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Nomenclatural novelties : Andrew M. Minnis & Daniel L. Lindner

Xerogeomyces Minnis & D.L. Lindner, gen. nov.

IF 901396

Type species: Xerogeomyces pulvereus (A.D. Hocking & Pitt) Minnis & D.L. Lindner 2023

Colonies on MY50G at 14 days after incubation at 25°C white, appearing floccose, with deep, irregular margins; colonies covered with a powdery layer of white conidia; reverse pale. Reproduction by means of profuse aleurioconidia; aleurioconidia born terminally, singly or rarely in very short chains, from highly branched dendritic conidiophores, subglobose to ellipsoidal, usually with truncate bases, smooth-walled, hyaline. Arthroconidia absent.

Notes: The morphological description of the genus is adapted from the description of Geomyces pulvereus A.D. Hocking & Pitt, Mycologia 80(1): 82 (1988). Xerogeomyces resembles Geomyces and allies including Pseudogymnoascus, but it differs in being xerophilic. ITS region DNA sequence data from the ex-holotype of Geomyces pulvereus (CBS 315.87, GenBank OR520910) also distinguish Xerogeomyces from Geomyces, Pseudogymnoascus, and close relatives. Analysis of these data using GenBank BLAST places Xerogeomyces among the Onygenales with the closest matches among named genera including Dactylodendron (92.58% identity with the type species, Dactylodendron pinicola, CBS 653.89, GenBank MH862194), Emmonsiellopsis (91.52% identity with the type species, Emmonsiellopsis terrestris, UAMH 2304, GenBank NR_153965), and Sigleria (88.64% identity with the type species, Sigleria carmichaelii, CBS 138264, GenBank KP119626).

Xerogeomyces pulvereus (A.D. Hocking & Pitt) Minnis & D.L. Lindner, comb. nov. IF 901397

Basionym: Geomyces pulvereus A.D. Hocking & Pitt, Mycologia 80(1): 82 (1988).