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New Guinean Issidae: description of new taxa in a poorly known island fauna (Hemiptera, Fulgoroidea)

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Abstract

In the framework of the recent expedition results of “Our Planet Reviewed Papua-New-Guinea 2012–2013” we provide here the first Issidae (Hemiptera, Fulgoroidea) fauna review of New Guinea with the description of three new taxa: one new genus *Papunega* Gnezdilov et Bourgoin **gen. nov.** with two new species: *Papunega magnifacies* Gnezdilov et Le Cesne, **sp. nov.** (type species), *Papunega armocula* Gnezdilov et Soulier-Perkins, **sp. nov.** *Tetrica fasciatifrons* Melichar, 1906 is transferred to the genus *Papugena* **gen. nov.** to become *Papugena fasciatifrons* (Melichar, 1906) **comb. nov.** New Guinean Issidae fauna now includes 7 genera and 16 species.

Key words: taxonomy, Issini, new genus, new species, new combination, Papua New Guinea

Introduction

The New Guinea Highlands, also known as the Central Range or Central Cordillera, forms a chain of mountain ranges and intermountain river valleys running along the island of New Guinea. Papua New Guinea (PNG) occupies the eastern half of New Guinea island where also occurs the highest peak of the range: Mount Wilhelm (4,509 m), an extinct volcano with a crater lake. In the framework of the recent expedition of “Our Planet Reviewed Papua-New-Guinea 2012–2013” a transect was carried out on Mount Wilhelm in October–November 2012.

The family Issidae Spinola, 1839 is known from New Guinea by only 6 genera: *Sarima* Melichar, 1903, *Tetrica* Stål, 1866, *Gabaloea* Walker, 1870, *Hemisphaerius* Schaum, 1850, *Hysteropterissus* Melichar, 1906, and the monotypical genus *Gilda* Walker, 1870 which taxonomic position remains uncertain (Gnezdilov, 2013a). With the new taxa described below, Issidae of New Guinea totalise only 16 species, an obvious underestimated number of the real biodiversity of the group in this area. Moreover, their taxonomic account is also inadequate as recently Gnezdilov (2013b) showed that the genus *Sarima* Melichar, 1903 is apparently an endemic taxon of Sri Lanka and that the generic position of other species described in this genus from other regions, needs to be revised. The same observation is also valid for the genus *Tetrica* Stål, 1866, two species of which are presented in New Guinea. The taxonomic status of these two genera and species included needs further study and deep revision (Gnezdilov, in preparation). Accordingly, we describe below two new species for which we erect a new genus to accommodate them in advance of a more complete taxonomic revision of the genus *Tetrica* and to which we also transfer one of the two species described by Melichar from the island: *Tetrica fasciatifrons*; the second Melichar’s species, *Tetrica suffusa*, actually belongs to another new genus that will be described later with the revision of the genus *Tetrica* sensu lato (Gnezdilov, in preparation).

Papunega armocula Gnezdilov et Soulier-Perkins, **sp. nov.**

Papunega fasciatifrons (Melichar, 1906), **comb. nov.**

Hemisphaeriini Melichar, 1906

Hemisphaerius Schaum, 1850

Hemisphaerius cervinus Walker, 1870

Hemisphaerius collaris Walker, 1870

Hemisphaerius concolor Walker, 1870

Hemisphaerius lunaris Walker, 1870

Hemisphaerius nigrinus Melichar, 1906

Hemisphaerius nigrolimbatus Melichar, 1906

Hemisphaerius similis Melichar, 1906

Hysteropterissus Melichar, 1906

Hysteropterissus conspergulus Melichar, 1906

Issidae incerta sedis

Gilda Walker, 1870

Gilda vittiventris Walker, 1870

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