Taxonomic History of Actinomycete Strains Bearing the Epithet rectivirgula: Correct Citation of Authorities

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There have been errors in recent publications in the citation of authorities for actinomycete strains bearing the specific epithet rectivirgula. The correct citations are Saccharopolyspora rectivirgula (Krasil’nikov and Agre 1964) Korn-Wendisch, Kempf, Grund, Kroppenstedt, and Kutzner 1989, Faenia rectivirgula (Krasil’nikov and Agre 1964) Kurup and Agre 1983, and Micropolyspora rectivirgula (Krasil’nikov and Agre 1964) Prauser and Momirova 1970.

Controversy has long surrounded the thermophilic actinomycetes that are currently referred to by the epithet rectivirgula, and these organisms have been placed in several genera and species over the last 25 years or so. The epithet which they isolated from soil and described as "Micropolyspora rectivirgula," at about the same time, Corbaz et al. (2) isolated similar organisms from moldy hay, which they mistakenly identified as "Thermopolyspora polyspora" and which were a major source of farmer’s lung hay antigen (16). In 1964, Krasil’nikov and colleagues questioned the distinction between the genera Thermopolyspora and Micropolyspora but still described their isolate as a Thermopolyspora species and continued to use this genus name (6, 8), while in 1966, Lechevalier et al. (13) listed an isolate of Thermopolyspora rectivirgula as Micropolyspora rectivirgula (species with wall chemotype IV) and listed isolates of "Thermopolyspora polyspora" as Micropolyspora species. However, these authors did not formally propose transfer of organisms from one genus to the other. It was left to Cross et al. (3) to describe the misidentified organism "Thermopolyspora polyspora" as the new species Microsporospolyspora faeni, while Prauser and Momirova (17) transferred Thermopolyspora rectivirgula to the genus Micropolyspora with the following statement: "Micropolyspora rectivirgula (Krasil’nikov und Agre) comb. nov. wird als korrekter Name für diese Aktinomyzeten vorgeschlagen." The two species were included on the Approved Lists of Bacterial Names (18) as Micropolyspora faeni Cross, Maciver, and Lacey 1968 and Micropolyspora rectivirgula (Krasil’nikov and Agre 1964) Prauser and Momirova 1970.

The synonymy of Micropolyspora rectivirgula and Microsporospolyspora faeni became apparent when cultures of Microsporospolyspora rectivirgula became freely available (1, 10, 17). At the same time, the type species of the genus Micropolyspora, Microsporospolyspora brevicatena Lechevalier, Solotorovsky, and McDermont 1961, was transferred to the genus Nocardiola (4). As a consequence, Kurup and Agre (11) proposed the transfer of Microsporospolyspora rectivirgula to the new genus Faenia, as Faenia rectivirgula (Krasil’nikov and Agre 1964) Lechevalier, Lechevalier, and Becker 1966, while McCarthy et al. (15) and Lacey et al. (12) argued for the conservation of the genus Microsporospolyspora, with Microsporospolyspora faeni Cross, Maciver, and Lacey 1968 as the type species. The Judicial Commission ruled in favor of Faenia rectivirgula (19), but the transfer of Faenia rectivirgula to the genus Saccharopolyspora has recently been proposed by Korn-Wendisch et al. (7). In doing this, these authors erroneously gave Kurup and Agre 1983 as the authority for the epithet rectivirgula.

Thus, there is much confusion surrounding the authorities for species bearing the epithet rectivirgula. While Kurup and Agre (11) are correctly cited as authorities for the genus Faenia, the specific epithet rectivirgula long predates the publication of these authors. There is perhaps more justification for using Lechevalier, Lechevalier, and Becker 1966 (13) as the authority for the transfer of Thermopolyspora rectivirgula to the genus Micropolyspora, although formal transfer of Thermopolyspora rectivirgula strains listed as Micropolyspora rectivirgula was never proposed. On the other hand, Prauser and Momirova (17) proposed the new combination Micropolyspora rectivirgula for actinomycetes bearing the epithets rectivirgula and faeni. However, this was not supported by any formal description, there is no direct reference to the original description, and the work of Prauser and Momirova was not based on the type strain, although another isolate cited by Krasil’nikov and Agre in their original description was used. Reference to neither Lechevalier, Lechevalier, and Becker nor Prauser and Momirova as authorities for the transfer is entirely satisfactory but, in the interest of nomenclatural stability, it is probably better to accept the authorities given on the Approved Lists (18) and cite Prauser and Momirova as the correct authorities for the transfer of Thermopolyspora rectivirgula to the genus Micropolyspora. The correct citations are given below:


LITERATURE CITED

3. Cross, T., A. Maciver, and J. Lacey. 1968. The thermophilic actinomycetes in mouldy hay: Microsporospolyspora faeni sp. nov. J.

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