BACTERIOLOGICAL NOMENCLATURE AND TAXONOMY

OPINION I. THE CORRECT SPELLING OF THE SPECIFIC EPITHET IN
THE SPECIES NAME *BACILLUS MEGATHERIUM* DE BARY 1884.

Approved by the Judicial Commission of the International
Committee on Bacteriological Nomenclature.

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THE JUDICIAL Commission has been asked to issue an Opinion relative to the preferred spelling of the specific epithet in the species name *Bacillus megatherium* de Bary 1884 (1)

Two spellings of the specific epithet are current in the literature, namely *megatherium* and *megatherrium*.

Rule 27 of the International Bacteriological Code of Nomenclature states

The original spelling of a name or epithet must be retained except in the case of a typographical error or of a clearly unintentional orthographic error

de Bary apparently deliberately chose the spelling *megatherium* and used it consistently in his writings. There is no evidence that *megatherium* was a typographical error for *megatherrium*.

However, in the literature of bacteriology there has been a widespread assumption that the correct spelling is *megatherrium*. The first use of *megatherrium* thus far found is that of Schroeter (1889)(2). Sternberg (1892)(3) and Beijerinck (1893)

(1) and later consistently used the spelling *megatherrium*, as did also Lehmann and Neumann (1896)(2) and many others.

de Bary gives no clue as to the etymology of *megatherium*. The emendation *megatherrium* obviously derives from the Greek prefix *mega* large, and the neuter diminutive noun *therion* animal or beast. Breed (1929)(3) apparently gave the first published explanation of why such a specific epithet should have been applied. He states that in conversation with Prof. Winogradsky, who had worked in de Bary's laboratory, he was informed that the organism was there known as 'Grosstier' or 'big beast'. Rippel (1940)(4) suggests that de Bary's use of the phrase 'für die stattliche Species' in naming the organism indicates that there may have been used in de Bary's laboratory the nickname 'Grosstier' or 'Grossvieh'.

Three explanations of the spelling *megatherium* have been suggested

1. *Megatherrium* is to be regarded as an unintentional orthographic error for *megatherrium*.

(1) deBary, A. Vergl Morph u. Biol. d. Pilze, Mycetozoa und Bakterien. Leipzig, 1884.

(2) Schroeter J. Die Pilze Schlesiens in Cohn's Kryptogamenflora von Schlesien. Hälfte 1. 3: 160. 1889.

(3) Sternberg G. M. Manual of Bacteriology. 1892. New York.

(1). Beijerinck M.W. Ueber die Butylalkoholvergärung und das Butylferment. Verhandl. Kon. Akad. van Wetenschappen. Amsterdam. Sec 2. Part 1 No 10. 1893.

(2) Lehmann K.B., and R. Neumann Atlas und Grundriss der Bakteriologie. München. 1896.

(3) Breed, R. S. Science. 70: 480. 1929.

(4) Rippel, Arch. Mikrobiol. 11. 470. 1940.

INTERNATIONAL BULLETIN

The fact that de Bary and his pupils consistently used the former spelling seems to argue against this interpretation

2. Rippel (1940) presents evidence that *megaterium* is a contraction of *megabacterium* by elision of "ba" and has the meaning of "large rodlet".
3. The derivation of *megaterium* from *μέγας*, *megas*, large, and *τέρας*, *teras*, monster has likewise been proposed. This is a possibility. However, the Greek stem is alternatively *teras* or *terat* and there seem to be no examples in which the stem is shortened to *ter*.

The Judicial Commission concludes that the etymology of the specific epithet *megaterium* is uncertain and that there is no adequate evidence either that this spelling is the result of a typographical error or that it is a clearly unintentional orthographical error. The original spelling of the author should be retained.

Note. In the ballot of the Commissioners there were nine votes in favor of accepting *megaterium*, three in favor of *megatherium* and two abstentions.

OPINION The spelling *megaterium* of the specific epithet in *Canthlus megaterium* de Bary 1884 is to be preferred to the spelling *megatherium*.