

Record of pleasant fungus beetle genus *Megalodacne* Crotch (Coleoptera, Erotylidae) on oyster mushrooms from Nainital, Uttarakhand, India

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ABSTRACT: Adults of pleasant fungus beetle, *Megalodacne* species were observed feeding on oyster mushrooms during August- September, 2024 in hilly area of Nainital.

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Pleurotus species, commonly known as oyster mushrooms belong to the class Agaricomycetes, order Agaricales and family Pleurotaceae. They are commonly found in temperate and tropical forests, occurring naturally on decomposing logs. These mushrooms have fruit bodies that are distinctively shell or spatula-shaped and come in different colours, such as white, cream, grey, yellow, pink, light brown and blue, depending on the specific species, they also emit a unique sweet like anise or licorice scent (Bhatia *et al.*, 2024). Kues and Gonzalez (2009) and Fraatz and Zorn (2010) have reported that insects are attracted towards polypores and mushrooms due to airborne volatile organic compounds (VOCs) such as alcohols, aldehydes, esters, ketones, acids, and terpenoids released from their fruiting bodies. Among the various insect pests that devour mushrooms, coleopteran beetles are one of the important groups whose adults feed on mushroom mycelia, succulent tissues of stipe, gills and pileus (Rina and Singh, 2016). Members of Erotylidae of Coleoptera are commonly known as “pleasing fungus beetles” due to large size and colourful patterns (Skelley, 2009). Their larvae and

adults feed on basidiomycetes fungi (Franc, 2001; Robertson *et al.*, 2004; Majka, 2007; Epps and Arnold *et al.*, 2010). They are worldwide in distribution with 125 genera and 2,500 described species found on various mushrooms and polypore fungi (Goodrich and Springer, 1999, Robertson and Whiting, 2014).

Production of two different species of oyster mushrooms *Pleurotus sajor caju* and *P. florida* was done at Faculty of Agriculture and Agroforestry at Krishnapur, Nainital (Latitude: 29.370598, Longitude: 79.464387) on paddy and wheat straw in a mushroom growing room at an average temperature of 22.75°C and relative humidity of 81.65 per cent. While cultivating oyster mushrooms, many larvae and a few adults of pleasant fungus beetle genus *Megalodacne* were observed feeding on gills and boring into stipes of mushrooms. The grubs, adults were handpicked, collected, photographed and identified at the genus level based on keys, morphological features and available literature (Boyle, 1956; Goodrich and Springer, 1999; Nongkynrih *et al.*, 2017; Chandra *et al.*, 2021;

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Skelley, 2024). The specimen was preserved in the laboratory, Faculty of Agriculture and Forestry, Kumaun University. Larvae were collected and reared further but they could not survive. Earlier studies done by Skelly (1999) have shown that the sluggish larvae are only found associated with the mature host fruiting body and adults are often found on the host fungus in large numbers with the larvae. The beetle species may be inhabitant of adjoining vegetation and pine forests in Krishnapur and may have entered the mushroom growing room through cracks and crevices. Future studies in this aspect may be required to gain knowledge on the life cycle and morphology of the beetle and also devise management strategies as oyster mushrooms are the second largest and most popular cultivated species of economic importance.

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