

Biodiversity Record: *Ganoderma weberianum* at the Singapore Botanic Gardens

Kee Swee Goh, Jamie Wen & Jian Hui Low*

Email: L160005@e.ntu.edu.sg (*corresponding author)

Recommended citation. Goh KS, Wen J & Low JH (2023) Biodiversity Record: *Ganoderma weberianum* at the Singapore Botanic Gardens. Nature in Singapore, 16: e2023038. DOI: 10.26107/NIS-2023-0038

Subject: *Ganoderma weberianum* (Fungi: Basidiomycota: Agaricomycetes: Polyporales: Ganodermataceae).

Subject identified by: Jian Hui Low.

Location, date and time: Singapore Island, Singapore Botanic Gardens, next to Evans Road (1.317797°N 103.818580°E); 16 March 2023; around 1800 hrs.

Habitat: Suburban parkland. In a small foliage patch beside a carpark.

Observer: Jian Hui Low.

Observation: An example of about 15 to 20 cm diameter was spotted growing off the ground among leaf litter at the base of a broad-leaf mahogany tree (*Swietenia macrophylla*) (Fig. 1). There were multiple large caps emanating from a main stem. The caps were glossy dark red to dark brown with whitish and orange margins suggestive of ongoing growth. The undersides of the caps were whitish with numerous pores, confirming that the fungus is a polypore.



Fig. 1. Left: Top-down view of *Ganoderma weberianum* relative to surrounding habitat. Right: Top-down close view of the fungus. (Photographs by: Jian Hui Low).

Remarks: The genus *Ganoderma* is difficult to classify as various species are highly identical in physical features; yet exhibit high phenotypic plasticity based on environmental parameters. Identification of surrounding trees and environmental features, such as in this example, could be useful to map out potential saprophytic preferences of different species. The featured fungus fits the description of *Ganoderma weberianum*, a species of polypore mushroom that is known to occur in Southeast Asia and Australia (Steyaert, 1972; Cabarroi-Hernández et al., 2019). We are inclined to believe that this is *Ganoderma weberianum* instead of its phenotypically similar relative *Ganoderma lucidum*, due to its distinctive short stem and propensity to produce caps in multiple directions (see The Biodiversity of Singapore, 2023). However, further genotypic analysis through molecular methods such as qRT-PCR or DNA sequencing are required to validate our conclusion. Nonetheless, this is a noteworthy observation of an apparently rare mushroom that is not well-documented both in Singapore and around the world. We hope this observation will provide meaningful insights to the classification of *Ganoderma* species.

Literature cited:

- Cabarroi-Hernández M, Villalobos-Arámbula AR, Torres-Torres MG, Decock C & Guzmán-Dávalos L (2019) The *Ganoderma weberianum-resinaceum* lineage: multilocus phylogenetic analysis and morphology confirm *G. mexicanum* and *G. parvulum* in the Neotropics. *MycKeys*, 59: 95–131.
- Steyaert RL (1972) Species of *Ganoderma* and related genera mainly of the Bogor and Leiden Herbaria. *Persoonia*, 7: 55–118.
- The Biodiversity of Singapore — A Digital Reference Collection for Singapore’s Biodiversity (2023) <https://singapore.biodiversity.online/taxon/F-Basi-Polyporales> (Accessed 18 March 2023)