

Outlineoffungi.org – Note 1562 *Thomasiella*

Web-links: Index Fungorum, facesoffungi, MycoBank, [GenBank](#)

Thomasiella G.H. Jerônimo, **gen. nov.**

MycoBank MB 855552

Etymology: the genus honors Thomas C. Jerônimo Alves, the son of Gustavo Henrique Jerônimo.

Type: *Thomasiella carolinae* G.H. Jerônimo

Description: Fungus saprotrophic. Thallus monocentric with exogenous development. Zoosporangium smooth, producing operculate discharge tubes. Zoosporangium apophysate; extensive rhizoids with multiple axes. Zoospores contain a single hyaline lipid globule. Resting spores thick-walled with a central and prominent lipid globule.

Notes: This monotypic genus was previously introduced as *Thomasia* by Jerônimo et al. (2024), however this name has been already used for a plant from the *Sterculiaceae* family (nom. not valid. publ., Art. 53.1 - Turland et al. 2018). *Thomasiella* is erected to accommodate *T. carolinae* G.H. Jerônimo, which was isolated from a water sample containing plant detritus from Maine, USA. The type species (asexual) is characterized by monocentric thallus with exogenous development. Zoosporangia is apophysate and rhizoids are extensive with multiple axes. Resting spores are thick-walled with a central and prominent lipid globule, formed like zoosporangia. Based on LSU and SSU loci, *Thomasiella* is sister to Nowakowskiellaceae (Cladochytriales, Cladochytriomycetes, Chytridiomycota).

Thomasiella carolinae (G.H. Jerônimo) G.H. Jerônimo, **comb. nov.** [MB#855553]

Basionom: *Thomasia carolinae* G.H. Jerônimo, Mycol. Progr 23:1 (2024) [MB#848818]

Description: Fungus saprotrophic. Thallus monocentric with an exogenous development. Zoosporangia smooth, spherical (15 to 18 µm), operculate, producing discharge tubes varying in length (8 to 20 µm). Zoosporangia apophysate, and rhizoids extensive, smooth, and with multiple axes. Zoospores contain a single hyaline lipid globule. Resting spores are spherical (8 to 10 µm), thick-walled, with a central and prominent lipid globule, functioning as a prozoosporangium.

Typification: USA. Maine: Old Town, Pushaw Lake, Oct 2013, J.E. Longcore. Holotype (Fig. 4a–p in Jerônimo et al. 2024). GenBank (JEL818): SSU + ITS + LSU = MT 730829.

Etymology: The specific epithet “carolinae” honors Carolina C. Jerônimo Alves, the wife of Gustavo Henrique Jerônimo.

Notes: This monocentric species develops exogenously, resulting in a non-persistent zoospore cyst and an apophysate zoosporangium with one or two operculate discharge tubes (see Jerônimo et al., 2024).

References

- [Jerônimo GH, Simmons DR, Longcore JE, James TY et al. 2024 – Investigation of CZEUM cultures reveals new genera and species of Cladochytriales \(Cladochytriomycetes, Chytridiomycota\). Mycological Progress 23, 1.](#)
- [Turland NJ, Wiersema JH, Barrie FR, Greuter W et al. 2018 – International Code of Nomenclature for algae, fungi, and plants \(Shenzhen Code\) adopted by the Nineteenth](#)

[International Botanical Congress Shenzhen, China, July 2017. Regnum Vegetabile 159. Glashutten: Koeltz Botanical Books.](#)

Entry by Jerônimo, G.H. & Pires-Zottarelli, C.L.A, Instituto de Pesquisas Ambientais, Secretaria de Meio Ambiente, Infraestrutura e Logística, Av. Miguel Stéfano 3687, São Paulo, SP, Brazil

(Edited by **Maryam Tavakol Noorabdi**)

Published online 23 September 2024