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## A new skink (Scincidae: *Saproscincus*) from rocky rainforest habitat on Cape Melville, north-east Australia

CONRAD J. HOSKIN

School of Marine & Tropical Biology, James Cook University, Townsville, Queensland 4811, Australia.

E-mail: [conrad.hoskin@jcu.edu.au](mailto:conrad.hoskin@jcu.edu.au)

### Abstract

*Saproscincus* skinks are restricted to wet forest habitats of eastern Australia. Eleven species have previously been described, with most having small distributions in disjunct areas of subtropical and tropical rainforest. The localized distributions and specific habitat requirements of *Saproscincus* have made them a key group for understanding the biogeographic history of Australia's rainforests. Here I describe a new species of *Saproscincus* from the Melville Range on Cape Melville, north-east Australia. The Melville Range is composed of boulder-fields and areas of rainforest in the uplands, and is highly isolated from other areas of elevated rainforest. All individuals of the new species were found on a moist ridgeline, active on boulders under a rainforest canopy or on boulder-field immediately adjacent to rainforest. *Saproscincus saltus* **sp. nov.** is highly distinct in morphology and colour pattern. Of particular interest are its long limbs and digits compared to congeners, which in conjunction with the observed ecology, suggest a long history of association with rock. The discovery of *S. saltus* **sp. nov.** extends the distribution of the genus over 100 km north from the nearest congeners in the Wet Tropics region. This species brings the number of vertebrates known to be endemic to the Melville Range to six, which is remarkable for such a small area.

**Key words:** *Saproscincus basiliscus*, *Saproscincus lewisi*, Cape York, boulder-field, rainforest, lithorefugia, Queensland

### Introduction

The genus *Saproscincus* Wells & Wellington 1984 consists of 11 species distributed in the coastal ranges and lowlands of eastern Australia. Most of the species have localized distributions in rainforests of coastal Queensland and northern New South Wales, and the genus has been a key group in biogeographic analyses of the history of Australia's rainforests (e.g., Moritz *et al.* 2005; Moussalli *et al.* 2005). Most *Saproscincus* (8 species) were described in the 1980s and 1990s during a period of intense interest in the rainforest fauna of eastern Australia that began in the 1970s (e.g., Broadbent & Clark 1976). Since the descriptions of *S. oriarus* Sadlier 1998, *S. hannahae* Couper & Keim 1998 and *S. lewisi* Couper & Keim 1998, only one species has been added, *S. eungellensis* Sadlier *et al.* 2005.

Within *Saproscincus* there is a 'northern' clade (Greer & Kluge 1980; Greer 1989; Couper & Keim 1998) consisting of *S. basiliscus* (Ingram & Rawlinson 1981), *S. lewisi*, *S. czechurai* (Ingram & Rawlinson 1981), *S. tetradactylus* (Greer & Kluge 1980) and *S. hannahae*. Genetics support the monophyly of this clade (Moussalli *et al.* 2005; Sadlier *et al.* 2005) and the group is defined by a number of unique morphological traits (Greer 1989; Couper & Keim 1998). The clade is distributed in rainforests of mid-east and north-east Queensland, with the most northerly species being *S. lewisi* in the northern Wet Tropics region. The largest areas of rainforest north of the Wet Tropics (particularly in regards to elevated rainforest) are in the McIlwraith Range and in the Iron Range area. McIlwraith Range has several endemic rainforest vertebrates, *Orraya occultus* (Couper *et al.* 1993), *Cophixalus crepitans* Zweifel 1985, *Cophixalus peninsularis* Zweifel 1985 and *Cyrtodactylus pronarus* Shea *et al.* 2011, while the only vertebrate endemics known for the Iron Range region are two frogs, *Cophixalus kulakula* Hoskin & Aland 2011 and *Cophixalus pakayakulangun* Hoskin & Aland 2011, that are highly localized in boulder-pile habitats. Interestingly, no *Saproscincus* have been found in these areas.