Transfer of *Micropolyspora rectivirgula* (Krassilnikov and Agre 1964) Lechevalier, Lechevalier, and Becker 1966 to *Faenia* gen. nov.

V. P. KURUP^{1,2*} AND NINA S. AGRE³

*The Medical College of Wisconsin, Milwaukee, Wisconsin 53226*¹; *Research Service, Veterans Administration Medical Center, Wood, Wisconsin 53193*²; and *Institute of Biochemistry and Physiology of Microorganisms, Academy of Sciences, Pushchino, Moscow Region, Union of Soviet Socialist Republics*³

Because *Micropolyspora brevicatena*, the type species of the genus *Micropolyspora*, has been removed from *Micropolyspora* to the genus *Nocardia*, we propose the name *Faenia* gen. nov. for the remaining species in the genus. The type species of this new genus is *Faenia rectivirgula* (Krassilnikov and Agre) comb. nov. The type strain of *F. rectivirgula* is VKM-A-810 = INMU 683 = ATCC 33515).

The genus *Micropolyspora* was described by Lechevalier et al. (18) for organisms that produce short chains of spores both on substrates and on aerial mycelia. Several species of this genus have been described by various authors (13). Recently, the type species, *Micropolyspora brevicatena*, was studied by different investigators who suggested placing it in the genus *Nocardia* (3, 12, 13, 19). Because the type species has been removed from the genus *Micropolyspora*, the name *Micropolyspora* becomes illegitimate according to Rule 37a of the *International Code of Nomenclature of Bacteria* (16).

Of the several species included in the genus *Micropolyspora*, *Micropolyspora angiospora* and *Micropolyspora internatus* are on the Approved Lists of Bacterial Names (22), whereas others, such as "*Micropolyspora viridinigra*," "*Micropolyspora rubrobrunea*," "*Micropolyspora caesia*," "*Micropolyspora thermovirida*," and "*Micropolyspora coerulea*," are not on the Approved Lists. The names not on the Approved Lists have been used frequently by investigators and culture collections throughout the world. Recently, "*M. viridinigra*" and "*M. rubrobrunea*" (11) were considered to be members of the genus *Excellispora* by Agre and Guzeva (1). Kurup (13) found that these two species and *M. angiospora* (23) have type III cell walls, excluding them from *Micropolyspora*, which has type IV cell walls. "*M. caesia*" (7) and *M. internatus* (2) were shown to be closely related to members of the genus *Saccharomonospora*; hence, these two species were transferred to this genus as *Saccharomonospora caesia* and *Saccharomonospora internatus* (13).

The descriptions of "*M. thermovirida*" (9) and "*M. coerulea*" (21) indicate that these organisms are not typical members of the genus *Micropolyspora*. According to morphological studies of the only strain of "*M. coerulea*," strain TNA 4045¹ (type strain), this actinomycete is a typical representative of the genus *Saccharomonospora*. As a rule, cultures of this strain produce a great number of single spores and rarely produce short chains of two to four spores, which is also true of *S. caesia* (7) and *S. internatus*. The type strain of "*M. thermovirida*" (9) and all other strains conforming to it, have been lost.

The only two species remaining in the former genus *Micropolyspora* are *Micropolyspora rectivirgula* (10) and *Micropolyspora faeni* (4), both of which are included on the Approved Lists of Bacterial Names (22). Lechevalier et al. (17) reclassified *Thermopolyspora rectivirgula* as *M. rectivirgula*. However, on the Approved Lists, Prauser and Mamirov (20) were cited as the authors who coined the new combination. There has been much confusion in the literature regarding these two species, but our studies and those of Jones et al. (6) have shown that there is no difference between the two species morphologically, physiologically, immunologically, and in their phage susceptibilities (5, 6, 8, 13–15). Hence, these two species should be united.

M. rectivirgula was first described by Krassilnikov and Agre in 1964 (10) and has priority over *M. faeni* (4). According to Rule 42 of the *International Code of Nomenclature of Bacteria* (16), when two taxa of the same rank are united, the oldest legitimate name should be retained. Be-

cause the type species of *Micropolyspora* is now known as *Nocardia brevicatena*, we propose a new genus, *Faenia*, to include *M. rectivirgula* as *Faenia rectivirgula*, which is also the type species.

Description of *Faenia* gen. nov. *Faenia* (Faen. i' a. L. n. *faenum* hay; L. f. pl. *Faenia* a genus of bacteria associated with hay) mycelium consists of branching aerial and substrate hyphae which are gram positive and 0.8 to 1.2 μ m in diameter. Spores are 0.7 to 1.5 μ m in diameter and are produced in chains of 2 to 15 on both aerial and substrate hyphae, usually on small sporophores. Spores grow slowly on most complex media at 35 to 60°C. The cell walls are type IV and contain *meso*-diaminopimelic acid, arabinose, and galactose; no nocardomycolic acid has been detected.

The type species is *F. rectivirgula* (Krassilnikov and Agre) comb. nov. (rec' ti. vir. gu. la. L. adj. *rectus* straight; L. n. *virgula* twig; M. L. n. *rectivirgula* straight twig).

Description of *Faenia rectivirgula* comb. nov., emend. (i) Morphology. Branching aerial and substrate hyphae are 0.8 to 1.2 μ m in diameter. Spores are produced in chains of 2 to 15 on both aerial and substrate hyphae. Spores are smooth, spherical to ovate, and 0.7 to 1.5 μ m in diameter and are usually produced on sporophores. Spore chains are straight and do not form spirals. Young hyphae and spores are gram positive, whereas older hyphae and spores may be gram negative.

(ii) Cultural characteristics. Colonies on Trypticase soy agar, casein hydrolysate agar, and nutrient agar attain a diameter of 2 to 3 mm after 1 week of incubation at 50°C. The color of the colonies varies from brownish yellow to pale orangeish yellow. Aerial hyphae appear as white tuftlike growth. No diffusible pigment is produced in any of these media.

(iii) Physiological characteristics. *F. rectivirgula* strains grow at 33 to 60°C, with the best growth occurring between 50 and 55°C. Most of the strains tolerate a pH range of 6.00 to 7.4. Galactose, glucose, lactose, mannose, glycerol, mannitol, and xylose are utilized as carbon sources; arabinose, maltose, rhamnose, sorbitol, and dulcitol are not. Esculin, arbutin, gelatin, hypoxanthine, Tween 20, and Tween 80 are hydrolyzed; adenine, starch, elastin, cellulose, chitin, casein, and tributyrin are not hydrolyzed. The strains produce deoxyribonuclease and catalase and reduce nitrate to nitrite. *meso*-Diaminopimelic acid, arabinose, and galactose are present in the cell walls.

(iv) Phage lysis. All strains of *F. rectivirgula* are lysed by actinophage MP (20) and by ϕ T-150A (15).

(v) Type strain. The type strain is strain VKM-

A-810 (= INMI 683 = ATCC 33515) (10).

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