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### A new species of *Isocossus* Roepke, 1957 (Lepidoptera: Cossidae) from Vietnam, including a world catalogue of the genus

ROMAN V. YAKOVLEV<sup>1,2</sup>

<sup>1</sup>Altai State University, South Siberian Botanical Garden, Lenin pr. 61, RF-656049, Barnaul, Russia

<sup>2</sup>Tomsk State University, Laboratory of Biodiversity and Ecology, Lenin pr. 36, 634050 Tomsk, Russia.

E-mail: yakovlev\_asu@mail.ru

**Abstract.** *Isocossus zolotuhini* Yakovlev sp. nov. is described from central Vietnam.

**Key words:** Cossidae, Vietnam, *Isocossus* genus species list, new species, *Isocossus zolotuhini*

#### Introduction

The genus *Isocossus* Roepke, 1957 (Cossidae) was established as a monotypic genus for *Isocossus vandeldeni* Roepke, 1957 described from Sumatra, Indonesia. The genus is included in the subfamily Cossinae. Holloway (1986) described five species of *Cossus* from Borneo and Sumatra, *C. cruciatus*, *C. seria*, *C. retak*, *C. rufipecten*, and *C. telisai* and indicated the similarity of these species with *I. vandeldeni*. In the same work, Holloway (1986) gave a description of the Oriental members of the genus *Cossus* Fabricius, 1794 and established a new synonym, *Cossus* = *Isocossus*. Holloway (1986) identified the existence of four *Cossus* groups as part of the fauna of Borneo based similarities of the male antenna structure and correctly pointed out that male genitalia offer few specific differences. Holloway (1986) stated: “The female antennae are usually filiform but the male antennae are, in the Bornean fauna, of four types:

- (1) Filiform: *kinabaluensis*, *verbeeki*, *chloratoides*.
- (2) Uniserrate/unipectinate: *chloratus*, *javanus*, *speideli*.
- (3) Strongly bipectinate over basal third only: *cinereus*.
- (4) Bipectinate at least basally and usually throughout though tapering evenly away in width towards the apex: *vandeldeni*, *rufipecten*, *cruciatus*, *retak*, *telisai*, *seria*.”

Schoorl (1990: 58–59) reinstated *Isocossus* as a valid genus and described in detail the unique antennal structure of *I. vandeldeni*. Later, Yakovlev (2006) established five new combinations: *Isocossus cruciatus*, *I. seria*, *I. retak*, *I. rufipecten* and *I. telisai*, and described the new species *I. stroehli* from Sumatra and continental Malaysia. Apomorphies of the genus (Yakovlev 2014a) include weak bifurcation of the uncus apex and bipectinate antenna with sharply truncated processes of the pecten in the distal third of antenna. The genus *Isocossus* is related to *Reticulocossus* Yakovlev, 2011 (type species *Paracossus schoorli* Yakovlev, 2004) from Sulawesi.

As part of cooperative Russian-Vietnamese scientific projects, several expeditions (2009–2013) were undertaken to different regions of Vietnam by Professor V. Zolotuhin (Ulyanovsk) and his colleagues. From material collected by these expeditions, three new Cossidae species were described, rise the total number of Cossidae reported for the fauna of Vietnam (Yakovlev 2014b) to 42 species. Additional material collected by V. Zolotuhin & A. Gurkovich revealed two males (one of them in very poor condition) from central Vietnam, belonging to a previously unknown species of *Isocossus*, which is described below.

#### Material and methods

Moths were collected using light traps. The genitalia slide was examined using a Zeiss Stemi 2000 C microscope and images taken with an Olympus XC 50 camera.