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From a dwarf to a giant: Revalidation of *Callulops valvifer* (Barbour, 1910), (Amphibia, Anura, Microhylidae)

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Abstract

According to the most recent revision of the subfamily Asterophryinae, the species *Pomatops valvifera* was considered to be a synonym of *Phrynomantis* (now *Callulops*) *robusta*. On the basis of recently collected material from near the type locality of *Pomatops valvifera* on the Bomberai Peninsula in western New Guinea, the invalidity of the genus name is confirmed but the species name is revalidated. *Callulops valvifer* (new combination) was hitherto unequivocally known from a single specimen of less than 30 mm snout-vent length. With a length of more than 70 mm for males and of more than 80 mm for females, this species is now among the largest of the currently known 22 species of the genus *Callulops*.

Key words: *Pomatops valvifera*; *Liophryne kampeni*; morphology; bioacoustics, Fakfak Mountains; western New Guinea

Introduction

The genus *Pomatops*, and its sole species *P. valvifera*, were erected by Barbour in 1910 to accommodate a microhylid frog of less than 30 mm snout-vent length that was found in the stomach of a natricine snake, *Tropidonophis mairii* (Gray, 1841). This snake was collected by A. E. Pratt at Fak Fak (today also spelled Fakfak) on the Bomberai Peninsula, then north-western Dutch New Guinea, today Papua Province of Indonesia. As the main feature to diagnose the new genus, Barbour (1910) referred to “a flap of skin extending for some distance anterior and posterior to the position of the eye. These flaps are sufficiently developed so that they may be laid down and thus completely cover the whole eye”. The monotypic genus *Pomatops* was considered valid by Van Kampen (1923) and Nieden (1926), but Parker (1934) synonymised it with *Asterophrys*. He correctly found that the diagnostic features given by Barbour do not apply. However, he maintained the species *Asterophrys valvifera* and considered *Liophryne kampeni* Boulenger, 1914 as a synonym of that species. *Asterophrys valvifera* was considered valid also by Loveridge (1948) and by Zweifel (1956). In his revision of the subfamily Asterophryinae Zweifel (1972) synonymised *Asterophrys valvifera* and *Liophryne kampeni* with *Phrynomantis robusta*. Dubois (1988) noted that the genus name *Phrynomantis* was preoccupied by a South African frog genus and he replaced it with the name *Callulops* Boulenger, 1888, for the at-present 22 Papuan taxa (Frost 2013, Günther et al. 2012).

According to Zweifel (1972) *Phrynomantis robusta*, now *Callulops robustus*, “is widely distributed throughout New Guinea from southeastern islands to the Vogelkop Peninsula”. The opinion that all frogs determined to be *Callulops robustus* from the mainland of New Guinea really belong to this species was doubted, for example, by Menzies (1975, 2006), Günther (2003), Kraus & Allison (2009), and Oliver et al. (2012). Kraus (2012) recently confined the areal distribution of *Callulops robustus* to the type locality of Misima Island (Louisiade Archipelago, east of the eastern end of mainland New Guinea) and resurrected *Mantophryne microtis* Werner, 1901, as a valid species of *Callulops*. If this taxonomic action proves to be correct, all frogs from mainland New Guinea that were hitherto treated as *Callulops robustus* belong to other species. New species of *Callulops* from the main island of New Guinea were described, after Zweifel’s (1972) revision of the genus, by Richards et al. (1995), Kraus & Allison (2003, 2009), Oliver et al. (2012), and Günther et al. (2012). Although Oliver et al. (2012) and Kraus (2012) suggested that *Pomatops valvifera* could be a valid taxon, they lacked material to define this taxon.