

Short scientific noteSubmitted: August 11th, 2020 - Accepted: September 1st, 2020 - Published: November 15th, 2020***Phyllodes diversipalpus* resurrected from taxonomic extinction
(Lepidoptera: Erebidae)**

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Abstract

Morphological evidence supporting the validity of *Phyllodes diversipalpus* **sp. rev.** from New Guinea is provided. This species is only superficially similar to *P. eyndhovii* and *P. staudingeri* and, having been associated with either of the two, was eventually wrongly subsumed under the latter.

Key words: resurrected species, moths, New Guinea.

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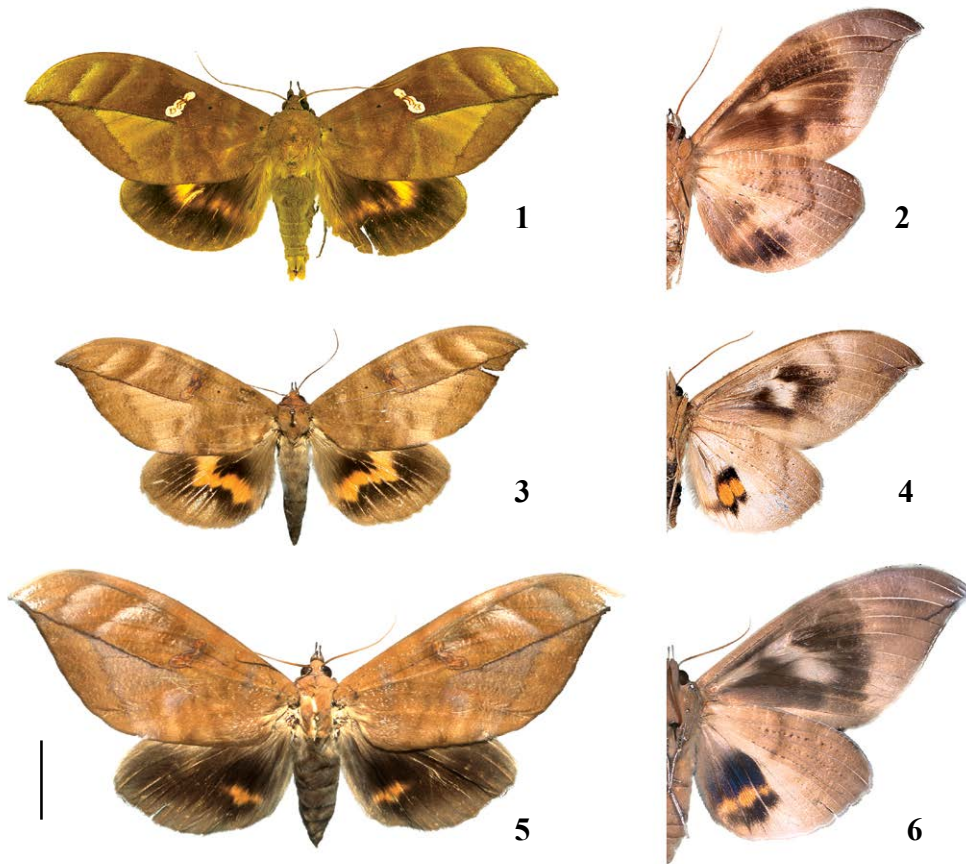
Quite a high number of noctuid moths has been described from New Guinea but evaluation of their taxonomic status is often hampered by lack of information on morphological features such as those of the genitalia, which have rarely been detailed by the original authors. Accordingly, it may also happen that large-sized or outstandingly-patterned species are misappreciated, as in the case of Prout's (1924) "*Phyllodes diversipalpus* sp. nov." from the then Dutch New Guinea (Figs 1-2). In fact, she compared the new taxon only to *P. eyndhovii* Snellen van Vollenhoven, 1859 [not 1858!] (cited as *eyndhovi*, an unjustified emendation due to Hampson, 1913) (Figs 3-4) and stressed, among the other, a strong difference in the vestiture of the second palpal segment, distally rounded in *P. diversipalpus* and angled in *P. eyndhovii* when observed in side view. However, this feature of *diversipalpus* is better corresponding to *P. staudingeri* Semper, 1901 (Figs 5-6), a species probably unavailable to her as it was to Hampson (1913: 391).

Gaede (1938) considered both *staudingeri* and *diversipalpus* as races of *eyndhovii* (cited again as *eyndhovi*), while Holloway (1976) raised *staudingeri* (incorrectly assumed to have been described as a subspecies of *P. eyndhovii*, cf. Semper, 1896-1902) to full species and delegated *diversipalpus* to *P. staudingeri* as a subspecies. Due to the fact that Poole (1989) did not subscribe the subspecies concept and aprioristically considered all subspecific names as synonyms, "*P. staudingeri diversipalpus*" was eventually sunken into nominotypical *P. staudingeri*.

What happened is a sheer case of unjustified 'taxonomic extinction', as the great geographic gap between easternmost populations of *P. eyndhovii* and *P. staudingeri*

with those of *diversipalpus* should have suggested. In fact, none of these species are known from between the Sunda and Sahul shelves ('Wallacea'). *Phyllodes diversipalpus* A.E. Prout, 1924, **sp. rev.** has to be reappreciated instead as a full species, as a simple comparison of the male genitalia shall confirm (Fig. 7). In particular, it should be noted that in addition to the vesical morphology, totally different among three species (Figs 10-12), the valval outline of *P. staudingeri* (Fig. 9) is remarkably different from that of *P. diversipalpus*. The latter is instead reminiscent of that of *P. eyndhovii* (Fig. 8), though as noted above the vesical configurations and outline of labial palpi leave no doubts about their specific distinction. Clear differences among the three species also occur in size (that of *P. diversipalpus* being intermediate between those of the other two) and pattern features, above all in the trend of postmedial line of the hindwing and spotting of the underside (Figs 1-6).

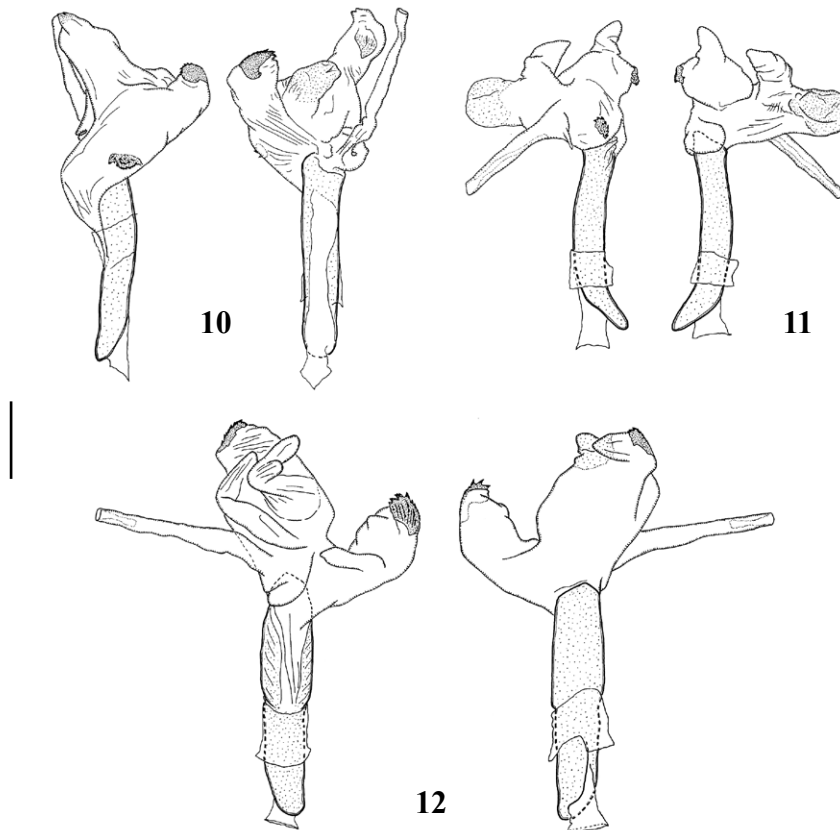
Phyllodes diversipalpus is hitherto recorded only from a handful localities in Papua Province of Indonesia (Prout 1924; and original data). *Phyllodes eyndhovii* is the most widely distributed of the three species, ranging from Northeast India to Southwest China, Taiwan, and across Indochina to the greater Sunda islands, eastwards to Palawan, Borneo and Java, while *Phyllodes staudingeri* is more markedly tropical oriental, as it occurs from Central Indochina across the Malay Peninsula eastwards to the Philippines (Luzon, Leyte, Panay, Mindanao) and the greater Sunda islands up to Java (Holloway 1976, 2005; Barlow [1983]; Poole 1989; Kononenko & Pinratanana 2005, 2013; Spitsyn & Scheglova 2019; and original data).



Figs 1-6 – Adults of *Phyllodes* spp.: **1**, *P. diversipalpus*, **sp. rev.**, ♂ syntypus, “Dutch New Guinea” (Indonesia, Papua), Nomnagihé (Natural History Museum, London); **2**, *idem*, ♂, “Irian Jaya”, Arso district, Uskwar, underside (Naturalis Biodiversity Center, Leiden); **3**, *P. eyndhovii*, ♀, Malaysia, Genting Highlands (Museo Civico di Zoologia, Roma); **4**, *idem*, ♂, underside, same locality and repository as fig. 3; **5**, *P. staudingeri*, ♀, Malaysia, Cameron Highlands (Museo Civico di Zoologia, Roma); **6**, *idem*, same specimen as in fig. 5. Scale bar = 2 cm.



Figs 7-9 – Male genital capsules of *Phyllodes* spp.: **7**, *P. diversipalpus*, **sp. rev.**, “Irian Jaya” (Indonesia, Papua), Arso district, Uskwar; **8**, *P. eyndhovii*, Malaysia, Genting Highlands; **9**, *P. staudingeri*, Malaysia, Cameron Highlands. Scale bar = 3 mm.



Figs 10-12 – Aedeagi of *Phyllodes* spp. (two views): **10**, *P. diversipalpus*, **sp. rev.**, same as fig. 7; **11**, *P. eyndhovii*, same as fig. 8; **12**, *P. staudingeri*, same as fig. 9. Scale bar = 3 mm.

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