Rhizosiphon akinetovorax Doweld, sp.nov.

Thallus endobiotic, prosporangium oval to elongate-oval, 8.6-23 µm long and 5-11 µm thick, arising as a swelling from the tip of the germ tube of the zoospore. Sporangium spherical to limoniform, 8-20 µm high and 6-8 µm wide, with a conspicuous papilla up to 2 µm high; distal portion of sporangium wall thick, covered with short rod-like markings. Zoospores 2.5-3 µm in diam., content granular with several minute refractive globules. Resting spore formation preceded by fusion of isogamous gametes, one of which had previously come to rest. Resting spores endobiotic, directly transformed into sporangium on germination, oval to elongate oval, 8-26 µm long and 7-16 µm thick, with thick and smooth 2-layered walls; one or a few large globules present. Parasitic on akinetes of Anabaena affinis Lemm. var. intermedia Griff. NOMENCLATURAL COMMENTS: Species Rhizosiphon akinetum Canter (in Trans. Brit. Mycol. Soc. 37: 121. 1954) was not validly published due to the lack of Latin diagnosis (German and English descriptions only were provided).

Holotype (iconotypus) tab. 4, figs 1-4 & tab. 5, figs 1-3; text-figs. 6-7 in Canter, Trans. Brit. Mycol. Soc.

Rhizosiphonaceae Doweld, fam.nov.

Thallus endobiotic, consisting of prosporangium and (if any) tubular or irregular vegetative hypha-like system or haustorium that may penetrate several host cells. Zoosporangium inoperculate, epibiotic, budding out of the prosporangium which develops from the germ tube. Zoospores posteriorly uniflagellate, with 1-several globules. Resting spores endobiotic, thick-walled, with 1-few globules, functioning as prosporangia on germination.

Holotype: Rhizosiphon Scherff. 1926.