Index Fungorum no. 119

Effectively published 08/02/2014 07:37:10 (ISSN 2049-2375)

Nomenclatural novelties : Alexander B. Doweld

Polyphagus arnaudovii Doweld, sp.nov.
IF550465
Thallus or broadly pyriform rudiment of the prosporangium attached to the underside of a water film by 5 short anchoring rhizoids; 5 long (100-120 Âµm) primary rhizoids arise from the periphery and curve down into the water like ribs of an open umbrella, and a 6th one develops from the terminal pole of the prosporangium and extends straight down like the handle of an umbrella; these 6 primary rhizoids spirally twisted and bear numerous short (3 to 5 Âµm), sharp setae (organelles of capture). Zygospores spherical, strongly spinate. Hyponeustonic. Nomenclatural comments: = Arnaudovia hyponeustonica Valkanov in Arch. Protistenk. 106: 562, tab. 44, figs 1-11. 1963, nom. inval. (lacking Latin description and holotype designation) = Polyphagus hyponeustonicus (Valkanov) Karling, Chytridiomycet. Iconogr.: 174. 1977 (â€œhypneustonicaâ€□), comb. inval. (based on invalid name, lacking also direct and full reference to basionym).
Holotype (iconotypus) tab. 40-43 in Valkanov, Arch. Protistenk. 106: 562. 1963.

Polyphagus asymmetricus Valkanov ex Doweld, in Doweld, sp.nov.
IF550466
Thallus lacking clearly pronounced radial symmetry; prosporangium spherical, up to 20 Âµm, from which 4 to 8 primary rhizoids branched extensively and chemotropically to the host cells. Sporangium spherical, always radially symmetrical, thick-walled, walls persisting some time after zoospores release. Zygotes elliptic, 6 Ñ… 9 Âµm, with warty surface, yellow-greenish. Hyponeustonic, on Botrydiopsis. [Modified after Valkanov, l.c.]. Nomenclatural comments: = Polyphagus asymmetricus Valkanov in Arch. Protistenk. 106: 568, tab. 44, figs 1-11. 1963, nom. inval. (lacking Latin description and holotype designation).
Holotype (iconotypus) figs tab. 44, figs 1-11 in Valkanov, Arch. Protistenk. 106: 568. 1963.

Polyphagus sinicus Doweld, sp.nov.
IF550467
Thallus holocarpic, hyaline, containing several refractive globules, polyphagous, attached to the algal filaments by thread-like rhizoids, 21-31 Ñ… 16-22 Âµm. Zoosporangia originated from the mature thallus by budding out an outgrowth which gradually enlarges and becomes a sporangium, spherical to elliptical, 17-21 Ñ… 25-29 Âµm, sporangium quickly disintegrating after the emergence of the zoospores. Zoospores ovoid, 8-8.5 x 5.8-6.5 Âµm, posteriorly uniflagellate, with a central lipid body 2.5 Âµm in diam., flagellum up to 28 Âµm long. Sexual reproduction by conjugation between two individuals. Zygospores spherical (15.6-18 Ñ… 18-20.5 Âµm), yellow-brown, strongly spinate (spines 1 Âµm long), thick-walled, containing a central oily globule 11.4 Âµm in diam. Germination unknown. On Draparnaldia. [Modified after Chen in Amer. J. Bot. 31: 233. 1944, as Polyphagus rostratus (Serb.) Chen, excl. typo non Sporophlyctis rostrata Serbinow in Bot. Zap. 15: 322. 1899]. Nomenclatural comments: = Sporophlyctis chinensis Sparrow, Aquat. Phycomyc.: 458. 1960, nom. inval. (lacking holotype designation and Latin description).
Holotype (iconotypus) figs 1-21 in Chen, Amer. J. Bot. 31: 233. 1944.