

A new morphologically cryptic species of forest frog (genus *Platymantis*) from New Britain Island, Bismarck Archipelago

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Abstract

We describe a new species of forest frog in the genus *Platymantis* from New Britain Island, Bismarck Archipelago, Papua New Guinea. The new species is a morphologically cryptic form that has masqueraded for almost four decades under the name *P. schmidti* (formerly *P. papuensis schmidti*, Brown & Tyler, 1968). The new species is microsympatric with the geographically widespread *P. schmidti* at two known localities. We diagnose the new species on the basis of its distinctive advertisement call and slight but consistent differences in body size and proportions. Calling males of the new species appear to prefer more elevated perches than do males of *P. schmidti* and the new species may exhibit a greater extent of sexual size dimorphism.

Key words: forest frogs, wrinkled frogs, *Platymantis*, Bismarck Archipelago, SW Pacific, advertisement calls, cryptic species diversity

Introduction

Frogs of the genus *Platymantis* (family Ranidae) have two major centers of diversity: one in the Philippines (26 species; Brown *et al.* 1997, Alcalá & Brown 1998, 1999), and another in the Solomon-Bismarck archipelagos (22 species; Brown 1952, 1997, Foufopoulos & Brown 2004, Brown *et al.* in press). Minor centers of diversity include 2–4 species endemic to eastern Indonesia (Menzies 1982a, 1982b, Edgar & Lilley 1993), six species in mainland New Guinea (Zweifel 1969, Allison 1996, Günther 1999), and possibly as many as seven species in the Admiralty Archipelago (W. C. Brown pers. comm.; SJR, unpubl. data); additionally, there are two species in Fiji (Gorham 1965, Morrison 2003), and one in Palau (Crombie & Pregill 1999).