp with umbilicate centre and velutinate stipe.

IV. DISCUSSION

Ratnagiri district of Maharashtra state, India is situated on the foot hills of Western Ghats. Being a hot spot of biodiversity, it is rich in Mycobiota. Though studies on mycobiota of Western Ghats have been neglected initially, now research groups are extensively engaged in exploring it for new species. Natarajan K and Manjula M. studied diversity of *Lentinus* from Western Ghats of Tamilnadu state of India⁴. Senthilarasu G and Singh SK. discovered a new species *L. alpacus* from Western Ghats of Maharashtra⁷. G. Senthilarasu studied Lentinoid fungi from Western Ghats of Karnataka, Tamilnadu and Kerala of India. He collected seventeen species of lentinoid fungi⁶. *L. velutinus* is reported from northern and central parts of India by Singh S. K. and Atri, Bose, Henning and others². But its presence from Western Ghats of Maharashtra, India is being reported for the first time in the present article.

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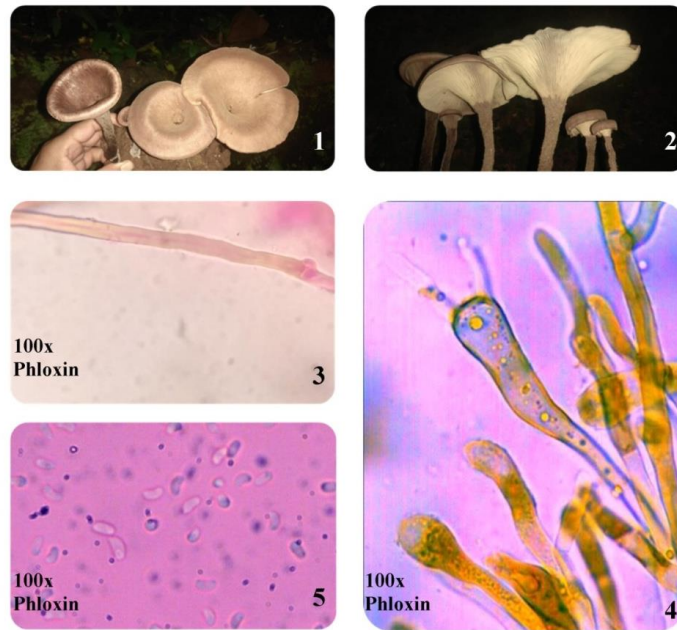


Fig. 1. *Lentinus velutinus* Habit and pileal surface view 2. Basidiocarp showing hymenium 3. Pileal hyphae showing clamp connection at 100x 4. Basidia and cystidia at 100x 5. spores at 100x.