

**NEW RECORD OF *PTEROPTYX TENER* OLIVIER (COLEOPTERA: LAMPYRIDAE: LUCIOLINAE) IN THAILAND**

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*Pteroptyx* Olivier (Lampyridae: Luciolinae) is a genus of fireflies native to Southeast Asia, New Guinea, Australia, and Hong Kong (Ballantyne and McLean 1970; Ballantyne et al. 2011). The genus is characterized by a distinct trilobed terminal abdominal sternite (Ballantyne and McLean 1970) and a deflexed elytral apex visually observed in males as a bent-wing tip used to clamp onto females during mating and to prevent the capture of females by other males (Ballantyne and McLean 1970; Wing et al. 1983; Ballantyne 2001; Cheng et al. 2010). Recently, the bent-winged fireflies of New Guinea and Australia were assigned to two genera: *Medeopteryx* Ballantyne and *Trisinuata* Ballantyne (Ballantyne and Lambkin 2013). To date, twelve species of *Pteroptyx sensu stricto* are recognized: *P. asymmetria* Ballantyne; *P. bearni* Olivier; *P. decolor* Olivier; *P. gelasina* Ballantyne; *P. maipo* Ballantyne; *P. malaccae* Olivier; *P. macdermotti* McLean; *P. masatakai* Kawashima; *P. sulawesiensis* Kawashima; *P. tener* Olivier; *P. truncata* Ballantyne; and *P. valida* Olivier (Ballantyne et al. 2011; Ballantyne and Lambkin 2013). The habitats of these fireflies are diverse, ranging from mangroves, along rivers, inland to highlands (Ballantyne et al. 2011). The mangrove-inhabiting species of *Pteroptyx* primarily aggregate on *Sonneratia caseolaris* (L.) Engler (Sonneratiaceae), *Nypa fruticans* Wurmb. (Arecaceae), *Acanthus ilicifolius* L. (Acanthaceae), *Rhizophora apiculata* Blume (Rhizophoraceae), *Rhizophora mucronata* Lamark, and *Bruguiera gymnorrhiza* (L.) Lamark (Rhizophoraceae) (Ohba and Wong 2004; Jusoh et al. 2010a, b). These *Pteroptyx* exhibit a unique synchronous flashing behavior used to attract females of the same species (Lloyd 1973; Case 1980; Ballantyne 1987; Lloyd et al. 1989; Strogatz 1997; Lewis and Cratsley 2008; Jusoh et al. 2010a). This synchronous flashing display has made *Pteroptyx* an attractive species to locals and researchers in the region, with their dazzling seasonal mating displays often attracting many observers, thereby contributing positively to regional economies and their ecotourism initiatives (Nallakumar 2003).

Although Thailand is a country rich in firefly diversity, the identification of its firefly species to date still remains limited. Researchers have identified six genera and more than 15 species (Hutacharern et al. 2007; Thancharoen et al. 2007), but over 50 species are thought to occur in the country. Of the 15 known species, only two, *Pteroptyx* species, *P. malaccae* and *P. valida*, are observed in mangrove areas throughout Thailand (Lloyd et al. 1989; Ballantyne 2001; Ballantyne et al. 2011; Ballantyne and Lambkin 2013). These mangrove areas cover 24 provinces of the eastern, central, and southern parts of the country; half of the mangroves reside in southern Thailand throughout 12 provinces: Chumphon, Surat Thani, Nakhon Si Thammarat, Songkhla, Pattani, and Narathiwat on the Thai Gulf coast; and Ranong, Phang Nga, Phuket, Krabi, Trang, and Satun on the Andaman Sea coast (Thampanya et al. 2006), with the southernmost connected to the Malay Peninsula.

To assess the diversity of *Pteroptyx* fireflies in mangroves, we conducted field observations during July 2012 to June 2013 throughout the three primary mangrove regions in eastern, central, and southern Thailand. Firefly specimens were collected with sweep nets and the species were identified according to Ballantyne (1987, 2001) and Ballantyne et al. (2011). Twenty sampling sites from Chanthaburi and Trat provinces located in the east, Samut Songkhram and Samut Prakan provinces in the central part of the country, and Chumphon, Surat Thani, Ranong, Nakhon Si Thammarat, Phangnga, Satun, and Trang provinces in the south were surveyed (Fig. 1).