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Two new species of *Phlogophora* Treitschke (Lepidoptera: Noctuidae) from China and Vietnam

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The genus *Phlogophora* Treitschke (type species *Phlogophora meticulosa* (Linnaeus)) comprises some 60 known species. *Phlogophora* is a widely distributed genus, mostly with Trans-Palaeartic and Oriental distribution, however species of the genus are known from the Ethiopian Region, and some from the Nearctic, as well. *Phlogophora* displays the highest diversity from the monsoon influenced regions of the Central and Southern Himalaya (Nepal, India, Myanmar and Vietnam) to the Indonesian islands in the South. A number of the species are endemic in islands from the Azores throughout Madagascar, Taiwan and, particularly, in the Sundaland (The Philippines and the Sunda Islands, towards to the east to New Guinea).

The majority of the smaller sized species with less elongate forewing have long been placed in the genus *Euplexia* Stephens sensu lato (type species *Euplexia lucipara* (Linnaeus)), due to their somewhat similar wing shape and wing pattern; comprehensive revisions of these two genera are not available yet. The detailed study of two of these species, *Phlogophora striatovirens* (Moore, 1867) and *Phlogophora discisignata* (Moore, 1867), **comb. n.** descended the recognition of two further, hitherto undescribed species, which are described as new herein.

The species of the *Ph. striatovirens* and the *Ph. discisignata* lineages are externally rather similar, though are clearly distinguishable by the details of the forewing pattern. Their genitalia are, however, conspicuously dissimilar, as the *Ph. striatovirens*-line possess specially modified harpe-ampulla-digitus complex (males) and penultimate segment of ovipositor (females). In the *discisignata*-line, the moths of the two twin species are easily distinguished by their different colouration and wing pattern, but their male genitalia are surprisingly similar, with rather small though clearly visible differences, showing a closer relationship with the *Ph. meticulosa* species-group, the typical lineage of the genus. As the two species occur sympatrically (and syntopically) in the Fansipan mountains in North Vietnam, the two taxa are separated here at species level.

Taxonomic nomenclature used in this study was constituted according to taxonomical experts and relevant literature (Berio 1972; Chen 1999; Fibiger & Hacker 2007; Hampson 1894; Hampson 1896; Hampson 1908; Holloway 1976; Hreblay & Ronkay 1998; Hreblay & Ronkay 1999; Moore 1876; Moore 1882; Nye 1975; Poole 1989; Prout 1928; Sugi 1982; Warren 1912; Yoshimoto 1993).

Abbreviations for personal and institutional collections used herein: AFM = Alessandro Floriani (Milan, Italy); ASV = Aidas Saldaitis (Vilnius, Lithuania); GRB = Gabor Ronkay (Budapest, Hungary); HNHM = Hungarian Natural History Museum (Budapest, Hungary); PGM = collection of Péter Gyulai (Miskolc, Hungary); ZMHU = Museum für Naturkunde (Berlin, Germany, formerly Zoological Museum, Humboldt University)

Phlogophora falcifera sp. n.

(Figs 4-6, 12, 13, 17)

Type material. Holotype: male (Fig. 4), China, Sichuan, Qionglai Shan, 1400 m, 31°13'N, 102°23'E, 1-31.V.2006, leg. V. Siniaev & Team; slide No. PGY4057m (coll. PGM, later to be deposited in the HNHM).

mainly in the outer part of the marginal area and, sometimes, in the filling of the orbicular stigma. The antemedial and postmedial crosslines are more indistinct, marked by a few dark grey and blackish scales along the greenish borders of the median area. The reniform stigma is white or greenish-white, without or with a few small blackish dots, the black patches at costa, in and below the cell are prominently marked. The hindwing colouration of the two sister-species is practically the same, but the discal spots of the new species are generally paler on both surfaces. The pubescence of the head and the thorax are dark grey in *Ph. nyestmacska* sp. n., with small ochreous-grey metathoracic tuft, while *Ph. discisignata* has deep chocolate-brown to blackish-brown thorax with large ochreous-brown metathoracic tuft.

Male genitalia. The configuration of the male genitalia of *Ph. nyestmacska* (Fig. 15) is very similar to that of *Ph. discisignata* (Fig. 14), with the following differences: the new species has longer and narrower, apically more acute valvae, longer and especially basally somewhat thinner harpes with smaller, shorter ventral basal extension, longer and thinner, more pointed digitus with slenderer basal plate, distally more tapering juxta and basally broader, more ample and discoidal vesica.

Female genitalia. The female genitalia of *P. nyestmacska* (Fig. 18) are also similar to those of *P. discisignata* (Fig 19) but the ostial ring is broad and more distinct from the broad but short and proximally asymmetrical antrum, and the medial part of ductus bursae is straight, not angled at middle. In *P. discisignata*, the ostium-antrum complex is stronger and more evenly sclerotised; the ostial ring is fused with antrum; the antrum is considerably longer and narrower, more quadratic, with slightly convex sides; and the ductus bursae is angled and twisted at middle section. The configuration of the female genitalia of the *P. discisignata*-*P. nyestmacska* species pair is somewhat similar to those of the *P. meticulousa* species-group (see Fibiger & Hacker 2007, Figs 258-262) due to the narrow, ring like ostium and antrum, the posteriorly sclerotised, otherwise longitudinally ribbed-wrinkled, broadly tubular ductus bursae and the elliptical-ovoid corpus bursae lacking signa, but the appendix bursae is, corresponding with the configuration of the vesica, short, semiglobular-subconical.

Biology and distribution. The new species is known from the higher altitude montane primary forest regions of the Fansipan Mts (Hoang Lien National Park), northern Vietnam, above 1900 metres.

Etymology. The new species is dedicated to the wife of the second author, Maria Tóth-Ronkay.

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