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**Revisional studies on the Luciolinae fireflies of Asia (Coleoptera: Lampyridae):
1. The genus *Pyrophanes* Olivier with two new species. 2. Four new species of
Pteroptyx Olivier and 3. A new genus *Inflata* Boontop, with redescription of
Luciola indica (Motsch.) as *Inflata indica* comb. nov.**

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Abstract

The Luciolinae firefly genus *Pyrophanes* is redescribed and a key is provided for 7 species, viz. *appendiculata* Olivier, *beccarii* Olivier, *quadrimaculata* Olivier, *semilimbata* (Olivier) and *similis* Olivier, with *Py. elongata* Ballantyne **sp. nov.** and *Py. similisimma* Ballantyne **sp. nov.** described as new. Macropterous females associated for several species have 2 pairs of broad bursa plates.

Following an enlarged phylogenetic analysis of morphological characters, an expanded generic description of *Pteroptyx* Olivier now accommodates four new species with metafemoral combs. Three of these have an entire light organ in ventrite 7 but are without the generic hallmark of deflexed elytral apices in the male. The first species of *Pteroptyx* to possess these features are *Pt. sayangia* Ballantyne **sp. nov.**, *Pt. galbina* Jusoh **sp. nov.** and *Pt. surabayia* Ballantyne **sp. nov.** Based on a single unusual specimen *Pt. gombakia* Ballantyne **sp. nov.** is here described with deflexed elytral apices and bipartite light organ in ventrite 7, but with exceptional incurving lobes along the posterior margin of ventrite 7, which is a characteristic of *Pyrophanes*. The description of *Luciola testacea* Motschulsky is discussed and many morphological characters of its type specimen are correctly outlined. Its place as the type for *Pteroptyx* is addressed.

Inflata **gen. nov.** Boontop is erected for specimens of *Luciola indica* Motschulsky as *Inflata indica* (Motsch.) **comb. nov.**, and is described from males and reliably associated females. Discussion overviews the present situation regarding Luciolinae taxonomy of southeast Asian and the Australopacific regions.

Key words: *Pyrophanes* Olivier, *Pteroptyx* Olivier, *Inflata* Boontop **gen. nov.**, taxonomy, new species, morphological phylogenetic analysis, identification keys