

International Committee on Systematic Bacteriology Taxonomic Subcommittee on *Enterobacteriaceae*

Minutes of the Meeting, 8 September 1986, Manchester, England

Minute 1. Call to order. The Chairman, D. J. Brenner, called the meeting to order at 9:00 a.m.

Minute 2. Record of attendance. Present were J. Bockemühl, D. J. Brenner (Chairman), W. Frederiksen, P. A. D. Grimont, L. Le Minor, F. Ørskov, I. Ørskov, J. L. Penner, R. Sakazaki, and G. A. M. Wauters. P. H. Mäkelä and B. Rowe were absent.

Minute 3. Opening remarks. The chairman welcomed those present, acknowledged a letter of regret from P. H. Mäkelä and the resignation of D. Dye, and asked J. L. Penner to act as Secretary for the first segment of the meeting.

Minute 4. Minutes of the last meeting. The minutes recorded at the previous meeting held in Boston on 10 August 1982 had been previously circulated. No notice for amendments had been made.

Minute 5. Agenda. The Chairman discussed the agenda and proposed changes in the order. The first item discussed was the opinion rendered on the taxonomy and nomenclature of *Yersinia pestis* and *Yersinia pseudotuberculosis*. The opinion to conserve *Y. pestis* was based on a new principle of retaining established names for perilous organisms. Discussion centered on the impact that this precedent could have on the science of taxonomy and the authority by which a species could be designated as perilous. The benefit in retaining the name *Y. pestis* is that it would avoid confusion, particularly for health agencies that have regulations governing perilous organisms.

Other organisms that could conceivably fall into the category of perilous names were discussed, and the cases of *Shigella-Escherichia coli* and *Vibrio cholerae* were mentioned as possible future problems.

Minute 6. Distribution of a paper. Copies of a paper entitled "Proposal for the Rejection of *Salmonella choleraesuis* and for the Designation of *Salmonella enterica* sp. nov., nom. rev. as the Type Species for the Genus *Salmonella*" by L. L. Minor and M. Y. Popoff were distributed.

Minute 7. Report of the Coordinator (R. Sakazaki) of the Working Group on *Klebsiella-Enterobacter-Hafnia-Serratia*. It was moved by R. Sakazaki and seconded by P. A. D. Grimont that R. Sakazaki will distribute the recommendations to subcommittee members. Those that do not agree with the recommendations may write minority reports. Approved.

A document by J. J. Farmer on remaining taxonomic problems in the *Enterobacteriaceae* will be circulated to the subcommittee.

Minute 8. Minimal standards. D. J. Brenner distributed a revised draft of "Proposal of Minimal Standards for the Description of New Taxa in the Family *Enterobacteriaceae*." Membership feedback on the first draft consisted of providing additional tests and data missing in the first draft. The points raised in the discussion included the following. (i) What is truly minimal? Should deoxyribonucleic acid hybridization be included in the list of minimal tests? (ii) The purpose of the minimal list of tests is to give editors and investigators guidelines on whether the species is adequately described. (iii) Minimal standards should not be

so complex that a competent investigator in a small laboratory is prevented from proposing a new species. At present, the system for proposing new species is working well, and there is a good intuitive feel among the scientists for recognizing and proposing new species. Minimal standards should not be such that a science-by-committee approach is developed. (iv) A question concerning methods was raised. Methods used at the Centers for Disease Control and other methods known to D. J. Brenner are cited in the draft. Other laboratories may employ other methods, but since the methods described in the draft work satisfactorily, the onus will be on the investigator using methods different from those cited to demonstrate that other methods give equivalent results. These alternative methods should be included in the list of methods for minimal standards. (v) Some special tests are needed for some species, but these should not be required for all the species in the family. (vi) It was noted that some tests are more important for a minimal standard than others, and it remains to be determined which ones are important for the species and for the genus. (vii) The problem of incubation temperatures, particularly for *Yersinia*, needs to be addressed. A more precise definition of room temperature, which varies from one laboratory to the next, should be considered. (viii) In a number of cases, it is not known how different methods compare, and consideration should be given to a comparative study before a list of standard tests is produced. An example of one such case is the TSI test used for H₂S at the Centers for Disease Control, whereas other laboratories use other tests.

A committee of P. Grimont, L. Le Minor, and R. Sakazaki was proposed to revise the draft on minimum standards by June 1987, to examine methods of performing tests, and to recommend which tests are truly minimal for the species and genera in the family *Enterobacteriaceae*. Approved.

Minute 9. Membership. (i) *Retirements.* It was moved by R. Sakazaki and seconded by D. J. Brenner that W. H. Ewing be thanked for his many years of contribution to the subcommittee and that he be made an emeritus member. Approved.

It was moved by P. A. D. Grimont and seconded by W. Frederiksen that a letter of appreciation for service be written to D. Dye. Approved.

(ii) *Working groups.* The membership of the working groups was reviewed; members who have retired were removed from the groups, and other members were added after discussion. Other names will be added when necessary. A revised list of the membership will be circulated by the Chairman.

(iii) *Election of Chairman.* P. A. D. Grimont was elected Chairman of the subcommittee.

(iv) *Election of Secretary.* J. L. Penner was elected Secretary.

Minute 10. Other business. The organizers of the next International Congress of Microbiology must be advised to be sure to avoid conflicts in scheduling meetings of the subcommittees.

It was agreed that members of the subcommittee should

send reprints of their publications as soon as they become available to other members.

Minute 11. Adjournment. The Subcommittee adjourned this session of the meeting at 12:05 p.m.

Minute 12. Call to order. The subcommittee reconvened on 8 September 1986 at 8:00 p.m. F. Brenner was Acting Secretary.

Minute 13. Additional discussion on minimal standards. Additional discussion on minimal standards included the following comments: (i) It must be made clear that investigators must compare potential new species with their closest phenotypic relatives within and outside a given genus and (ii) a possible standard is the enterobacterial common antigen.

Minute 14. *Salmonella* nomenclature. *Salmonella choleraesuis* is presently the type species of *Salmonella*. It is also a serotype name and is therefore confusing. L. Le Minor wishes to propose a new type species name, "*Salmonella enterica*." The subcommittee has supported this concept in the past and unanimously reaffirmed its support. The new name has been suggested in papers by L. Le Minor and is used in the new edition of *Identification of Enterobacteriaceae* by W. H. Ewing. A request for an opinion must be made to the Judicial Commission to conserve "*S. enterica*" over *S. choleraesuis*. The thrust of the request will be to

minimize the confusion caused by having *S. choleraesuis* as the name of the type species. This will be done by L. Le Minor and M. Y. Popoff (see Minute 6).

Subcommittee members made several comments and suggestions on the Le Minor-Popoff "*S. enterica*" proposal.

(i) Clinical laboratories now report and will continue to report salmonellae by serotype. (ii) Examples of the way *Salmonella* serotype *typhi* and other serotypes are now reported should be provided. (iii) Workers should differentiate between scientific and practical nomenclature for salmonellae. (iv) Recommendations of the subcommittee on "*S. enterica*" should be published as part of subcommittee minutes in the International Journal of Systematic Bacteriology so that this can be referenced in the Le Minor-Popoff paper.

Minute 15. Outgoing Chairman. D. J. Brenner congratulated the new officers and thanked the subcommittee members for the accomplishments made during his 8 years as Chairman. P. A. D. Grimont thanked D. J. Brenner for his efforts.

Minute 16. Adjournment. The meeting was adjourned at 10:00 p.m.

John L. Penner, *Secretary*