NOTES

Description of Oerskivia gen. n. to Harbor Ørskov’s Motile Nocardia

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The genus Oerskivia is proposed to harbor actinomycetes forming an extensively branched substrate mycelium which usually breaks up into motile elements. Cell wall preparations contain major amounts of lysine and galactose. Aspartic acid is often present in major amounts. Aerial mycelium is not formed. Gram reaction and catalase production are positive. The type species is Oerskivia turbata comb. n.

The studies of Jones and Bradley (2), Prauser (4), and Sukapure et al. (5) demonstrated that strains of “Ørskov’s motile nocardia,” described as Nocardia turbata by Erikson (1), are very different from strains of Nocardia of the asteroide-farcinica type. Since nothing but confusion can be gained in referring to these organisms as nocardiae, and since none of the previously described genera of actinomycetes seem suitable for the assignment of these branching, motile bacteria, we propose the new genus Oerskivia in honor of the first man who described these organisms (3). We would place the genus Oerskivia in the family Actinomycetaceae. References to methodology are given in Sukapure et al. (5).

Oerskivia gen. n. Extensively branching vegetative hyphae (ca. 0.5 μm in diameter), growing on the surface of and penetrating into the agar, which break up into motile rod-like elements. Growth appears bacteroid in smears. No aerial mycelium is formed. Gram-positive, catalase-positive. The type species is Oerskivia turbata. Cell wall type VI + major amounts of galactose. Aspartic acid may be absent. Per cent guanine plus cytosine (GC%) = 70.5–75.

Oerskivia turbata (Erikson) Prauser, Lechevalier, and Lechevalier comb. n. (Nocardia turbata Erikson, J. Gen. Microbiol., 11, 1954, 198–208). Yellow, extensively branching vegetative hyphae breaking into motile rod-like elements which are usually monotrichous when small and peritrichous when long (ca. 0.4 by 1.1 μm). Nitrite produced from nitrate. Casein, gelatin, and starch hydrolyzed. Catalase-positive. Not acid-fast. Mesophilic. Isolated from soil. Acetate, lactate, and pyruvate utilized; acid from arabinose, cellobiose, dextrin, fructose, galactose, glucose, glycerol, glycogen, α-methyl-D-glucoside, lactose, maltose, mannan, salicin, sucrose, trehalose, xylose, and β-methyl-D-xyloside. Tyrosine, benzoate, succinate, and tartrate not utilized; no acid from adonitol or inositol. The following tests were variable (per cent positive strains): hypoxanthine (37%), xanthine (37%), citrate (37%), and propionate (88%) utilization, acid from mannitol (12%), melibiose (37%), raffinose (25%), rhamnose (12%), sorbitol (25%), and sorbose (12%). The type strain is Statens Seruminstitut of Copenhagen strain 891 (Ørskov’s strain 27).

LITERATURE CITED