

Remarks on the sphingid fauna of Vietnam

(Lepidoptera: Sphingidae)

by

VADIM V. ZOLOTUHN & SERGEJ A. RYABOV

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Abstract: The presence of *Phyllosphingia dissimilis* (BREMER, 1861) in Vietnam is confirmed, and its subspecific attribution is shortly discussed. *Daphnis placida* (WALKER, 1856) is for the first time recorded from Vietnam.

Zusammenfassung: Das Vorkommen von *Phyllosphingia dissimilis* (BREMER, 1861) wird für Vietnam bestätigt und deren subspezifische Zuordnung diskutiert. *Daphnis placida* (WALKER, 1856) wird erstmals, und neu für Vietnam nachgewiesen.

The sphingid fauna of Vietnam is reported to be relatively well studied. 117 species were listed from there by KITCHING & SPITZER (1995), but some of them carried a question mark; their presence was still doubtful.

117 species surely do not cover all the diversity of this family in Vietnam. After preliminary data, at least 150 species are known to us after original collecting data and materials kept in Russian and German museums. Two of them are considered in the article below.

Phyllosphingia dissimilis (BREMER, 1861) (col. pl. 1: 3, 4)

The species was referred in KITCHING & SPITZER (1995: 173) as follows:

“(Phyllosphingia dissimilis perundulans SWINHOE, 1897)

No specimens of *dissimilis* from Vietnam have been traced. VITALIS DE SALVAZA (1919) gave the locality as “Indochine”, which may also refer to Laos or Cambodia. The presence of *dissimilis* in Vietnam would not be unexpected but has yet to be confirmed”.

The species was also not listed from Vietnam by EITSCHBERGER (2002: 161). This very characteristic species was reliably listed from Vietnam for the first time by HILL (2000) in a local Vietnamese journal concerning a biodiversity survey of protected areas in Vietnam. 15 specimens were collected in Pu Mat Nature Reserve in 1998 (May-October) and 1990 (March-May). Our own data show that it is not rare, but very local (fig. 4) and rarely attracted to light sources and most specimens were collected in heavy rain; in such difficult night conditions for collecting they may fly to a trap in dozens. The ♀♀ are rarely attracted to light, only on very hot rainy or nebula nights. One ♀ in Ha Tinh Province was caught above a forest stream in a sultry night in April 2003 (without the lure of light). Maximum size: the length of the forewing is 70 mm.

Surprisingly, caterpillars hatched from eggs laid by the Vietnamese ♀, have rejected *Juglans* (*mandschurica*) as a host in spite of the fact that the species is reported to be monophagous on *Juglans*.

Material: 1 ♂, N-Vietnam, 1600 m, Mt. Fan-Si-Pan (Nord), Cha-pa, Primärurwald, 22°17'N, 103°44'E, IV 1995, leg. R. BRECHLIN (MWM); 1 ♂, N-Vietnam, Mt. Fan-Si-Pan (W-Side), Cha-pa, 1600-1800 m, 22°20'N, 103°40'E, 15.-25.IV.1995, leg. V. SINJAEV & loc. coll. (MWM); 3 ♂♂, Central Vietnam, Quang Binh Prov., Phong Nha Ke Bang N.P., 15.III.-11.IV.1999, leg. A. DEVJATKIN; 1 ♀, Central Vietnam, Ha Tinh Prov., Son Kim vill., IV.2003, leg. S. RYABOV; 1 ♂, Northern Vietnam, Lao Cai prov., Fan-si-pan Mts, env. of Sa Pa, 1500 m, IV-V 2005, leg. S. RYABOV; 5 ♂♂, Northern Vietnam, Lao Cai prov., Fan-si-pan Mts, env. of Sa Pa, 1500 m, 11.V.2006, leg. V. ZOLOTUHN; 2 ♂♂, Central Vietnam, Prov. Kon Tum, Distr. Kom Plong, vill. Mang Cahn, 1250 m, 9.VI.2006, leg. V. ZOLOTUHN; 2 ♂♂, Central Vietnam, Nghe An Prov., Pu Mat NP, Phúc Sơn vill., 130 m, 18°49'N, 104°58'E, 1.X.2008, leg. V. ZOLOTUHN; 3 ♂♂, 1 ♀, Central Vietnam, Thua Thien Hue Prov., Bach Ma N.P., 1250 m, 16°12'N, 107°51'E, 22.IV.2009, leg. V. ZOLOTUHN.

A question about its subspecific attribution is still open. The moth differs well from the nominate subspecies, being larger, more contrastingly patterned and with narrower forewings. Its attribution to *Ph. d. perundulans* SWINHOE, 1897 described from Jaintia Hills also needs confirmation. In comparison with *Ph. d. perundulans* SWH. from SE Tibet, Mangkang (figured in EITSCHBERGER, 2002: pl. 30-32 but mistakenly as ‘*dissimilis hoenei* CLARK, 1937’, misprint), sacculus processes are more robust in the Vietnamese population but symmetric, whereas other characters are not of high diagnostic significance in the species (figs 1-3).

During our visit to BMNH in January 2010, a typical specimen of *Ph. d. perundulans* SWH. and some conspecific ones were studied there (col. pl.1: 1, 2). They are distinctly different from those of Vietnam, being brighter and with the outer margin of both wings more serrate and not embedded in the M-zone. Thus, the Vietnamese population cannot be attributed to *Ph. d. perundulans* SWH. and is closer to, but not identical with, the south Chinese population known as *Ph. d. jordani* BRYK, 1946. If synonymizing the latter with the nominate subspecies as done by EITSCHBERGER (2002) is correct, the moths from Vietnam should be considered within the nominotypical subspecies, but this decision needs further investigation.

Daphnis placida (WALKER, 1856) (col. pl. 1: 6)

First observation from Vietnam.

Material: 1 ♂, Central Vietnam, Prov. Kon Tum, Distr. Kom Plong, vill. Mang Cahn, 1250 m, 11.VI.2006, leg. V. ZOLOTUHN.

The single ♂ of the species was collected during full moon on a mercury lamp. It is much worn but with the very characteristic wing shape and pattern that allows identification without any doubt. The finding is not unexpected because of the high migratory ability of the species, but the possibility of finding it in Vietnam was never considered and the species is absent from all known lists for Heterocera of Vietnam. The ♂ genitalia is figured here (figs 5-8).

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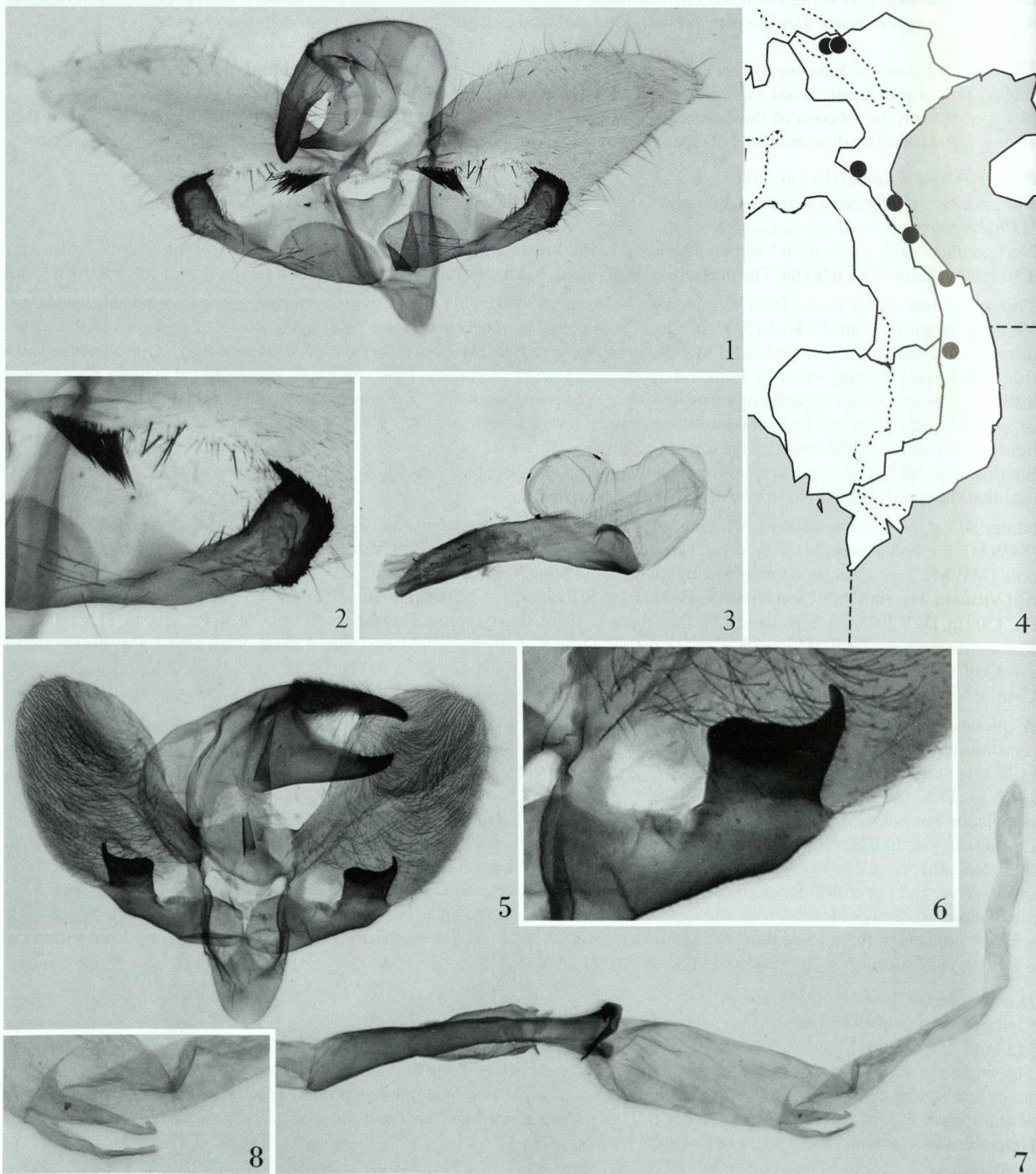
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Addresses of the authors

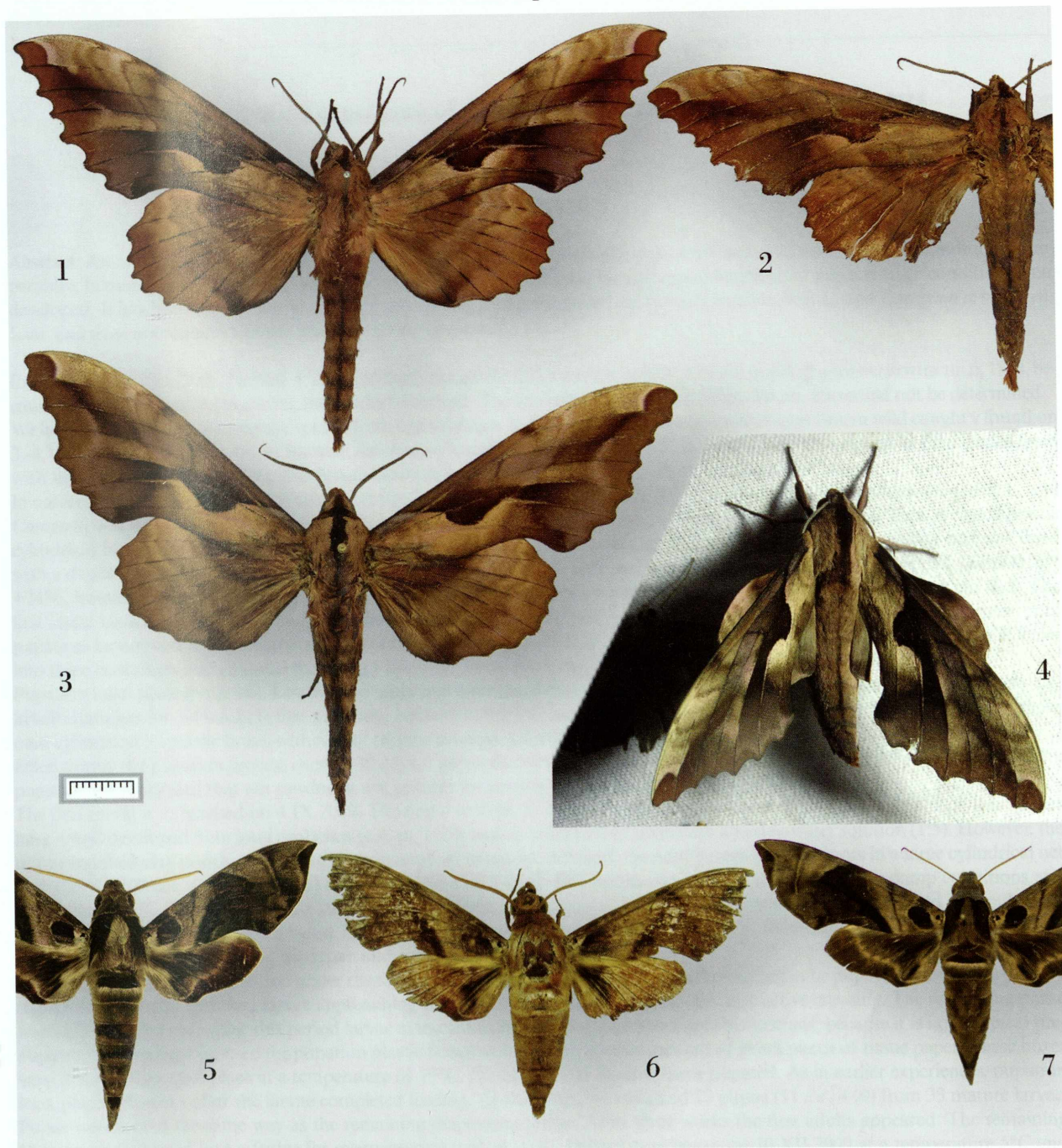
VADIM V. ZOLOTUHN
Department of Zoology
State Pedagogical University of Uljanovsk
pl. 100-letiya V. I. Lenina 4
RUSSIA-432700, Uljanovsk
E-mail: v.zolot@mail.ru

SERGEJ A. RYABOV, Director
Tula Exotarium
Oktyabrskaya, 26,
RUSSIA-300002 Tula
E-mail: tula.exotarium@gmail.com



- 1-4: *Phyllosphingia dissimilis* subspec. from Vietnam: (1) ♂ genitalia general view, northern Vietnam, Fan-si-pan Mts., Sa-Pa (MWM), (2) same, saccular process enlarged, (3) same, aedeagus extracted, (4) distribution of the species in Vietnam.
- 5-8: *Daphnis placida* (WALKER, 1856), Central Vietnam, Prov. Kon Tum, Distr. Kom Plong, vill. Mang Cahn: (5) ♂ genitalia general view, (6) same, saccular process enlarged, (7) same, aedeagus extracted, (8) same, lobes of the vesica enlarged.

Colour plate 1



- 1-2: *Phylloschingia dissimilis perundulans* SWINHOE, 1897, (1) ♂, Naga Hills (BMNH), (2) holotype ♂, Jaintia Hills (BMNH).
 3-4: *Phylloschingia dissimilis* subsp. from Vietnam, (3) ♂, northern Vietnam, Fan-si-pan Mts., Sa-Pa (MWM), (4) ♂, Central Vietnam, Prov. Kon Tum, Distr. Kom Plong, vill. Mang Cahn, 1250 m, 9.VI.2006 (photo: V. ZOLOTUHN);
 5-7: *Daphnis placida* (WALKER, 1856), (5) ♂, Thailand, Chiang Mai, Sanpatong, 9.XII.1988, leg. H. SCHNITZLER (ZFMK), (6) ♂, Central Vietnam, Prov. Kon Tum, Distr. Kom Plong, vill. Mang Cahn, 1250 m, 11.VI.2006, leg. et coll. V. ZOLOTUHN, (7) ♀, Malaysia, Borneo, Sabah, Kinabalu mts. 04.2007 (coll. S. RYABOV).

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Autor(en)/Author(s): Zolotuhin Vadim V., Ryabov Sergej A.

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