



International Committee on Systematics of Prokaryotes

Online meeting of the ICSP Publications Committee with members of the IJSEM Editorial Board

6th March 2024, 11.00-12.25 CET

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Participated: C. Manaia (chair), A. Oren (secretary), D.R. Arahall, H. Ay, H. Christensen, R.R. de la Haba, P.-E. Fournier, A. Jones, W.-J. Li, M. del C. Montero-Calasanz, E.R.B. Moore, D. Proença, P. Rahi, J. Romalde, M.E. Trujillo, S.N. Venter, Y.-Q. Zhang, and Microbiology Society staff member N. Froude.

Apologies were received from S.L.W. On and C.J. Hugo.

Issues discussed included strategies to increase the impact and citations of IJSEM; adherence to journal guidelines and policies; how to deal with minimal descriptions; and distinguishing between the rules of nomenclature and the minimum level of scholarship required for publication in IJSEM.

C. Manaia: Presented a list of competing journals prepared by N. Froude, based on journal citations in recent validation lists. The impact factor of *IJSEM* is not significantly lower than most competing journals, which are in the same range. *Frontiers in Microbiology* and *Microorganisms* have higher impact factors. However, these journals do not publish 'minimalist' species taxonomic descriptions, with their papers containing more extensive information. *Systematic and Applied Microbiology* also has a higher impact factor; manuscripts submitted to that journal now need to contain metagenomic evidence to support the relevance of the described taxa in the environment.

H. Ay: A more comprehensive analysis of the genomes will increase the quality of the papers in the *IJSEM*, and improve the journal's impact factor.

E.R.B. Moore: The relevance of an organism in its environment is seldom clear in submitted IJSEM manuscripts. Supplying this information should be a requirement.

P.-E. Fournier: Uses metagenomics in cases when cultivation is difficult or impossible. However, metagenomes are poorly reproducible and difficult to interpret.

S.N. Venter: When authors have the genome sequence available, they should check the databases whether similar organisms may be found in metagenomes or elsewhere. Information on the ecosystems where similar genomes were earlier encountered may be highly relevant for the understanding of the ecological role of the organism.

H. Christensen: Metagenomic information is of little value, unless it can be related to the ecosystem from which the organism was isolated.

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D. Proença: Although having multiple isolates is always preferable, publication of new taxa based on single isolates can be important, especially when the organism shows novel properties and is not closely related to any known organism.

D. Proença and P.-E. Fournier: The quality of the genome sequence is important and should be documented.

Oren: The Chun *et al.* 2018 paper (Minimal standards for the use of genome data for the taxonomy of prokaryotes, *IJSEM* 68: 461-466) is still relevant as a guideline. An updated version, with M.E. Trujillo as a co-author, has been reviewed and a revised version is in review.

R.R. de la Haba: How can one assess which isolates are ecologically relevant?

E.R.B. Moore: Relevance can be anything that the authors want to present.

M.E. Trujillo: *IJSEM* does not need to publish new species descriptions of poor quality.

M. del C. Montero Calasanz: The editors of *IJSEM* need to be more strict. The Instructions for Authors should stress that the rationale of performing the study should be made clear in manuscripts.

E.R.B. Moore: Conflicts between authors and editors are inevitable, as editors cannot please everyone. Editors should consider themselves as 'judges' and the last line of evaluation of manuscripts before publication. Editors should not be afraid to reject papers.

P. Rahi: Most species descriptions in *IJSEM* look technically OK, but many present little scientific innovation. Decisions to accept/reject are difficult to make, but based on the scientific level, many papers published in the journal could have been rejected.

M.E. Trujillo: Clarivate assigns *IJSEM* to the Microbiology category and, therefore, *IJSEM* needs to compete with many new journals in this category.

P. Rahi: Society-linked journals appear to become increasingly popular, in spite of having lower impact factors than others from large publishers.

A. Oren: In 2010, Tindall *et al.* published a paper entitled 'Notes on the characterization of prokaryote strains for taxonomic purposes' (*IJSEM* 60: 249–266). It may be worthwhile to update this paper to serve as guidelines showing what editors expect from authors who submit descriptions of new species.

M.E. Trujillo: Is looking forward to input from all participants in the meeting with suggestions on how to improve the Instructions for Authors. She proposed that the Instructions for Authors should be updated, and a revised version should be ready no later than September.

As general conclusions of the meeting, it was recommended that Editors should: i) not hesitate to reject (preferentially pre-screen reject) papers with minimal descriptions – e.g species represented by a single strain; ii) require the authors to describe the objectives and/or of the ecological or other relevant context of the study that gave origin to that description; iii) require the authors to highlight based on specific properties and characteristics, rather than on generalist statements, why the description of a new taxa justified; iv) require that genome

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sequence data quality standards are fulfilled and that genome analysis is used for comparative and/or functional inferences, besides only limited data, e.g., %GC content, ANI/dDDH or other.

Summary prepared by A. Oren
7th March 2024