

Nomenclatural novelties : Alexander B. Doweld

**Riethophlyctis** Doweld, gen.nov.

**IF550474**

Zoosporangia epibiotic, sessile, inoperculate, spherical, with 1-5 exit papillae, walls laevigate, developed from the body of an encysted zoospore, causing organoid witch broom-like galls on the host; endobiotic part consisting of a short, knob-like rhizoid. Zoospores spherical, with a single eccentric lipid globule, posteriorly uniflagellate. Secondary sporangia epibiotic, sessile, subglobose to pyriform, with a single (rarely more) apical pore, not causing gall formation of the host thallus. Resting spore arising from the fusion of a male and a female gametangium, formed apical in the receptive thallus after conjugation with the contributing thallus by means of a conjugation tube produced by the male plant, warty, brownish when ripe. In honorem A. Rieth nominatur.

Holotype: *Riethophlyctis vaucheriae* Doweld 2014.

**Riethophlyctis vaucheriae** Doweld, sp.nov.

**IF550473**

Zoosporangia epibiotic, sessile, inoperculate, spherical, 25-65 Åµm, with 1-5 exit papillae, walls laevigate, colorless, developed from the body of an encysted zoospore, causing organoid witch broom-like galls on the host; endobiotic part consisting of a short, knob-like rhizoid. Zoospores spherical (3,8-)4,5-5,0(-5,5) Åµm, with a single colorless, refractive eccentric lipid globule, posteriorly uniflagellate, flagellum 10-13 Åµm long. Secondary sporangia epibiotic, sessile, subglobose to pyriform, 10,5-45,5 Åµm wide by 13,0-45,5 Åµm long, with a single (rarely more) apical pore, 6,0-15,5 Åµm, not causing gall formation of the host thallus. Resting spore arising from the fusion of a male and a female gametangium. Male cell oval to elongate, 5,0-7,0 Åµm wide and 15-30 Åµm long (including conjugation tube); female oval, mostly sessile (9,5-) 13 (-20,0) Åµm wide by (12,0-) 17 (-23,5) Åµm long. Zygospore (resting spore) formed apical in the receptive thallus after conjugation with the contributing thallus by means of a conjugation tube produced by the male plant; outer half of the zygote-wall covered by warts, inner (in respect to the female gametangium) half of the wall laevigate (9,5-) 13,5 (-17,0) Åµm wide and (7,0-) 11,0 (-15,5) Åµm long, brownish when ripe. Germination not observed. [Modified after Rieth, l.c.]. NOMENCLATORIAL COMMENTS: Based on (=) *Zygorhizidium vaucheriae* Rieth in Biol. Centralbl. 86: 444-446. 1967, nom. inval. (lacking Latin description and holotype designation). .

Holotype (iconotypus) tab. I-II in Rieth, Biol. Centralbl. 86: 437-438. 1967.