

Two new species of large green canopy-dwelling frogs (Anura: Hylidae: *Litoria*) from Papua New Guinea

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Abstract

Litoria graminea is a large green canopy-dwelling frog originally described from a single specimen from an unknown locality in Papua New Guinea. We demonstrate that this species as currently recognised contains at least three distinct taxa. We restrict the name *L. graminea* to a population of animals occurring south of New Guinea's main cordillera and describe two new species of large green arboreal frogs, one from the Kikori River Basin (Southern Highlands and Gulf Province) and one from the Huon Peninsula (Morobe Province). The two new species can be distinguished from each other by differences in iris and sclera colouration, and both can be distinguished from *L. graminea* by their narrower heads, different iris colouration and by their small round (vs elongate) nuptial pads.

Key words: Amphibia, Hylidae, *Litoria graminea*, new species, Papua New Guinea

Introduction

Until recently only two species of very large (> 60 mm), green and slender arboreal *Litoria*, *L. graminea* and *L. infrafrenata*, were known from lowland and foothill rainforests of New Guinea. *Litoria infrafrenata* is comparatively well known and widely collected because it frequently occurs in close association with humans (Tyler 1968, Menzies 1976). In contrast *L. graminea* is rarely encountered and only a small number of specimens have been collected since its description by Boulenger (1905) (Parker 1936, Tyler 1968, Allison *et al.* 1998, Richards 2002). The rarity of these animals is attributable to their canopy-dwelling habits. The only other large, uniformly green *Litoria* in lowland New Guinea is *L. caerulea*, a robust species with distinct parotid glands that is found in drier forest habitats of southern and northern New Guinea (Tyler 1968).

Over the last ten years the senior author has collected a number of specimens provisionally referred to *Litoria graminea* from widely scattered localities north and south