Luminous mushrooms in Japan and the ecological function of the luminescence.

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Abstract

Currently 37 species of luminous mushrooms are recorded from Japan [1] [2]. For examples, 'Night light mushroom' *Mycena chlorophos* is one of the brightest luminescent species distributing mainly in subtropical Izu Islands and Ryukyu Islands. 'Moon night mushroom' *Omphalotus japonicus* appearing at mountainous area of Japan mainland in autumn, is huge (sometimes over 50 cm diameter) and famous for their gastrointestinal toxicity. In this presentation, we show the characteristics of these Japanese mushroom species, and also introduce our recent examinations for spore ingestion by insects to investigate the ecological function of the bioluminescence using *M. chlorophos* and *O. japonicus*. 1. Katsumoto, K. List of Fungi Recorded in Japan. (Nihonsan Kinrui Shuran). Kyoto: The Kanto Branch of the Mycological Society of Japan (In Japanese), 2010.

2. Living Lights List. https://www3.chubu.ac.jp/faculty/oba_yuichi/

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