



On the Nomina *Ramanella* and *Ramanella symbiotica* (Anura: Microhylidae)

Danniella Sherwood

Arachnology Research Association, Oxford, United Kingdom (danni.sherwood@hotmail.com; ORCID: 0000-0001-8170-9529)

The authorship of the microhylid nomina *Ramanella* and *Ramanella symbiotica*, now considered junior synonyms of *Uperodon* Duméril and Bibron 1841 and *U. variegatus* (Stoliczka 1872) (Fig. 1), has been attributed in various ways. A number of authors (including but not limited to Parker 1934; Duellman and Trueb 1994; Chanda and Deuti 1997; Sarkar and Ray 2004; Sarkar et al. 2004; Dubois 2005; Frost et al. 2006; de Silva et al. 2008; Dinesh and Radhakrislinan 2009; Ukuwela et al. 2010; Harpalani et al. 2015; Peloso et al. 2016; Garg et al. 2018; BioNames 2022; Frost 2022; GBIF 2022) have attributed both the genus *Ramanella* and its type species to the joint authorship of Rao and Ramanna 1925. Interestingly, Srinivasulu et al. (2006) attributed the authorship of the genus *Ramanella* (and the type-species) to Rao and Ramanna 1926, immediately afterward giving the date “1925” used by other authors in quotation marks, suggesting that these authors considered the work to have been published in 1926 instead of 1925. However, that statement is erroneous as the publication date of the part of the *Proceedings of the Zoological Society of London* that contained the article by Rao and Ramanna was clearly shown to be in 1925 by Duncan (1937). GNI (2022) has multiple entries for *Ramanella*, most attributing the authorship to Rao and Ramanna 1925, once (correctly) to Rao 1925, and one entry attributing it to Rao and Ramanna 1926 (presumably following Srinivasulu et al. 2006). Page (2022) cited *Ramanella* four times but only once with authorship, attributed (correctly) to Rao 1925. This one entry bears the silhouette of a lizard adjacent to the nomen (used on SpeciesCite to indicate the taxonomic group to which the nomen belongs) as opposed to the silhouette of a frog found in the three entries without explicit attribution of authorship or date. This is obviously an error. Clarivate Analytics (2022) has three entries for *Ramanella*, one without attribution of authorship and date, and two entries that attribute the authorship and date to Rao and Ramanella 1925.

Nonetheless, based on a sentence immediately following the first paragraph under the heading “Genus *Ramanella* nov.” in the original description, Rao alone is the author of

the genus. The sentence reads: “I have associated this genus with the name of my old pupil, Mr. B.S. Ramanna, who has shown great zeal in collecting research material for cytological and embryological work (Rao and Ramanna 1925: 587–588). Ramaswami (1936: 1137) therefore correctly stated in a footnote “Rao (1925) only associated the new genus with the name of his pupil Ramanna, and therefore the new genus was founded by Rao,” and this attribution was repeated in Ramaswami (1939). Neave (1940), Golvan (1962), and Rees (2022) also correctly attributed the genus *Ramanella* to Rao 1925. However, its type-species (*Ramanella symbiotica*) is clearly the work of both authors, based on the original text regarding the species, and the appropriate attribution is Rao and Ramanna 1925.

Rao and Ramanna (1925: 587) listed the species epithet of the type species as *symbiotica* on the contents page; however, on the following page, where the species is formally described, the name is spelled “*symbioitca*,” a *lapsus calami* per Article 32.5.1 of the Code (ICZN 2012). Parker (1934: 90, 94) listed the nomen as “*symbioitca*,” but this spelling is found nowhere in Rao and Ramanna (1925). Parker (1934) did not



Fig. 1. A Variegated Globular Frog, *Uperodon variegatus* (Stoliczka 1872) (= senior synonym of *Ramanella symbiotica* Rao and Ramanna 1925). Photograph © David V. Raju. Licensed for use under Creative Commons Attribution-Share Alike 4.0 International.

mention the existence of two spellings of the species epithet in Rao and Ramanna (1925) nor did he provide a spelling consistent with either species epithet in Rao and Ramanna (1925), thus failing to meet the criteria of First Reviser per Article 24.2.3 of the Code (ICZN 2012). The next author to mention this species was Ramaswami (1936, 1939), who consistently used the spelling *symbiotica* (Ramaswami 1936: 1138, 1152–1153; 1939: 44), also failing to meet the requirements of Article 24.2.3 of the Code (ICZN 2012). Therefore, by noting here the two original spellings in Rao and Ramanna (1925) and by establishing *symbiotica* as the correct spelling, I act as First Reviser per the Code (ICZN 2012).

The incorrect subsequent spelling “*symbioitica*” also was used by Dinesh and Radhakrislinan (2009: 174), Dinesh and Radhakrislinan (2013: 134), Dinesh et al. (2013: 411), GBIF (2022), and Frost (2022). The incorrect original spelling (per Article 32.4 of the Code) “*symbioitca*” was used by Garg et al. (2018: 39, 43). Clarivate Analytics (2022) and GNI (2022) listed the species epithet as “*symbioitea*,” which is an additional incorrect subsequent spelling and, like “*symbioitica*,” is not found anywhere in the original publication of Rao and Ramanna (1925).

Considerable confusion clearly has existed in the historical literature regarding the authorship (and in one case, date) that are attributed to *Ramanella* and *R. symbiotica* and to the spelling of the species epithet. As outlined above, online databases and future published works should list these nomina as *Ramanella* Rao 1925 and *Ramanella symbiotica* Rao and Ramanna 1925.

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