**Sporidesmium knawiae** Crous, sp. nov.

**Mycobank**: MB508003.

**Etymology**: Named for the Royal Netherlands Academy of Arts and Sciences (KNAW), on the occasion of its 200th anniversary. The host genus, *Encephalartos*, is commonly called the ‘bread tree’. It was formerly used for food, and thus has some similarity to the Academy, which feeds us with knowledge.

**Latin diagnosis**: *Sporodesmium inflati* simile, sed conidiis 4-septatis, 60–80 × 10–13 µm.

**Description**: Colonies sporulating on tap water agar supplemented with sterile *Pinus* needles. Colonies black, erumpent, sporodochial. Mycelium consisting of branched, septate, thin-walled, hyaline to pale brown, smooth, 1.5–2 µm wide hyphae. Conidiophores separate, or aggregated in groups of 2–6, sinuous or straight, erect or somewhat repent, arising from creeping hyphae, or aggregated in black sporodochia; separated from hyphae by basal septum, base mostly not swollen, and lacking rhizoids; stipe cylindrical, brown, smooth, thick-walled, at times geniculate and branched in upper part, or regenerating percurrently, 100–250 × 4–6 µm. Conidiogenous terminal, cylindrical, brown, 10–20 × 4–6 µm; proliferating once percurrently at apex, after which the conidiophore extends in length, before forming the next conidium; flaring collarette visible. Conidia solitary, acrogenous, oblong, ovalate, tapering towards subobtuse apex and truncate base, 4-euseptate, smooth-walled, (60–)65–70–(80) × (10–)11–12–(13) µm, basal cell pale brown, second to fourth cells medium brown, and apical cell pale brown; hilum with minute marginal frill; at times conidia with delayed secession visible, creating the impression of lateral conidiogenous loci on conidiogenous cells; conidial base truncate, 5–6 µm wide.

**Cultural characteristics**: Colonies on 2 % malt extract agar (MEA; Difco) at 25 °C in a 12 h dark : 12 h light cycle under mixed fluorescent and near-ultraviolet light after 1 month: 25 mm diam, erumpent, spreading, with moderate aerial mycelium and feathery needles.

**Conidiogenous cells** medium brown, and apical cell pale brown; hilum with minute marginal frill; at times conidia with delayed secession visible, creating the impression of lateral conidiogenous loci on conidiogenous cells; conidial base truncate, 5–6 µm wide.

**Notes**: *Encephalartos* (Zamiaceae) was the genus described by the German botanist J.G. Lehmann in 1834 for cycads indigenous to Africa. The name is derived from Greek (*en* = within, *kephali* = head, and *artos* = bread), meaning ‘bread in the head’, referring to the Khoi-Khois’ (“Hottentots”) habit of removing the pith of the stem, burying it in the ground for 2 months, before kneading it into bread. Species of *Encephalartos* are thus commonly referred to as bread trees or bread palms (www.kew.org/plants/). Although this ancient plant genus is endangered, and known to suffer from trunk and root parasites, and fungal infections, only a few fungi have been described from this host (nt.ars-grin.gov/fungaldatabases/).

The genus *Sporidesmium* Link and morphologically similar genera are polyphyletic, with *Sporidesmium* having phylogenetic relationships to both *Dothideomycetes* and *Sordariomycetes*. *Sporidesmium knawiae* is phylogenetically and morphologically closest to *S. inflatum* (Berk. & Ravenel) M.B. Ellis, which also has widely dispersed percurrent proliferations, and conidia with brown median, and paler ends cells.

**Colour illustrations**: *Encephalartos lebomboensis* palm growing in South Africa (H. Glen, SANBI, South Africa); fungal colony growing on PDA; conidiophores with terminal conidiogenous cells, giving rise to versicoloured conidia with paler basal and end cells (P.W. Crous). Scale bars = 10 µm.

Sporidesmium knawiae