

# On the name of the oldest fossil mushroom

Sam W. Heads<sup>1</sup> · Andrew N. Miller<sup>1</sup> · J. Leland Crane<sup>1</sup>

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**Abstract** The name *Gondwanagaricites magnificus*, incorrectly published in a previous paper, is made valid and new MB numbers assigned.

**Keywords** Basidiomycota · Brazil · New genus · New species · Paleontology

## Introduction

The generic name, *Gondwanagaricites*, and species name, *Gondwanagaricites magnificus*, of the fossil mushroom described by Heads et al. (2017) were not validly published for the following reasons: (1) the identifier was not cited for the generic name (Art. 42.1); (2) a species name cannot be validly published if the genus name is not validly published (Art. 35.1); and (3) it was not specifically stated which illustration represents the holotype (Art. 43.3). These corrections are now made here using newly assigned MB numbers.

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✉ Sam W. Heads  
swheads@illinois.edu

<sup>1</sup> Illinois Natural History Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign, 1816 South Oak Street, Champaign, Illinois 61820, USA

## Systematic paleontology

Kingdom Fungi (L.) Moore, 1980  
Phylum Basidiomycota Moore, 1980  
Class Agaricomycetes Doweld, 2001  
Order Agaricales Underwood, 1899  
Family *incertae sedis*

***Gondwanagaricites* Heads, A.N. Mill. et J.L. Crane, gen. nov. MB821896**

[urn:lsid:mycobank.org:names:MB821896]

**Type Species:** *Gondwanagaricites magnificus* Heads, A.N. Mill. et J.L. Crane

**Etymology:** The genus name is a combination of Gondwana, the ancient supercontinent, the Greek word *agarikon*, “a mushroom,” and the Greek suffix *-ites*, denoting a fossil.

***Gondwanagaricites magnificus* Heads, A.N. Mill. et J.L. Crane, sp. nov. MB821897**

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**Holotype:** Brazil: Ceará: Chapada do Araripe; Crato Formation: Nova Olinda Member (Lower Cretaceous: Upper Aptian, 113–120 Ma); URM-88000. While precise locality details are unknown, the lithology of the matrix is consistent with the specimen having been collected in one of the extensive quarry complexes near the town of Nova Olinda (7.0939°S, 39.6796°W).

Figure 1a in Heads et al. (2017) represents an illustration of the holotype specimen and diagnostic features.

**Etymology:** The specific epithet is the Latin adjective *magnificus*, meaning “magnificent” or “splendid” in reference to the remarkable preservation of the holotype.

**Generic-specific description:** Basidiome color unknown (preserved as orange-brown goethitic replacement). Pileus 10.0 mm diameter, 7.5 mm high at widest point; apparently circular, convex; probably glabrous and striate; margin slightly incurved; veil absent; context 3.0 mm thick. Lamellae (gills) 4.5 mm broad at widest point, broadly attached to stipe apex; edge entire, up to 50  $\mu\text{m}$  wide. Stipe 34.0 mm long, 6.5 mm wide, straight, cylindrical, with longitudinal striations,

annulus absent, base slightly bulbous. Basidiospores not observed.

## Reference

Heads SW, Miller AN, Crane JL, Thomas MJ, Ruffatto DM, Methven AS, Raudabaugh DB, Wang Y (2017) The oldest fossil mushroom. *PLoS ONE* 12(6):e0178327. <https://doi.org/10.1371/journal.pone.0178327>