



Formation of family group names using the stem of -gaster, with special reference to names based on *Miscogaster* and *Sphegigaster* (Hymenoptera: Chalcidoidea: Pteromalidae)

ROGER A. BURKS

Department of Evolution, Ecology, and Organismal Biology, The Ohio State University, 1315 Kinnear Road, Columbus, OH 43212, U.S.A. E-mail: burks.roger@gmail.com

Article 29.3.1 of the International Code of Zoological Nomenclature dictates that family group names are formed by deleting the case ending from the genitive singular, when the genus ends in a Latin or classical Greek word (ICZN 1999). This process determines the genitive stem of the word. Formation of a family group name based on an incorrect genitive stem is considered an incorrect original spelling, and the Code requires that it be automatically changed to the correct stem if described before 1999 in cases where this does not create a junior homonym (Article 35.4.1).

Implicit in the wording of these articles is the assumption that there is only one correct genitive stem for each classical word. This assumption is not challenged in most situations, and typically an incorrectly formed family name will be changed to the correct form without discussion. This can be called an assumption of objectivity in choice of genitive stems, meaning that there is assumed to always be one correct form. Correcting spelling of the stem when forming family-group names is not considered to be a nomenclatural act, and is done automatically by authors who find this error. The correctly formed name is given the same authorship and publication date as the incorrectly formed name. Unfortunately, a few words have had multiple genitive stems in classical literature, and this has led to some confusion.

Genitive stem of “gaster”

One classical word used commonly in zoological nomenclature, but with multiple genitive stems, is γαστήρ (transliterated: gaster). Many dictionaries list two alternative singular genitives for γαστήρ: γαστρός and γαστέρος (transliterated: gastros and gasteros, respectively), but few discuss the differences in application and frequency between these two forms. One source that does discuss this is the expanded lexicon by Liddell *et al.* (1940). They explain that γαστέρος is used in lyric and epic poetry, possibly to produce euphony in vocal recitation. The genitive γαστρός (the syncopated form) was far more commonly used, and is considered the prose genitive. This interpretation was confirmed by Smyth (1920). However, in some 19th century lexica, γαστέρος was listed as the first genitive form without as much explanation (Donnegan 1831; Liddell & Scott 1843). It was in later, especially 20th century, lexica that differences in usage between the two stems were more completely specified. This is possibly due to an assumption in older editions that most readers would be attempting to read poetry instead of prose. The order of these two stems in these dictionaries may explain why some 19th century biologists, such as Francis Walker, concluded that γαστέρος was the correct genitive.

Walker consistently constructed family names using the gaster- stem, even when the original spelling of a family group name used the gastr- stem instead (Walker 1873). In later years there was a growing awareness that there were two genitive stems for generic names ending in -gaster. This is illustrated by occasional discussions of the matter when choosing between alternative forms (Walker 1958; Bouchard *et al.* 2011).

This issue received a community-wide discussion for hymenopteran names in the 1980's (Bouček 1986a, 1986b; Steyskal 1986; Graham 1987; Mason 1987). The end result was that names such as Microgastrinae and Platygasteridae tended to be spelled as recommended by Mason (1987). Names within Pteromalidae (Chalcidoidea) have been treated more chaotically, with some preferring gaster- as the stem (*e.g.* Bouček 1986a, 1986b; Graham 1987) [thus arguing against following the 1985 edition of the code] and others using gastr- as the stem (*e.g.* Heydon 1997; Bouček & Heydon 1997, Baur 2000) [these authors followed the recommendation in 3rd edition of the ICZN published in 1985]. Different forms have been used by different authors ever since. It should also be noted that Graham (1969) did not consistently use original spellings despite his recommendation (1987), but instead consistently emended names to use the gaster- stem.