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*Bulletin S.R.B.E./K.B.V.E.*, 135 (1999) : 213-215

**On two species of Phasmatodea in the collection of the  
Institut royal des Sciences naturelles de Belgique, Bruxelles,  
including the description of a new species**

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**Abstract**

One new species of Phasmatodea (*Nesiophasma zanus* sp. n.) as well as the egg of *Phasma marosensis* HENNEMANN 1998 are described and illustrated. The specimens discussed are preserved in the collection of the Institut royal des Sciences naturelles de Belgique, Bruxelles.

**Keywords** : Phasmatodea, IRSNB, *Nesiophasma zanus*, *Phasma marosensis*, new species, eggs, description.

While photographing and checking the Phasmatodea type material preserved in the Institut royal des Sciences naturelles de Belgique in Brussels, one new species could be identified. One of the two specimens of a species previously described by the author in a paper dealing with the stick-insect fauna of Sulawesi, had an egg in its ovipositor which is described below. The terminology for the description of the eggs is that of SELICK (1997).

***Nesiophasma zanus* sp. n.**

*Tirachoidea zanus* REDTENBACHER in litt., VANSCHUYTENBROEK & COOLS, 1981 : 17.- Bull.

Inst. r. Sci. nat. Belg., 53(23).

Holotype, female : Nouvelle Guinee, Fruhstorfer (coll. IRSN).

REDTENBACHER placed a label with the name "*Tirachoidea zanus* Redt. sp. n." on this specimen, a name which was not published in his monograph "Die Insektenfamilie der Phasmiden 1906-1908" nor in any other publication. The name is therefore unpublished but is taken over from REDTENBACHER and used for this species.

The new species is most closely related to *Nesiophasma spinulosum* (BRUNNER v.W., 1907) [= *Nesiophasma eremothocus* GÜNTHER, 1934], but

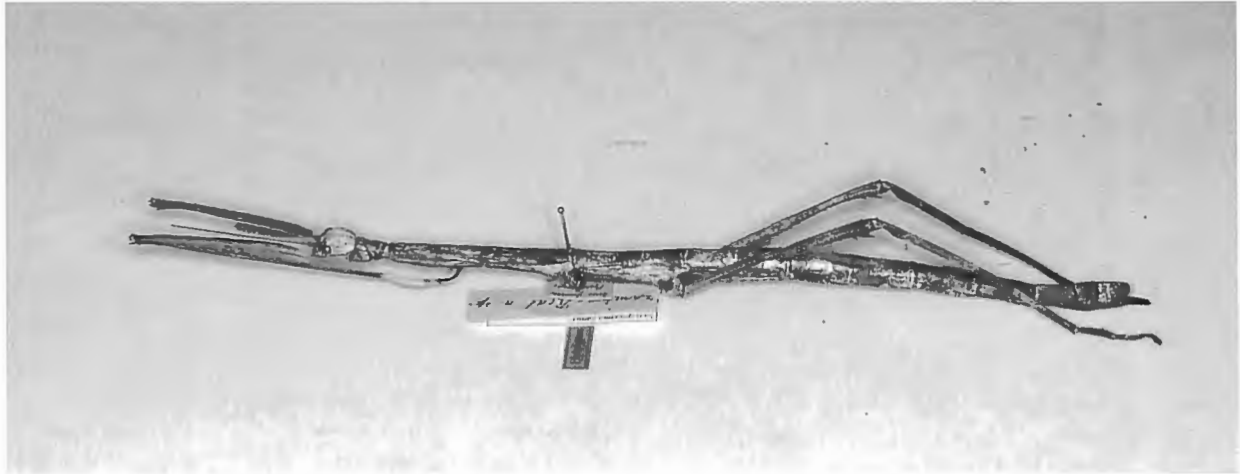


Fig. 1. *Nesiophasma zanus* sp. n., female holotype.

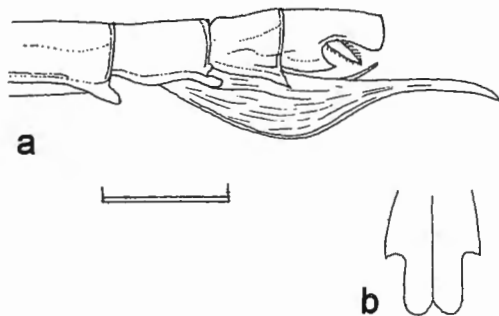


Fig. 2. *Nesiophasma zanus* sp. n. a : last abdominal segments seen laterally; b : anal segment seen dorsally (scale = 5 mm).

being much smaller and more slender. It can be easily distinguished by the lateral lobes of the abdominal tergites 7-9, shorter fila ovipositoris and the spination of the legs.

### Description

**O :** Large, elongate, smooth, brown with many lighter and white patches and shadings. Protarsus yellowish white except for the last three segments.

**Head :** Oval, vaulted, smooth, 1.5 times as long as broad. Eyes large, brown convex, two small depressions between them. Antennae broken (believed to be longer than profemora originally). Scapus dorsoventrally depressed, longer than broad, tapered towards distal end. Pedicellus slightly longer than broad, cylindrical.

**Thorax :** Pronotum shorter and narrower than head, with central median indentation, the anterior margin raised. Mesonotum long and slender, slightly broadened in anterior half and towards posterior margin near the mesocoxae. On the lateral border with a fine red stripe running along

whole length of segment. Mesopleurae and mesosternum smooth. Metanotum three times as long as broad, metapleurae and metasternum smooth.

**Abdomen :** Segmentum medianum about  $\frac{2}{3}$  the length of metanotum, nearly twice as long as broad. Abdominal segments 2-6 cylindrical, about 2.5 times as long as broad, the 2nd slightly shorter. Seventh tergite with a small, triangular, distally pointed lobe, posterolaterally, the sternite with a small posteromedian granule. Eighth tergite strongly vaulted, contracted in the median area, about 2.5 times as long as broad. Posterolaterally with small lobe, projecting beyond the posterior margin of segment. Ninth tergite strongly vaulted as well, slightly broader than long, with similar lobe posterolaterally. Anal segment keeled, with rounded triangular incision, the extreme margins rounded. A deep rounded gap near cerci. These moderately small, dark brown, laterally depressed, tapered sharply to an almost pointed tip. Fila ovipositoris orange brown nearly reaching posterior margin of anal segment. Operculum keeled, long, projection beyond the posterior margin of anal segment, rounded distally.

**Legs :** Long, slender, serrated on all edges. Metatarsus on front legs with low carina, longer than other segments together. Metatarsus on hind legs with high, rounded and slightly serrated carina, nearly the length of the other segments together.

**Measurements (in mm) :** body 168.0, body including operculum 174.0, pronotum 38.5, metanotum including segmentum medianum 22.5, profemora 44.0, mesofemora --, metafemora

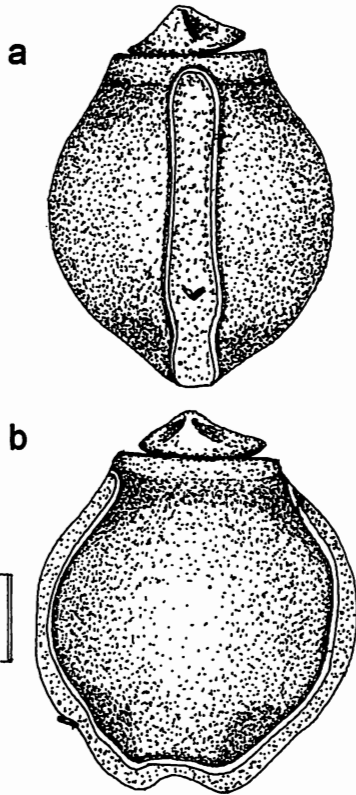


Fig. 3. Egg of *Phasma marosensis*. a : dorsal; b : lateral (scale = 1 mm).

42.5, antennae > 35.0.

Male and egg unknown.

***Phasma marosensis* HENNEMANN, 1998**

*Phasma marosensis* HENNEMANN, 1998 : 117.-  
Mitt. Mus. Nat.kd. Berl., Zool. Reihe 74(1).  
Holotype, female: S-Sulawesi, Lembang, Maros,  
leg. Gunawan XII.1995 (MNHU).

**Material**

2 females : Indes Néerlandaises, Billiton, van  
Braeckel, R. Mus. Hist. Nat. Belg. I.G. 10.483.

Two female specimens of this species could be  
identified, one of which had an egg in its ovipositor  
which is described below. Body lengths of

the two specimens (operculum excluded) :140.5  
and 132.0 mm.

**Description of the egg**

One egg could be extracted from the ovipositor  
of one of the specimens and is fully developed.

Length 4.2 mm, width 3.1 mm, height 4.1 mm.  
Large, brownish grey. Capsule granulated, laterally  
compressed, slightly longer than high, a keel running  
round dorsal and ventral surface as well as the pol-area.  
Microphylar plate elongate running nearly round whole  
capsule, with slightly raised edge. Microphyle small,  
rounded, near pol-area of microphylar plate. Operculum  
oval, flat, black, the edge greyish. Capitulum irregularly  
shaped, orange brown, on short stalk.

**Aknowledgements**

The author would like to thank Jacques Cools for  
allowing access to the collection of IRSNB and for  
arranging the loan of the specimens discussed as well  
as other material. Many thanks are also due to my  
friend Oskar CONLE for his help and photographic  
work.

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