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Biodiversity Record: Bird's nest fungus, Cyathus striatus, at Central Catchment Nature Reserve

Austin Seah Wen Kang & Jian Hui Low*

Email: <u>L160005@e.ntu.edu.sg</u> (*corresponding author)

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Subjects: Striated bird's nest fungus, Cyathus striatus (Basidiomycota: Agaricales: Agricomycetes: Nidulariaceae).

Subjects identified by: Jian Hui Low.

Location, date and time: Singapore Island, Central Catchment Nature Reserve, Terentang Trail at 1.357029°N, 103.817227°E; 1 June 2024; around 1800 hrs.

Habitat: Secondary rainforest, foliage patch on the side of a dirt path.

Observer: Jian Hui Low.

Observation: A patch of bird's nest fungus of around 120 cm by 40 cm was found on a fallen trunk and the leaf litter and mulch immediately next to it (Fig. 1). Each fruiting body measured around 1-1.5 cm in diameter, up to 2 cm in height and resembled a cup with pronounced striations (Fig. 2). Varying numbers of peridioles (egg-like structures, each around 1.5-2 mm in diameter) were present in most cups (Fig. 2).



Fig. 1. In-situ dorsal view of patch of bird's nest fungus showing the distribution of the fruiting bodies relative to their surroundings. Fig. 2. Close-up top-down view of the fruiting bodies (Photographs by: Jian Hui Low).

Remarks: *Cyathus striatus* possess cup-shaped fruiting bodies that resemble a bird's nest with eggs. The outer wall (peridium) is typically brown and adorned with fine striations. Inside the cup lie several dark brown spherical spore sacs (peridioles), which can contain up to 30 million spores each (Hassett et al., 2015). The peridioles are covered with a thin membrane (tunica) and are attached to the cup by specialised mycelia cords (funiculus). When a raindrop hits the interior of the cup at the correct angle, the peridioles will be launched away from the cup while still connected to the funiculus (Hassett et al., 2013). The sticky funiculus allows the peridioles to stick to elevated substrates in the vicinity. This intriguing dispersal approach trades distance for height and challenges the conventional notion that dispersal mechanisms are typically designed to maximise distance to minimise competition.

This species has a high prevalence in temperate regions and can be found in forested areas playing a vital role in ecological homeostasis. These fungi are saprophytic and ubiquitous decomposers of plant debris and mulch (Kuo, 2014). Although *Cyathus striatus* is not uncommon in Singapore (see Chua, 2018; Lee & Choong, 2023), colonies of it are challenging to spot due to their small size and cryptic colour (Wee, 2018), and thus tend to go unnoticed.

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