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PROPOSAL TO DESIGNATE STRAIN ATCC 3004 (IMRU 3004) AS THE NEOTYPE STRAIN OF STREPTOMYCES ALBUS (ROSSI DORIA) WAKSMAN AND HENRICI

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SUMMARY. Strain ATCC 3004 (American Type Culture Collection; IMRU 3004 Institute of Microbiology, Rutgers University) is proposed as the neotype strain of Streptomyces albus (Rossi Doria) Waksman and Henrici 1943. Streptomyces albus is by original designation the type species of the genus Streptomyces Waksman and Henrici 1943.

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In view of the facts listed below we propose that the Judicial Commission of the International Committee on Bacteriological Nomenclature of the International Association of Microbiological Societies render an Opinion designating strain ATCC (American Type Culture Collection) 3004, (IMRU (Institute of Microbiology, Rutgers University) 3004) as the neotype strain of the species Streptomyces albus (Rossi Doria) Waksman and Henrici (basionym Streptotrix alba [sic] Rossi Doria 1891). This strain would then serve as the neotype strain of the type species of the genus Streptomyces Waksman and Henrici 1943.

1. In a recent survey of 26 specialists in the field of actinomycete taxonomy, 14 favored the International Code of Nomenclature of Bacteria and Viruses as the basis for nomenclature of the Actinomycetales.

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2. Descendants of the holotype culture of Streptotrix [sic] alba Rossi Doria 1891 are no longer extant.

3. No type strain or neotype strain has been officially designated.

4. R. Hütter (1961) has proposed that strain ATCC 618 be designated as the neotype strain. However, insofar as can be determined, the history of this strain can be traced back to Krainsky in 1914. The history of strain ATCC 3004 (IMRU 3004) can be traced back to Berestnev in the 1890's.

5. S.A. Waksman (1961, p. 172) designates strain IMRU 3005 as the "type culture." The characteristics of this strain do not conform to those cited by Waksman and Henrici (1943). The strain exhibits characteristics attributed to Streptomyces griseus.

6. The characteristics of Rossi Doria's isolates suggest that the organism he studied was, in fact, an isolate of what is now recognized as Streptomyces griseus (Krainsky) Waksman and Henrici.

7. The descriptive material in the Rossi Doria publication leaves much question with regard to the identity of the organism with which he was working; so much so that Waksman and Henrici in 1943 proposed a concept for S. albus that bears little or no resemblance to the concept proposed by Rossi Doria.

8. Since about 1919, the characteristics for S. griseus have been presented in such fashion that there is little difficulty in assigning a given isolate to this species based on the characteristics required. The species, because of the work of Waksman and his collaborators, is well established in actinomycete taxonomy. Any effort to relate these strains to S. albus, based on the incomplete Rossi Doria concept (as measured by today's criteria in actinomycete taxonomy), would cause great confusion and result in greater chaos than is now present in actinomycete taxonomy.

9. Based on the 1943 Waksman and Henrici concept for S. albus there is little difficulty for specialists in the field to identify a given isolate with this species.

10. Strain ATCC 3004 (IMRU 3004) fulfils the requirements for classification in the species Streptomyces albus as the species is currently defined.

11. Strain ATCC 3004 (IMRU 3004) apparently is a viable descendant of the oldest known streptomycete isolate bearing the label "albus."

12. In support of the above statement we would like to call to the attention of the Commission the appended references. With regard to the references cited, attention should be called to several points.

    1. The reason for the change of proposed strain number from ATCC 618 to ATCC 3004 (IMRU 3004) is explained in the footnote on page 370 of the Lyons and Pridham article (1962).

    2. Information given on page 369, paragraph 2, of the Hütter article is incorrect. Neither of the two strains mentioned would be classified as strains of S. griseus. Strain NRRL B-1685 is, in fact, our designation for strain ATCC 618 which the author proposed as the neotype strain of S. albus. Strain ATCC 3004 is the strain characterized in our 1962 publication.

    3. Strain IMRU 3005, designated as the type culture of S. albus on page 172 of the Waksman volume 2 (1962), has characteristics that conform with those of S. griseus, based on our study of a culture of the strain obtained directly from Waksman.

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