

## JOURNAL POLICY ON NAMES OF AEDINE MOSQUITO GENERA AND SUBGENERA

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The International Code of Zoological Nomenclature exists to promote stability and universality of scientific names in taxonomy, using the Linnean binomial system (genus and species), to ensure that the valid name of each species is distinct within each unique genus, according to the rules of priority. In the context of biosystematics, the code does not restrict freedom of taxonomic thought or action. Through the code, nomenclature shows the rank accorded to any formal group of animals (e.g., family or tribe, genus or subgenus, species or subspecies) leaving ample scope for informal categories such as species complexes, phylogenetic clades, and other groups. All classifications and reclassifications above the species level depend on subjective interpretation of taxonomic evidence, so uniformity is arrived at through consensus among systematists, and eventually adopted by the rest of the scientific community.

Reclassifications that result in changing the names of common pests and vectors, for which there is extensive older literature, inevitably create considerable confusion among teachers, students, and researchers, with communication difficulties and financial implications for republishing educational materials, keys, catalogs, and management of databases. When reinterpreting the relationships between species and groups of applied importance, systematists have responsibility to limit the impact on nomenclature. Such caution was not exercised when the majority of known species and subgenera of *Aedes* mosquitoes were transferred to the restored genus *Ochlerotatus* based on taxonomic characters that few other workers have examined.<sup>1</sup> Many investigators adopted the new name combinations without fully understanding the reasons. Savage and Strickman<sup>2</sup> gave a comprehensive argument against splitting *Ochlerotatus* from *Aedes*, whereas Black<sup>3</sup> defended this step. The latest proposal by Reinert and others<sup>4</sup> to elevate dozens of additional subgenera of Aedini to generic status creates a further dilemma for journal editors and authors. Mosquito systematists and cladists remain divided on the appropriateness of these changes. Anyone can join the debate at <http://wrbu.si.edu/forums>. Meanwhile, authors should be aware of the current editorial policy of the American Journal of Tropical Medicine and Hygiene (AJTMH) on this fluid issue.

AJTMH\* takes the position that more research (including

\* Following consultation with several other journals in our field, whose editors share our concern for limiting confusion with respect to

molecular evidence) and interpretation are needed to develop a consensus on the reclassification of Aedini proposed by Reinert<sup>1</sup> and Reinert and others.<sup>4</sup> In particular, the nomenclatural implications need to be separated from their cladistic analyses. Accordingly, AJTMH encourages authors dealing with aedine mosquitoes to maintain usage of the traditional names (<http://www.mosquitocatalog.org/main.asp>), except when the author has taxonomic reasons for not doing so. AJTMH also will permit authors to adopt the newly proposed classification of Aedini (with 46 genera recognized by Reinert and others<sup>4</sup>) if they are convinced of the case, e.g., for elevation of any particular genus. In such cases, authors are asked to include the previous binomial combination when the species is first mentioned in the text of any submitted paper, as in the following examples: *Stegomyia albopicta* (= *Aedes albopictus*, see Reinert and others<sup>4</sup>), *Ochlerotatus triseriatus* (= *Aedes triseriatus*, see Reinert<sup>1</sup>).

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2. Savage HM, Strickman D, 2004. The genus and subgenus categories within Culicidae and placement of *Ochlerotatus* as a subgenus of *Aedes*. *J Am Mosq Control Assoc* 20: 208–214.
3. Black W, 2004. Learning to use *Ochlerotatus* is just the beginning. *J Am Mosq Control Assoc* 20: 215–216.
4. Reinert JF, Harbach RE, Kitching IJ, 2004. Phylogeny and classification of Aedini (Diptera: Culicidae), based on morphological characters of all life stages. *Zool J Linnean Soc* 142: 289–368.

names of the aedine mosquitoes, namely: The Journal of Medical Entomology, Annals of Tropical Medicine and Parasitology, Emerging Infectious Diseases, Journal of the American Mosquito Control Association, Journal of Vector Ecology, Medical and Veterinary Entomology, Transactions of the Royal Society of Tropical Medicine and Hygiene, Vector Borne and Zoonotic Diseases, and PROMED.