Zootaxa 3709 (6): 597–600
www.mapress.com/zootaxa/

Correspondence

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

http://dx.doi.org/10.11646/zootaxa.3709.6.9
http://zoobank.org/urn:lsid:zoobank.org:pub:027D5D35-FE2E-4738-B502-0CF0136EC57F

Elucidating Article 45.6 of the International Code of Zoological Nomenclature: A dichotomous key for the determination of subspecific or infrasubspecific rank

STEVEN W. LINGAFELTER[1] & EUGENIO H. NEARNS[2]

[1]*Systematic Entomology Lab, ARS, USDA, National Museum of Natural History, MRC-168, P.O. Box 37012, Washington, DC 20013-7012, U.S.A. E-mail: steve.lingafelter@ars.usda.gov*

[2]*USDA Postdoctoral Researcher, Department of Entomology, Smithsonian Institution, National Museum of Natural History, Washington, DC 20013-7012, U.S.A. E-mail: gino@nearns.com*

Abstract

We present an overview of the difficulties sometimes encountered when determining whether a published name following a binomen is available or infrasubspecific and unavailable, following Article 45.6 of the International Code of Zoological Nomenclature (ICZN, 1999). We propose a dichotomous key that facilitates this determination and as a preferable method, given the convoluted and subordinate discussion, exceptions, and qualifications laid out in ICZN (1999: 49–50). Examples and citations are provided for each case one can encounter while making this assessment of availability status of names following the binomen.

Key words: available name, binomen, ICZN, subspecies, trinomen

Introduction

The determination of whether a species-group name originally formed as a trinomen is infrasubspecific or subspecific can be difficult to make, particularly given the convoluted exceptions and qualifications one finds in Article 45.6 (ICZN, 1999: 49–50). However, this is very important since many of the seemingly valid names that are published are not available, according to the code. This is the most critical determination one must make as a first step to assessing the status of a name that follows a binomen. This problem became very evident as we were completing the database of the primary types of longhorned woodboring beetles (Coleoptera: Cerambycidae and Disteniidae) in the collection of the National Museum of Natural History, Smithsonian Institution (Lingafelter, et al., in prep.). We discovered that many of the "types", although labeled and segregated by earlier researchers, did not, in fact, meet the status of availability as primary types since their trinomials were determined to be infrasubspecific.

When a fourth name follows a trinomen, that name is automatically infrasubspecific, according to Article 45.5 (aggregate or interpolated names excepted). However, when this is not the case, and one encounters a third name that follows a binomen, the provisions of Article 45.6 can make the determination more difficult. According to Article 45.6.2, "The rank denoted by a species-group name following a binomen is subspecific, except that it is deemed to be infrasubspecific if its author used one of the terms "aberration", "ab." or "morph". Likewise, according to Article 45.6.3 "it is deemed to be infrasubspecific if it was first published after 1960 and the author expressly used one of the terms "variety" or "form" (including use of the terms "var.", "forma", "v." and "f.").

However, according to Article 45.6.4, a species-group name is considered "subspecific if first published before 1961 and its author expressly used one of the terms "variety" or "form" (including use of the terms "var.", "forma", "v." and "f."), *unless* its author also expressly gave it infrasubspecific rank, *or* the content of the work unambiguously reveals that the name was proposed for an infrasubspecific entity, in which case it is infrasubspecific"; *except* that according to Article 45.6.4.1, "a name that is infrasubspecific under Article 45.6.4 is nevertheless deemed to be subspecific from its original publication if, before 1985, it was either adopted as the valid name of a species or subspecies or was treated as a senior homonym."

In summary, one can conclude that the terms "aberration", "ab." and "morph" *always* denote infrasubspecific status. The terms "variety" or "form" (including use of the terms "var.", "forma", "v." and "f.") only denote infrasubspecific

Accepted by Q. Wang: 7 Aug. 2013; published: 10 Sept. 2013