A proposal for the use of standardized abbreviations for the genera of triatomine bugs (Reduviidae: Triatominae) across the World

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Dear Editor:

One-letter abbreviations are often, but not mandatorily, used for the names of animal genera. This leads to difficulties in those publications where several genera with the same initial letter are described. Proper use of abbreviations is recommended by the International Code of Zoological Nomenclature (ICZN, Chapter 7, Article 25, Recommendation 25A, 1999). Two-letter abbreviations for the genera of Phlebotominae, Ixodidae, and Culicidae have been proposed and widely used by many experts.

Because triatomine bugs, with 151 valid species, are distributed in at least 17 genera, their initials might be the same; for example, for Panstrongylus, Parabelminus, and Paratriatoma, the abbreviation would be “P” and for Belminus and Bolbodera, it would be “B.” Thus, it would be useful to have two-letter abbreviations for this group. “Pa.” was used for Paratriatoma, first cited between brackets, although this usage was not defined previously in literature.

The following abbreviations are proposed for the genera of Triatominae: Alberprosenia Martínez and Carcavallo, 1977, Al.; Belminus Stål, 1859, Be.; Bolbodera Valdés, 1910, Bo.; Cavernicola Barber, 1937, Ca.; Dipetalogaster Usinger, 1939, Di.; Eratyrus Stål, 1859, Er.; Hermanlentia Jurberg and Galvão, 1997, He.; Linschcosteus Distant, 1904, Li.; Meccus Stål, 1859, Mu.; Mepraia Mazza, Gajardo and Jorg, 1940, Me.; Microtriatoma Prosen and Martínez, 1952, Mi.; Nesotriatoma Usinger, 1944, Ne.; Panstrongylus Berg, 1879, Pn.; Paratriatoma Barber, 1938, Pt.; Parabelminus Lent, 1943, Pb.; Psammolestes Bergroth, 1911, Ps.; Rhodnius Stål, 1859, Rh.; and Triatoma Laporte, 1832, Tr. The second letters in the abbreviations were chosen with the consideration that they were not same as those present in the abbreviations of other genera with the same letter as the first initial.

The validity of Mepraia as a genus has been controversial. Created to accommodate Me. spinolai, a triatomine bug with alar polymorphism, it was included in Triatoma, but was validated again, and its reinclussion in Triatoma was recently proposed. The genus Meccus was synonymized to Triatoma and revalidated, because of its exaggerated size, compared to Triatoma, great width of conexivum, and differences in the structure and shape of testicles. This revalidation was corroborated by molecular analysis, but the genus was again considered as non-valid.

The revalidation of Nesotriatoma as a genus, and its inclusion as a subgenus of Triatoma, was proposed. If the last proposal is accepted, the three-letter abbreviation for the name of this is proposed to be “Nes.”, as described in previous studies. The presence of numerous monotypic genera and the need for careful evolutionary analysis warrant meticulous studies on population structure and genetic flux. Considering the current controversies on the phylogeny of subfamilies, new abbreviations, as described above for the mentioned genera, may be used by workers who prefer to accept the genus status.

Because of the low probability of reference to both Culicidae and Phlebotominae in the same publication, no precaution, with respect to the use of similar abbreviations, is necessary, as exemplified in a previous study. For Culicidae, only Limatus (Li.), Psorophora (Ps.), and Trichoprosopon (Tr.), would have similar abbreviations; these genera occur in the American continent, where most species of Triatominae are found. For Phlebotominae, such coincidence occurs only for Hertigia (He.), Micropygomyia (Mi.), Phlebotomites (extinct) (Pt.), and Psychodopygus (Ps.).

Thus, we propose that the judicious and consistent use of abbreviations for the names of genera to avoid ambiguity in the literature.

REFERENCES


