

MORPHOLOGICAL AND GEOGRAPHIC VARIATION OF
PSEUDOPHRYNE CORROBOREE
(ANURA: LEPTODACTYLIDAE)

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SUMMARY

The toadlet *Pseudophryne corroboree* is confined to the mountains of southeastern New South Wales and the Australian Capital Territory. The first detailed distribution map is presented. The species ranges from Mt Kosciusco in the south to the Brindabella Range near Canberra in the north. The Brindabella Range populations are isolated from those in the south. The species has not been found below 1,040 m. Its range may, in part, be limited by competitive interactions with the closely related *P. dendyi*.

P. corroboree has only a single phalanx in the first toe. In this it differs from all other Australian leptodactylids except *P. guentheri* in which the condition probably evolved independently.

Geographic variation in coloration is briefly described. The adaptive significance of this variation is not clear.

Univariate analysis of morphometric variation (ten characters, four populations) shows that Brindabella Range individuals are larger bodied than those from the Snowy Mountains area. Furthermore, there are indications of clinal (altitudinal) trends in some variables. Discriminant function and Q-mode multiple factor analyses elucidate and confirm these patterns and separate altitudinal and ontogenetic components of variation within and between populations. Large body size in specimens from the Brindabellas may be an adaptation to the size of sympatric *P. dendyi* rather than a response to ecogeographic factors.

INTRODUCTION

The toadlet, *Pseudophryne corroboree*, with its striking pattern of black and yellow dorsal stripes, occurs only in the mountains of southeastern New South Wales and the Australian Capital Territory. First described by Moore (1953), the type specimen, R13103 is in the Australian Museum. Colefax (1956), Jacobson (1963),

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