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Inclusive and productive ways forward needed for species-naming conventions

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uedes and colleagues' call¹ to eliminate taxonomic eponyms stems from intense ongoing debates²⁻⁴. The International Code on Zoological Nomenclature Commission has categorically stated that it will not do this (discussed more thoroughly in ref. 4); doing so would eliminate the stability that the code provides and would sow chaos at a time when scientists must work together to mitigate the biodiversity crisis and bolster public confidence in science. Accordingly, any solutions to the debate must be mindful of global scientific and taxonomic practice.

Removing existing eponyms would wipe out many names that honour local researchers, historical figures, cultures and potentially places^{2,4}, which have become more common - replacing historic trends that predominantly honoured a less diverse set of persons¹. Given the recentness of the trend to prioritize Indigenous names in taxonomy², lower- and middle-income countries with a taxonomic infrastructure that has been established relatively recently⁵ would be especially affected by the loss of eponyms, as there might be no existing synonyms to replace eponyms or possible replacements might themselves be eponyms. In this context, researchers from higher-income countries with more funding and infrastructure might then have advantages in the race to rename species.

Guedes et al.¹ also suggest prohibiting eponym designation going forward, but we find this even more ethically problematic than eliminating them altogether. Prohibiting future eponyms would effectively deny local researchers the same tools as historical researchers. We need to enable and encourage taxonomic work worldwide rather than punish present-day researchers for the prior actions of colonialists from other countries. The use of eponyms empowers in-country researchers to name their own biodiversity in a way that honours and celebrates local figures - contemporary or historic - who deserve recognition for their contribution to people's welfare or advances in biodiversity research and conservation. The elimination of eponyms may counteract the increasing tendency to

honour local individuals and could generate discontent among those who most need empowering. One might even consider a ban on eponyms itself colonialistic without consideration or due compensation for the hundreds of years that colonizing countries pursued such goals unchecked, paralleling some climate solutions that have been criticized for targeting lower- and middle-income countries⁶.

Constructive solutions are needed to bend the curve of biodiversity description towards inclusion and we argue that bans on scientific eponyms are unproductive and even morally problematic. Given the immense number of undescribed insect species (perhaps 20% or fewer are named⁷), not to mention other hyperdiverse groups such as fungi, there is still the potential to make the majority of eponymous species names reflective of Indigenous peoples, cultures and places if the right steps are taken to modernize taxonomic practices. Here, we propose two major solutions that involve both funding and publishing regulations, and reforms in common name conventions.

There is no doubt that taxonomic work requires stronger support⁵ and the way that this is done can directly increase the proportion of eponyms that honour Indigenous cultures. Biodiversity funds such as those proposed in the Convention on Biological Diversity's Kunming-Montreal Biodiversity Framework, as well as national or multinational granting agencies, should set aside funds for species description that are contingent on the inclusion of local researchers and the prioritization of local name use in at least some expected proportion of the resulting new species names. Similarly, editors and reviewers at scientific journals could also encourage the use of more-representative naming in their policies.

Common names also offer a productive avenue for naming reform. There, the removal of eponymous or other potentially offensive references could be enacted with comparably little strife: the standardization of common names in birds offers a template of approaches to do this⁸. The Entomological Society of America has begun this process for insects: for example, *Lymantria dispar* has been renamed the 'spongy moth'⁹. There is already will and action among taxonomists for this, which makes it a much more productive endeavour.

Through these and other representative and inclusive initiatives, eponyms can have an empowering role in 21st century taxonomy. With increased capacity in countries where colonial legacies remain, researchers should be encouraged to honour each other and other important cultural figures and features while better understanding their own biodiversity.

Michael C. Orr $eilensin 1, 2 \ interface Michael C. Hughes³, Omar Torres Carvajal <math>
eilensin 4, Rafael R. Ferrari <math>
eilensin 1, Arong Luo 1, Hossein Rajaei 2, Santiago R. Ron 4, Natapot Warrit⁶, Alireza Zamani 7, Yuanmeng Miles Zhang 8 & Chao-Dong Zhu 1, 19, 10 \ interface Michael Aligner Michael Chael Ch$

¹Key Laboratory of Zoological Systematics and Evolution, Institute of Zoology, Chinese Academy of Sciences, Beijing, China. ²Entomologie, Staatliches Museum für Naturkunde Stuttgart, Stuttgart, Germany. ³School of Biological Sciences, University of Hong Kong, Hong Kong, China. ⁴Pontifical Catholic University of Ecuador, School of Biology, Museum of Zoology, Quito, Ecuador. ⁵Environmental Science Training Center, Federal University of Southern Bahia, Porto Seguro, Brazil. 6Center of Excellence in Entomology and Department of Biology, Faculty of Science, Chulalongkorn University, Bangkok, Thailand. ⁷Zoological Museum, Biodiversity Unit, Faculty of Science, University of Turku, Turku, Finland. ⁸Institute of Evolutionary Biology, University of Edinburgh, Edinburgh, UK. ⁹State Key Laboratory of Integrated Pest Management, Institute of Zoology, Chinese Academy of Sciences, Beijing, China.¹⁰College of Life Sciences, University of Chinese Academy of Sciences, Beijing, China.

⊡e-mail: michael.christopher.orr@gmail.com; zhucd@ioz.ac.cn

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Correspondence

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Author contributions

M.C.O, A.C.H. and C.-D.Z. conceived the paper. M.C.O. led the writing. A.C.H., O.T.C., R.R.F., A.L., H.R., S.R.R., N.W., A.Z., Y.M.Z. and C-D.Z. contributed to discussions and provided significant inputs on at least one near-final draft.

Competing interests

The authors declare no competing interests.