

## NEW TAXA OF EROTINI (INSECTA: COLEOPTERA: LYCIDAE) FROM BORNEO

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**ABSTRACT.** - A new subgenus, *Taphomimus*, is established in *Pyropterus* Mulsant, 1838, and a new species *P. (Taphomimus) sarawakanus* (Sarawak, East Malaysia) is described. *Pyropterus tonkineus* (Pic, 1923) and *P. diocisus* Bocák & Bocáková, 1991, are transferred to *Taphomimus*. A key to the subgenera of *Pyropterus* is presented.

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### INTRODUCTION

The genus *Pyropterus* is known to include two subgenera, i.e. *Pyropterus* s. str. and *Helcophorus* Fairmaire, 1891 (Kasantsev, 1993, 1995). Another subgenus is added below, along with the description of a new species, accompanied with some taxonomic changes that seem necessary.

### MORPHOLOGY AND SYSTEMATIC ACCOUNT

The lycid tribe Erotini is a well defined group characterised by the conspicuous rhomboidal pronotal cell extending from anterior to posterior margins and by the median lobe of the aedeagus fully enveloped in a pair of tube-shaped paramerae. The genera within the tribe are mostly separated on the basis of presence/absence of secondary elytral costae in the interstices between the primary ones, or, in other words, presence of a single or a double row of cells in the interstices (examples of the two are *Dictyoptera* Latreille, 1829, and *Pyropterus* Mulsant, 1838). Some genera are also distinguished by a somewhat irregular shape of the pronotal rhomboid cell (*Lycoprogonthes* Pic, 1915), of the aedeagus (*Coloberos* Bourgeois, 1885), or of both (*Taphes* C.O.Waterhouse, 1878).

Generally all Lycidae of the tribe Erotini show little morphological divergence and the question of superspecific separation remains obscure. On one hand almost in all species with a single row of reticulate cells in elytral interstices there are traces of double rows in

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the basal part of elytra. On the other hand some species with double rows of cells show a tendency to lose the second row in some of the interstices and/or in the central portion of the elytra. Some species of presumably different origin are often listed together in polyphyletic taxa, such as *Dictyoptera*, *Benibotarus* and *Pyropterus*.

The supraspecific structure of the former two was studied recently (Kasantsev, 1990, 1995), the difference between the subgenera of *Pyropterus* being shown in the key that follows.

### KEY TO THE SUBGENERA OF *PYROPTERUS*

1. Humeral elytral costa much stouter than the other ..... *Helcophorus*  
 - All four primary elytral costae equally developed ..... 2
2. Median pronotal cell of regular rhomboidal or oval shape. Elytral pubescence uniform .....  
 ..... *Pyropterus*  
 - Lateral angles of median pronotal cell stretched outwards. Elytral costae densely pubescent, while  
 bottom of cells hairless ..... *Taphomimus*

### *Pyropterus* (*Taphomimus*), new subgenus

**Type species:** *Pyropterus* (*Taphomimus*) *sarawakanus*, new species, by present designation.

**Diagnosis.** - Eyes relatively small. Antennae filiform, with second and third joints much shorter than fourth, but third evidently larger than second. Fourth and subsequent joints of antennae with erect curved pubescence. Pronotum transverse, with median rhomboidal cell stretched outwardly at lateral angles and a pair of conspicuous oblong additional cells below the median one (Fig. 1). Elytra with four equally developed primary costae, interstices with a single row of well defined rectangular cells. Elytral costae pubescent, with bottom of cells hairless. Tarsi with widened and gradually diminishing in length (except ultimate) joints.

**Etymology.** - The name is derived from the generic name *Taphes* and the Latin for mime, alluding to the resemblance of the new taxon to the aforesaid genus. Gender masculine.

**Remarks.** - *Taphomimus* is easily distinguishable from *Pyropterus* s. str. by the shape of the pronotal cell and the elytral pubescence. In certain aspect the new subgenus resembles some of other Erotini taxa: by the pronotal sculpture - *Taphes*, *Eros* and *Protaphes* Kleine, 1926, differing from the three by a single row of cells in each of the elytral interstices; by the elytral pubescence - *Punicealis* Kasantsev, 1990, distinguishing from the latter by the pronotal and elytral sculpture.

Also, *Taphomimus* bears certain resemblance to the fossil *Kolibaceum* Winkler, 1987, described from the Baltic amber. Similar in the structure of pronotum the fossil taxon however is readily distinguishable by the strong humeral elytral costa.

The relationships between the new subgenus and *Pyropterus* s. str. are similar to those between *Dictyoptera* s. str. and *Dictyoptera* (*Punicealis*), the latter also differing by the uniform elytral pubescence, in addition to the long trochanters.

*Pyropterus (Taphomimus) sarawakanus*, new species

(Fig. 1)

**Material examined.** - Holotype - male, Kuching (Insect Centre, Severtzov Institute of Problems of Animal Evolution and Ecology of the Russian Academy of Sciences, Moscow).

**Description.** - Male. Dark brown. Pronotal ribs and elytra red.

Head glabrous, flat behind antennal prominence. Eyes relatively small (interocular distance 3.4 times as long as the radius). Clypeus small, semicircular. Maxillary palpi slender, with ultimate joint about 1.5 times longer than joint 3, flattening and slightly narrowing toward apex. Antennae filiform, reaching slightly over the middle of elytra, with joint 3 wider and slightly longer than joint 2 and both together 1.5 times as short as joint 4; joints 4 to 10 subequal in length; joint 11 the longest, 1.2 times longer than joint 4; 3 basal joints in somewhat more decumbent pubescence than following joints.

Pronotum transverse, 1.7 times wider than long, with conspicuous median areola, connected with side margins by prominent carinae and accompanied by a pair of additional cells below and a pair of less conspicuous round cells above; hind angles acute, moderately long (Fig. 1). Scutellum slightly elongate, emarginate at apex.

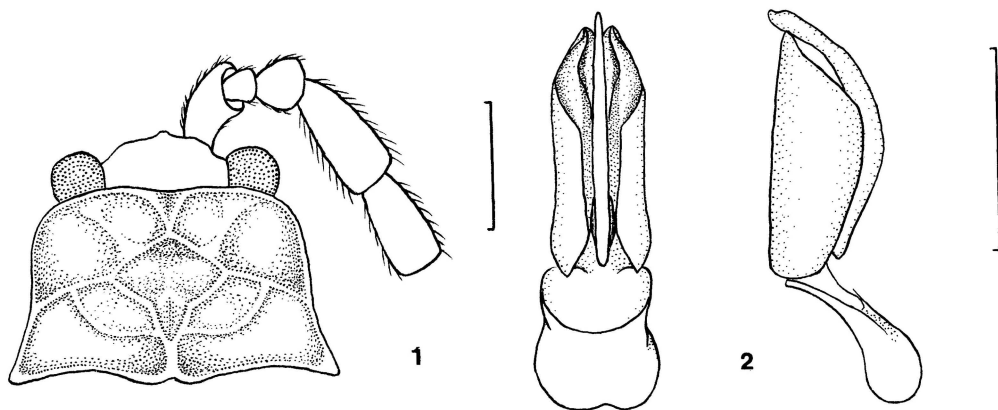
Elytra relatively long, 2.5 times as long as wide humerally, slightly widening posteriorly, with 4 conspicuous primary costae; interstices with a single row of regular transverse rectangular cells and traces of double rows basally. Pubescence along the costae short and relatively dense.

Aedeagus - Fig. 2.

Length: 5.6 mm. Width (humerally): 1.7 mm.

Female. Unknown.

**Etymology.**- The name is derived from the country where the unique specimen was collected.



Figs. 1-2. *Pyropterus (Taphomimus) sarawakanus*, new subgenus, new species. Holotype male: 1, Anterior part of the body; 2, Aedeagus. Scale = 0.5 mm.

**Remarks.** - The new species differs from both *P. (Taphomimus) tonkineus* and *P. (Taphomimus) diocisus* by the coloration and the shape of the aedeagus. The possible nearest affinities in adjacent genera are *Protaphes* species and *Taphes brevicollis* C.O. Waterhouse, 1878, separable by the much shorter third antennal segment and double rows of cells in the elytral interstices.

It is worth mentioning that in *Taphes brevicollis* there exists a smooth transition from forms with double rows of quite regular square cells in the elytral interstices to forms with a single row in the interstices at the discal portion and traces of irregular double interstitial reticulation at the basis and apex of each elytron.

***Pyropterus (Taphomimus) tonkineus* (Pic, 1923), new combination**

*Taphes tonkineus* Pic, 1923: 16-17 (Tonkin).

*Pyropterus* (s.str.) *tonkineus*; Kasantsev, 1993: 62.

**Distribution.** - Northern Vietnam.

**Remarks.** - The Lectotype of this species from the Paris Museum of Natural History has been studied (Kasantsev, 1993).

***Pyropterus (Taphomimus) diocisus* (Bocák & Bocáková, 1991), new combination**

*Pyropterus diocisus* Bocák & Bocáková, 1991: 316-318 (Chapa).

**Material examined.** - VIETNAM: prov. Gialai-Contum, 40 km N Ankhe, tropical forest, 8 Nov.1979, L.Medvedev; prov. Gialai-Contum, 40 km N Ankhe, tropical forest, 21 Nov.1979, L.Medvedev (all in the Insect Centre, Severtzov Institute of Problems of Animal Evolution and Ecology of the Russian Academy of Sciences, Moscow).

**Distribution.** - Vietnam.

**Remarks.** - Though not mentioned in the description (Bocák & Bocáková, 1991) the species some specimens of which are at my disposal possesses characters of *Taphomimus*. The last two species do not seem to have an additional pair of conspicuous areolae on the pronotum, otherwise corresponding and undoubtedly belonging to this subgenus.

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