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Description of a new species of *Calanthemis* Thomson, 1864 (Coleoptera: Cerambycidae) from Principe Island

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Keywords:

Coleoptera ; Cameroun
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Calanthemis ; Sao Tome ;
taxonomy ; Africa.
new species ;

Abstract. – A new species of *Calanthemis* Thomson, 1864 from Principe Island is described and illustrated: *C. filippii* n. sp.

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Introduction

The four oceanic islands, Principe, Sao Tome, Annobon, and Bioko are located in the gulf of Guinea and host an incredible, largely endemic biodiversity. Few entomological surveys have been conducted on the different islands. The Cerambycidae fauna (Coleoptera) of Sao Tome and Principe consisted previously of 44 and 21 species respectively (Tavakilian & Chevillotte, 2023). Fortunately, very recently Delahaye *et al.* (2023) published an extensive checklist of the Cerambycidae fauna of both islands adding six continental species, two recently described species and removed five dubious species. In total, 66 species are recorded, 62.12% of which are endemic.

Since the past five years, Microland association has obtained the collecting permits to study the entomofauna on these islands. During one of their expeditions from 17.X.2022 to 9.XI.2022 in Principe, it collected a new Clytini specimen which, after careful examination, was proven to belong to a new species. Yet, on both islands only three Clytini species were known and only one in Principe: *Calanthemis bergerostalorum* Schmid, 2014 (Schmid, 2014). In the present article, we describe this new species, *Calanthemis filippii* sp. nov.

Material and methods

The description follows the morphological terminology by Harris (1979). Measurements are given in millimetres. Body length is the total length measured from the apex of the elytra to the clypeus. Photographs of the specimens were taken with a Canon 850D Body

Camera, Canon MPE 65 Lens and Sigma 50 Macro Lens. Lighting made up of two neon bars and four small led lamps. Combine ZP stacking software and Photoshop element 2018 retouching software was used to reconstruct the complete habitus of the species.

Calanthemis filippii sp. nov.

(Fig. 1-3)

ZooBank: <http://zoobank.org/1F939A5F-40B5-4926-B4F5-8C20FB0C2D05>

Holotype, ♀, Principe, Porto real, Parco Natio, 1°37'12" N - 7°23'57" E, 177 m, 28.X.2022, leg. G. Filippi, Fauchage [Sweep net], deposited in the collection of the Musée des Confluences, Lyon, France.

Differential diagnosis. – The distinctive coloration pattern of *C. filippii* sp. nov. is unique in the genus *Calanthemis* Thomson, 1864.

Description of the holotype

Body size. – 8.3 mm.

Coloration. – Tegument brownish to dark brown. – Pronotum covered with dense recumbent yellowish setae except for a glabrous transverse band. – Elytra covered with the following pattern of yellowish recumbent setae:

- 1) A transverse band covering the basal fifth and shortly advanced on the humeri;
- 2) An inverted V-shaped band not-connected with the basal band and extending to the basal third of the elytra;
- 3) A diamond-shaped spot located after the middle;
- 4) A large triangular spot covering the apical third, which does not reach the outer apical spines. Posterior margin of metasternum bearing a small line of yellowish setae.

Reviewer : Norbert Delahaye (France)

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Head. – Short, without longitudinal carina, evenly and densely punctured, each punctuation associated with a yellowish setae insertion with a short longitudinal glabrous line. – *Setae* denser above and below the eye, and around the antennal socket. – *Antennae* short, reaching the elytral base. – *Scape* rounded, finely and densely punctured; antennomere III the longest, distal segments gradually shorter.

Pronotum. – Slightly longer than wide, very convex, evenly and deeply punctured, covered with yellowish setae, except for a median transverse stripe.

Scutellum. – Rounded, minutely punctured and covered with yellow setae.

Elytra. – Parallel-sided, convex, finely and densely punctured and covered with setae; apex truncated, with a minute spine at the outer margin.

Legs. – Covered with sparse white setae; femora gradually and moderately clavate in the apical half. – *Metafemora* not exceeding the elytral apex. – *Tibiae* straight, widening at apex. – *First metatarsomere* 3 times longer than remaining segments together.

Abdomen. – Densely punctured with sparse long hairs, except for three transverse yellow stripes.

Male. – Unknown.

Etymology. – The species name is dedicated to Gérard Filippi, president of *Microland* association and responsible for the multiple expeditions organized in Sao Tome.

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The authors would like to thank the NGO Microland in partnership with OPIE-Provence-Alpes-du-Sud, for its program São Tomé-et-Príncipe "Archipelago of Biodiversity", in particular its president, Gérard Filippi for having organized the various expeditions to São Tome, in collaboration with the local authorities and institutions and without whom we would not have discovered some of these species. We thank Pascal Deschamps for making the photo of the holotype habitus. We also thank all the members who took part in the expeditions to the archipelago, Gabriel Neve, Patrick Bonneau, Benoît Gilles and the BirdLife São Tomé association and their representatives, Jean Baptiste Deffontaines and Marquinhna Martins, for their logistical and material assistance, as well as the CIAT and its director José Luis Xavier Mendes, for the compliance of institutional authorizations.

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Résumé

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Une nouvelle espèce du genre *Calanthemis* Thomson, 1864 est décrite de l'île de Principe: *C. filippii* n. sp.

Mots-clés. – Coleoptera, Cerambycinae, Clytini, *Calanthemis*, taxonomie, espèce nouvelle, Ligne volcanique du Cameroun, Principe, São Tomé, Afrique.

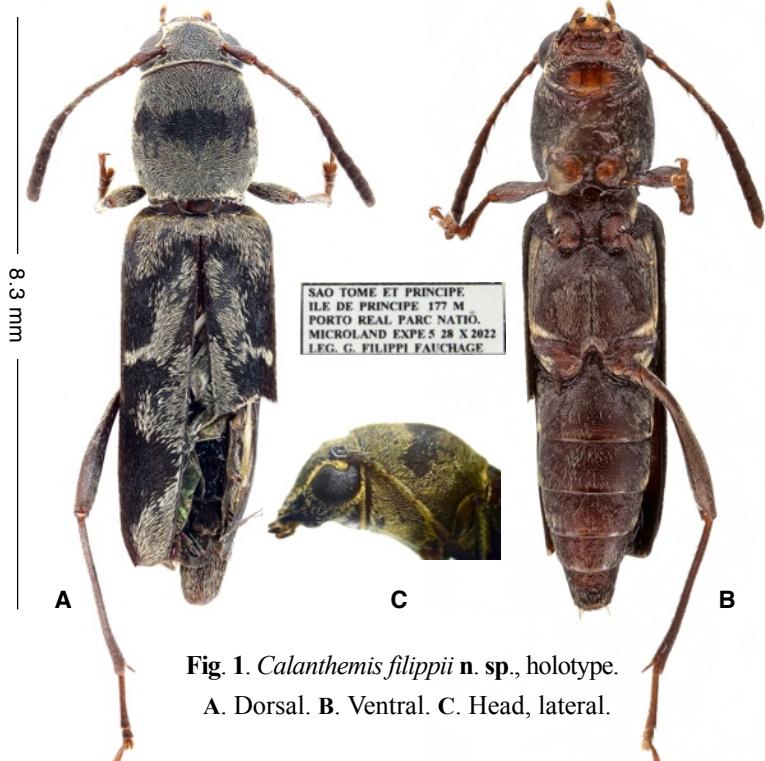


Fig. 1. *Calanthemis filippii* n. sp., holotype.

A. Dorsal. B. Ventral. C. Head, lateral.

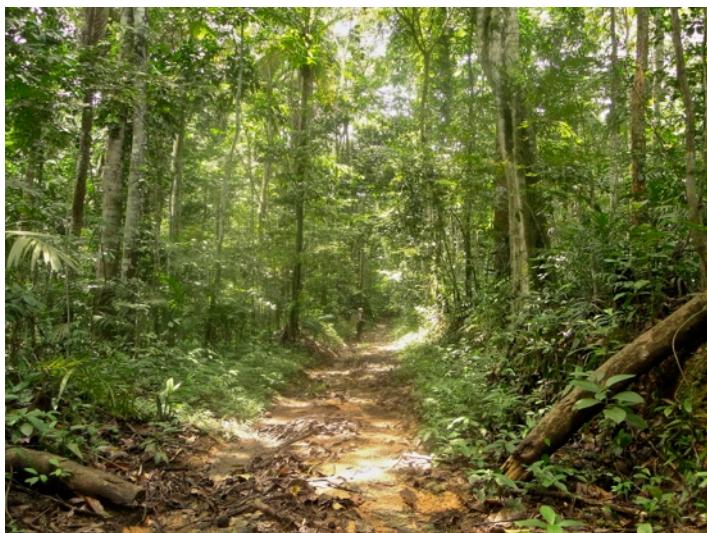


Fig. 2. Typical station of *Calanthemis filippii* n. sp.

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Scientific coordinator. – AC

Publisher correspondence. – AC & POM

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Descriptors. – AC, FV, DR & POM

Article proofreading. – POM, AC, FV & DR

Bibliographic work. – POM, FV & DR

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Collector. – GF

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Fig. 3. Distribution of *Calanthemis filippii* n. sp.

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SOMMAIRE

Description d'une nouvelle espèce du genre *Calanthemis* Thomson, 1864 (Coleoptera: Cerambycidae) de l'île de Principe.

Alain Coache, Francesco Vitali, Denis Richard & Pierre-Olivier Maquart 1 – 3

CONTENTS

Description of a new species of *Calanthemis* Thomson, 1864 (Coleoptera: Cerambycidae) from Principe Island.

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Illustration de la couverture :

Pêche du jour mise sur claire pour séchage au soleil. Ile de Principe.

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