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## Burrowing crickets endemic to summits in Mauritius (Orthoptera, Gryllidae): occupation of similar niches by species possibly derived from Australasian and African colonists

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### Abstract

Two ground burrowing crickets are described from the oceanic island of Mauritius (South Western Indian Ocean): *Gialaia (Eugialaia) strasbergi* n. sp. belongs to a subgenus that was only known from Papua-New Guinea, and *Taciturna baiderae* n.sp. belongs to a genus that was only known from South Africa. *Taciturna baiderae* n. sp. displays a maternal care behavior to clutch of eggs and offspring. Elements of the biology of these two new species are given and their conservation status is assessed.

**Key words:** new species, maternal care, transoceanic dispersal, island biogeography, subterranean species

### Introduction

The transoceanic colonization events that gave rise to endemic fauna of Oceanic islands are often surprising. These events could even appear as puzzling when involving poorly mobile specialized species and transoceanic journeys across thousands of kilometers. Two new cricket species from Mauritius (South western Indian Ocean) likely to have such puzzling origin are described in the present article. *Gialaia (Eugialaia) strasbergi* n. sp. belongs to a subgenus that was only known from montane forest of Papua-New Guinea, and *Taciturna baiderae* n.sp. belongs to a genus that was only known from South African provinces of Natal and Cape. Both species have a non-overlapping distribution restricted to preserved summits of Mauritius where these are burrowing ground galleries. As few other burrowing Gryllidae (Ghosh 1912; West & Alexander 1963), *Taciturna baiderae* n.sp. displays a maternal care behavior to clutch of eggs and offspring.

In the present article, *Taciturna baiderae* n. sp. and *Gialaia (Eugialaia) strasbergi* n. sp. are described, elements of biology are given and their conservation status is assessed.

### Methods

The new taxa described in the present paper are based on specimens recently collected Mauritius island. Sight collecting was performed by day and night using a halogen headlamp.

The number following the name of the collector corresponds to field pad number of the specimen, and is printed in the first label pinned on the specimen.

**Abbreviations.** Bt, basitarsus; cp, copulatory papilla; F, femora (followed by leg number); FW, forewing; Pro, pronotum; T, tibia (followed by leg number).

**Male genitalia.** The terminology of male genitalia is after Desutter-Grandcolas (2003): ec a, ectophallic apodeme; pe, pseudepiphalllic sclerite; pe l, pseudepiphalllic lophi; pe p, pseudepiphalllic parameres; ra, rami.

**Female genitalia.** dv, dorsal valve; O, ovipositor; vv, ventral valve.

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