

## Records of the Sphingidae (Lepidoptera) from the Philippines, with Descriptions of a New Species and a New Subspecies<sup>1)</sup>

By

**Hiroshi INOUE**

311–2, Bushi, Iruma City, Saitama Pref. 358, Japan

**Abstract.** All the specimens of the Sphingidae from the Philippines preserved in the National Science Museum, Tokyo, are listed, together with my private collection. The species not examined by me but previously recorded by senior authors are added. One new species, *Poliana albescens*, and one new subspecies, *Amplypterus panopus mindanaoensis*, are described. Three new synonyms are stated: *Ambulyx tattina uichancoi* (CLARK) = *A. tattina* JORDAN, *Cypa decolor manilae* CLARK = *C. decolor decolor* (WALKER), and *Elibia linigera* BOISDUVAL = *E. dolichus* WESTWOOD. The lectotype and paralectotype of *Macroglossum caldum philippinense* CLARK are designated.

BOISDUVAL ([1875]) described seven new species of the Sphingidae from the Philippines: *Choerocampa hesperus* [= *Daphnis placida placida* (WALKER)], *Elibia lignigera* [= *E. dolichus* (WESTWOOD)], *Acosmeryx socrates* (Manila), *Panacra tiridates*, *Choerocampa echeclus* [= *Hippotion*], *Choerocampa rhesus* [= *Theretra*], and *Choerocampa pollux* [= *Cechenena*]. BUTLER (1879) described one new species: *Enpinanga vigens*. ROTHSCHILD (1894 & 1895) described three new species: *Meganoton cocytoides*, 1894 [= *M. rufescens rufescens* (BUTLER)]; although Mindanao was included, *cocytoides* is considered to be a synonym of the nominotypical subspecies from India to Thailand, *Ambulyx staudingeri*, 1895, and *Panacra variegata*, 1894 [= *Eupanacra mydon elegantulus* (HERRICH-SCHÄFFER)]. SEMPER (1896) listed 45 species of the Sphingidae from various islands of the Philippines, including two new species, *Chaerocampa brunnea* [= *Theretra*] and *Sataspes cerberus* [= *S. tagalica* BOISDUVAL, subsp.]. ROTHSCHILD et JORDAN (1903) cited literature in great detail for each species and subspecies and their synonyms of all the known taxa of the world. They described *Polyptychus trilineatus philippinensis* from Luzon and Mindanao. WAGNER (1913–1919) cites about 30 species (including some widespread species in the Oriental Region such as *Agrius convolvuli*) as occurring the Philippines mainly based on ROTHSCHILD et JORDAN, (1903). CLARK (1917–1938), described eight new species and eight new subspecies mainly from Luzon. JENSEN

1) This study is supported by the Grant-in-aid for Scientific Research Nos. 60041078 and 61043074 for Field Research of the Monbusho International Scientific Research Program, Japan.

(1973) recorded 37 species mainly from Palawan, with some taxonomic notes. Recently HOGENES et TREADAWAY (1993), described five new species from the Philippines.

The following list is compiled mainly based on a rich collection made by Dr M. OWADA (abbreviated as MO), the National Science Museum, Tokyo (abbreviated as NSMT), with a few specimens collected by Dr Y. KUROSAWA of the same museum. In addition some specimens I personally received from Drs H. KEZUKA and Y. Yoshiyasu and from various sources caught by native collectors are included. Most of the specimens, including the holotypes of two new taxa, secured by Drs KUROSAWA and OWADA are preserved in the National Science Museum, Tokyo, but most of my private collection (abbreviated as HI) will be transferred to the Natural History Museum, London, excepting part of them which will be donated to Nat. Sci. Mus., Tokyo, after completion of this paper. The species not examined by me but recorded from the Philippines are also cited.

Among the type-series of moths here illustrated those of CLARK's new taxa (figs. 1, 3-5) excepting fig. 6 were taken at Carnegie Museum, Pittsburgh, and those of ROTHSCHILD and JORDAN (fig. 2) and fig. 6 at The Natural History Museum, London.

In compiling this list I express my gratitude to the above mentioned friends.

OWADA's collecting sites. Luzon: Barlig, 1,550 m, Mt. Data, 2, 250 m, Sagada, 1,550 m, Mountain Prov.; Paoay, 2,400 m, Nr Sayangan, Benguet Prov.; Los Banos, 200 m, Laguna Prov. Mindoro: Puerto Galera, 50 m, N Mindoro. Mindanao: Iligan, New Bataan, N Davao; Mt. Talomo, 1,100 m, Apo Range, Upper Baracatan, Davao; Motoklot, 650 m, Gasy, 700 m, Maitum, S Cotabato. Palawan: Matalangao, 180 m, N Palawan; Victoria Peak, 500 m, Trident Mines, C Palawan.

### *Agrius convolvuli* (LINNAEUS)

*Sphinx convolvuli* LINNAEUS, 1758, Syst. Nat. (Edn 10), 1: 490.

*Material examined.* Luzon: Paoay, 2,400 m, 10. vii. 1985, 1♂; Los Baños, 12. ix. 1985, 1♀ (MO). Panay: 23. v. 1995, 1♂, HI. Palawan: Puerto Princesa, 16. v. 1988, 1♂, HI.

*Notes.* SEMPER (1896) recorded from Luzon, Bohol, Cebu and Mindanao, and JENSEN (1973) from Palawan.

### *Megacorma obliqua obliqua* (WALKER)

*Macrosila obliqua* WALKER, 1856, List Specimens lepid. Insects Colln. Br. Mus., 8: 208.

*Material examined.* Palawan: Victoria Peak, 500 m, Trident Mines, 3-5. ix.

1985, 1♂ (MO).

*Notes.* SCHULTZE (1907) recorded from Luzon, and JENSEN (1973) from Palawan and Balabac.

*Acherontia styx medusa* MOORE

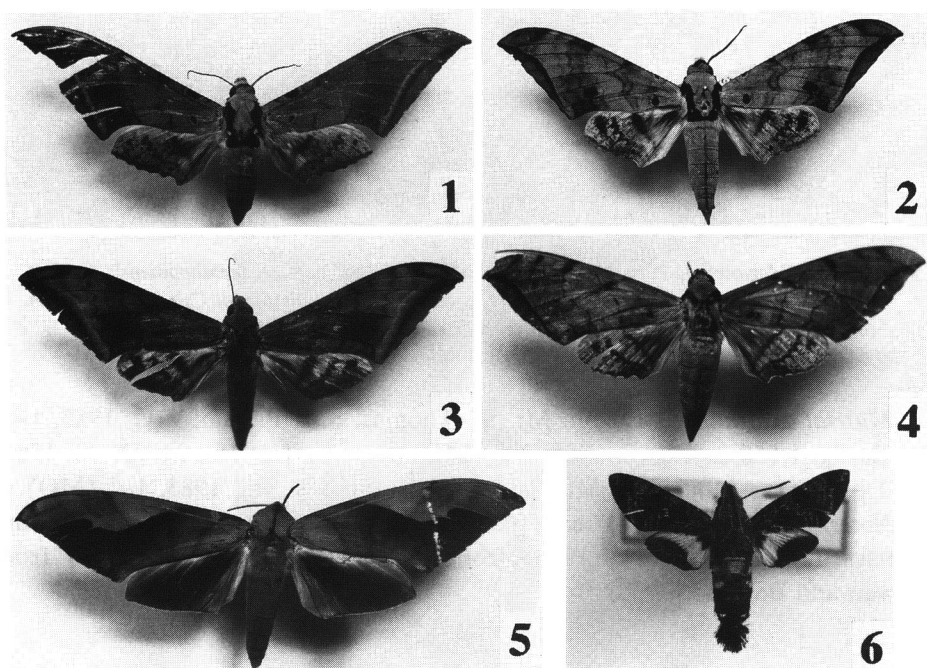
*Acherontia medusa* MOORE, [1858], Cat. lepid. Insects Mus. Hon. East-India Comp., 1: 267.

*Material examined.* Palawan: Puerto Princesa, 15. v. 1988, 1♂, HI.

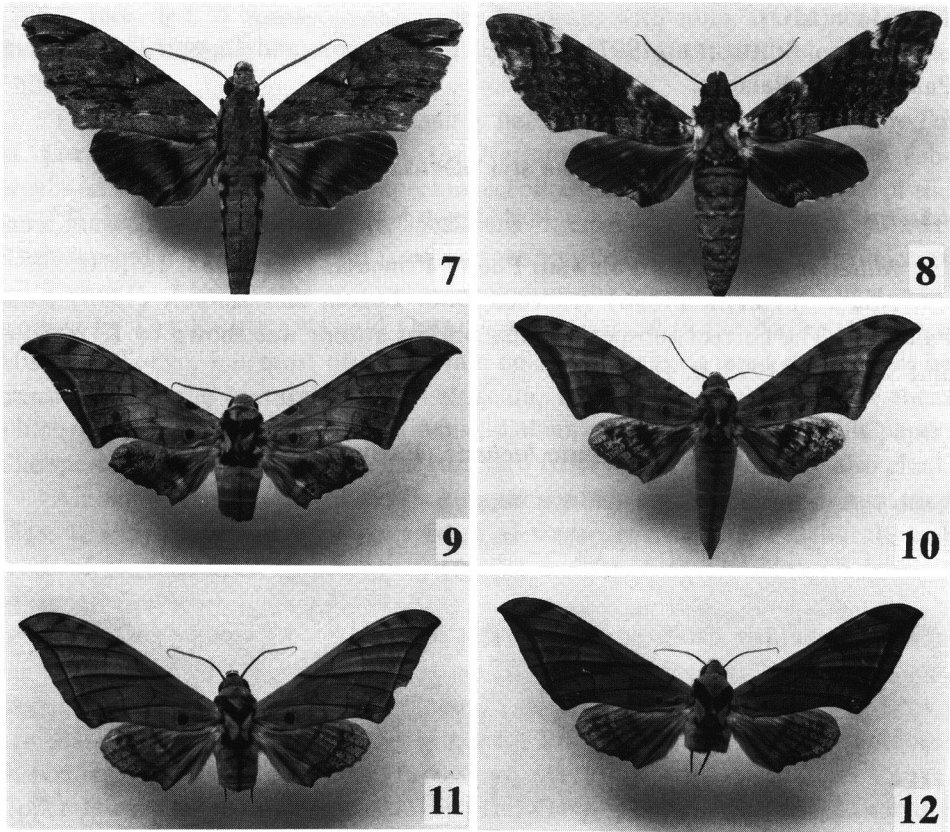
*Notes.* SEMPER (1896) recorded from Luzon, and JENSEN (1973) from Palawan. The correct subspecies name and its author was shown by KITCHING and SPITZER (1995, p. 181).

*Acherontia lachesis* (FABRICIUS)

*Sphinx lachesis* FABRICIUS, 1798, Ent. Syst. Suppl., p. 434.



Figs. 1-6. Type-series. 1. *Ambulyx sericeipennis luzoni* (CLARK), holotype ♀. 2. *A. wilemani* (ROTHSCHILD et JORDAN), holotype ♂. 3. *A. immaculata* (CLARK), holotype ♀. 4. *A. johnsoni* (CLARK), holotype ♀. 5. *Clanis surigaoensis* CLARK, holotype ♂. 6. *Macroglossum caldum philipinense* CLARK, paralectotype ♀.



Figs. 7–12. *Meganoton*, *Poliana* and *Ambulyx* spp. 7. *M. rufescens philippinensis* CLARK, ♂. 8. *P. albescens* sp. nov., holotype ♂. 9. *A. sericeipennis luzoni* CLARK, ♂. 10. *A. immaculata* CLARK, ♂. 11. *A. johnsoni* CLARK, ♂. 12. Ditto, ♀.

*Material examined.* Luzon: Mt. St. Thomas, S of Baguio, v–vi. 1985, 1♂, HI. Barlig, 1,550 m, 19. vii, 1985, 1♀ (MO); Sagada, 1,550 m, 21–23. vii. 1983, 2♂, 1♀ (MO). Mindanao: Mt. Talomo, 1,100 m, 3–6. viii. 1985, 1♂ (MO).

*Notes.* SEMPER (1896) recorded from Luzon, Polillo, Babuyan and Cebu, ROTHSCHILD and JORDAN (1903) from Palawan, and JENSEN (1973) from Palawan and Balabac.

#### *Meganoton nyctiphanes* (WALKER)

*Macrosila nyctiphanes* WALKER, 1856, List Specimens lepid. Insects Colln. Br. Mus., 8: 209.

*Notes.* ROTHSCHILD and JORDAN (1903) recorded from Palawan.

*Meganoton rufescens philippinensis* CLARK

*Meganoton rufescens philippinensis* CLARK, 1938, Proc. New Engl. zool. Club, 17: 37.

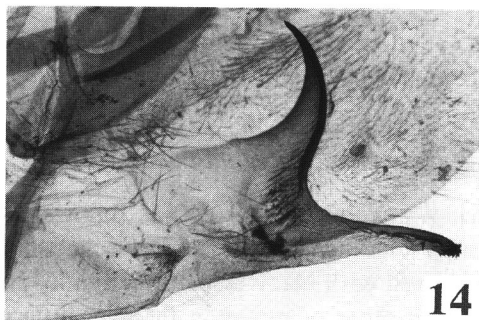
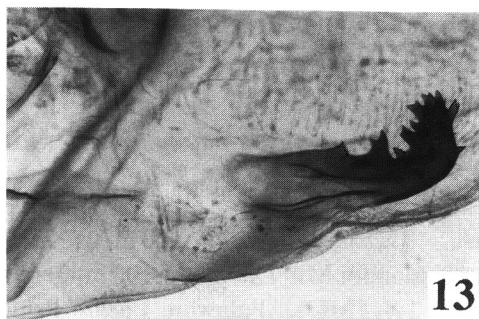
*Material examined.* Mindanao: Iligan, 8–10. iv. 1969, 1♂ (MO).

*Notes.* This subspecies was founded on a single male from Los Baños, Luzon. ROTHSCHILD (1894) included Mindanao for the range of *M. cocytoides* ROTHSCHILD, a junior synonym of the nominotypical subspecies.

*Poliana albescens* sp. nov.

*Male.* Palpus with 1st and 2nd joints white, 3rd joint, face and dorsal surface of head olive-green, antennal shaft with dorsal surface olive-green, apical one-fifth white. Thorax and abdomen above olive-green, apical half of tegula white, a pair of black patches formed by raised tuft of hair present at posterior margin of thorax. Abdominal segments fringed with white at posterior margins, each segment with a pair of white dots as extensions of oblique lateral white lines. Thorax and abdomen below white, legs variegated with white and olive-green.

Forewing olive-green, basal area white, subbasal white line, ante- and post-median series of lines alternately white and dark brown, the outer antemedian and



Figs. 13–14. Male genitalia, right valva. 13. *Poliana albescens* sp. nov. (H. INOUE Slide 12390). 14. *P. leucomelas* ROTHSCHILD et JORDAN (HI Slide 13313).

inner postmedian white lines broadened at costa, subterminal fascia more weakly dentate than postmedian lines, produced at middle, ill-defined white patch at subterminal area between veins 4 and 6, termen and fringe with white spots between vein 2 and 6, a white spot at tornus. Hindwing darker olive-green, straightish postmedian fascia faint, a white bar near tornus, fringe white, spotted with olive-green at extensions of veins. Underside monotonous brownish green, forewing with two white costal marks at posterior area, hindwing with basal and hindmarginal area whitish, transverse fasciae much faintly reproduced than on above.

Length of forewing: 47–49 mm. Wingspan: 91–99 mm.

*Male genitalia.* Harpe very short, apical area upcurved, strongly serrated, aedeagus cylindrical, simple, no cornuti.

*Type series.* Holotype ♂, and paratypes 4♂: Motoklot, 650 m, Maitum, South Cotabato, Mindanao, 11. viii. 1985 (MO). The holotype and two paratypes in coll. NSMT, one paratype in coll. HI and one paratype in coll. J.-M. CADIOU, Brussels.

*Distribution.* Philippines (Mindanao).

*Notes.* Somewhat similar to *P. leucomelas* ROTHSCHILD et JORDAN (1915) from Thailand, Cambodia and Vietnam, but quite distinct in colour of body and wings, forewing with much smaller white discal stigma and white area of median and terminal area much more confined. The male genitalia have a quite distinctly shaped harpe as illustrated.

### *Psilogamma menephron menephron* (CRAMER)

*Sphinx menephron* CRAMER, 1780, Uitlandsche Kapellen, 3: 164, pl. 285: A.

*Material examined.* Luzon: Los Baños, 200 m, 21–23. vii. 1985, 1 ♀; id., 12. ix. 1985, 1♂ (MO). Mindanao: Mt. Talomo, 1,100 m, 3–6. viii. 1985, 1 ♀; Gasy, 700 m, 12–13. viii. 1985, 1 ♀ (MO). Palawan: Puerto Princesa, 15–20. v. 1988, 2♂, 2 ♀, HI.

*Notes.* SEMPER (1896) recorded from Luzon, Cebu, Bohol and Mindanao, and JENSEN (1973) from Palawan and Balabac.

### *Amplipterus panopus mindanaoensis* subsp. nov.

Separated from *A. p. panopus* (CRAMER) as follows:

Forewing with outer shading of postmedian fascia usually broader, terminal dark area inwardly bordered with black fascia much more sharply angled inward at vein 5. Hindwing with outer postmedian fascia a little more distally placed, distal yellow marks of inner postmedian fascia less developed, antemedian fascia

usually weaker and median fascia usually more slender. Underside, forewing with terminal dark area more deeply extended inward. From subsp. *celebensis* (ROTHSCHILD & JORDAN), 1906: 179, it is distinguished by the discal band of forewing not so oblique, the subterminal zigzag line on forewing below well-developed as in the nominotypical subspecies.

*Type series.* Holotype, ♂: Mt. Talomo, 1,100 m, Apo Range, Upper Baracatan, Davao, Mindanao, 3–6. viii. 1985 (MO). Paratypes: Sagada, 1,550 m, Mountain Prov., Luzon, 21–23. vii. 1985, 1 ♀; data as holotype, 1 ♂; Motoklot, 650 m, Maitum, S. Cotabato, Mindanao, 11. viii. 1985, 5 ♂; Gasy, 700 m, Maitum, S. Cotabato, Mindanao, 12–13. viii. 1985, 4 ♂; type-locality, 17–19. viii. 1985, 1 ♂, 1 ♀; Los Baños, 200 m, Laguna Prov., Luzon, 11–13. ix. 1985, 1 ♂ (MO); Panay, 21. iii. 1995, 1 ♂, HI. The holotype and 11 paratypes in coll. NSMT and 4 paratypes in coll. HI.

*Distribution.* Philippines (Luzon, Panay and, Mindanao).

*Notes.* SEMPER (1896) recorded from Luzon. The nominotypical subspecies is illustrated by D'ABRERA ([1987], p. 52, pl. [17]: [8], ♂; [9], ♀).

#### *Ambulyx sericeipennis luzoni* (CLARK)

*Oxyambulyx sericeipennis luzoni* CLARK, 1924, Proc. New Engl. zool. Club, 9: 14.

*Material examined.* Luzon: Paoay, 2,400 m, 11. vii. 1985, 1 ♂ (MO).

*Notes.* From a single female from Manila, Luzon, this subspecies was described. This and subsp. *javanica* (CLARK) are much smaller, with more strongly falcate apex of forewing, than the other subspecies.

#### *Ambulyx wilemani* (ROTHSCHILD et JORDAN)

*Oxyambulyx substrigilis wilemani* ROTHSCHILD et JORDAN, 1916, Novit. zool., 23: 252.

*Material examined.* Panay: 23. v. 1995, 5 ♂, HI. Mindanao: Mt. Talomo, 3–6. viii. 1985, 1 ♂, 1 ♀; id., 17–19. viii. 1985, 4 ♂ (MO).

*Notes.* CLARK (1919, Proc. New Engl. zool. Club, 6: 100) doubted *wilemani* to be an independent species and CADIOU and HOLLOWAY (1989, p 134) upgraded it as a good species based on the external and genitalic features. Forewing with antemedian spots at costa and dorsum are usually heavier than in *substrigilis*.

#### *Ambulyx substrigilis substrigilis* (WESTWOOD)

*Sphinx (Ambulyx) substrigilis* WESTWOOD, 1847, Cabinet orient. Ent., [p. 61].

*Notes.* JENSEN (1973) recorded from Palawan.

*Ambulyx pryeri* DISTANT

*Ambulyx pryeri* DISTANT, 1887, Ann. Mag. nat. Hist., (5), 20: 271.

*Notes.* JENSEN (1973) recorded from Palawan.

*Ambulyx staudingeri* ROTHSCHILD

*Ambulyx staudingeri* ROTHSCHILD, 1894, Dt. ent. Z., Iris, 7: 300, pl. 7: 1.

*Material examined.* Luzon: Banaway, 7. v. 186, 1♂; Mt. St. Thomas, S of Baguio, v–vi. 1985, 1♂, HI. Barlig, 1,550 m, 17–19. vii. 1985, 15♂; Sagada, 1,550 m, 21–23. vii. 1985, 3♂, 1♀ (MO). Panay: 23. v. 1995, 1♂, HI. Mindanao: Mt. Talomo, 1,100 m, 3–6. viii. 1985, 41♂; id., 17–19. viii. 1985, 1♂; Motoklot, 650 m, 11. viii. 1985, 1♂; Gasy, 700 m, 12–13. viii. 1985, 1♂ (MO).

*Notes.* The type-locality is Mindanao. SEMPER (1896) added Luzon. JENSEN (1973) recorded it from Tawitawi, near Sabah, Borneo.

*Ambulyx immaculata* (CLARK)

*Oxyambulyx immaculata* CLARK, 1924, Proc. New Engl. zool. Club, 9: 14.

*Material examined.* Panay: 23. v. 1995, 3♂, HI. Negros: Amban, 16. vii. 1970, 1♂, HI. Mindanao: Mt. Talomo, 1,100 m, 3–6. viii. 1985, 3♂, 1♀; id., 17–19. viii. 1985, 4♂ (MO).

*Notes.* Based on a single female from Manila, Luzon, this remarkable species was described. A male was illustrated by D'ABRERA ([1987]: pl. [79]: [8]). The male is much lighter in the ground colour and the forewing with antemedian patches and transverse lines much clearer than in the female.

*Ambulyx johnsoni* (CLARK)

*Oxyambulyx liturata johnsoni* CLARK, 1917, Proc. New Engl. zool. Club, 6: 61, pl. 8: 1.

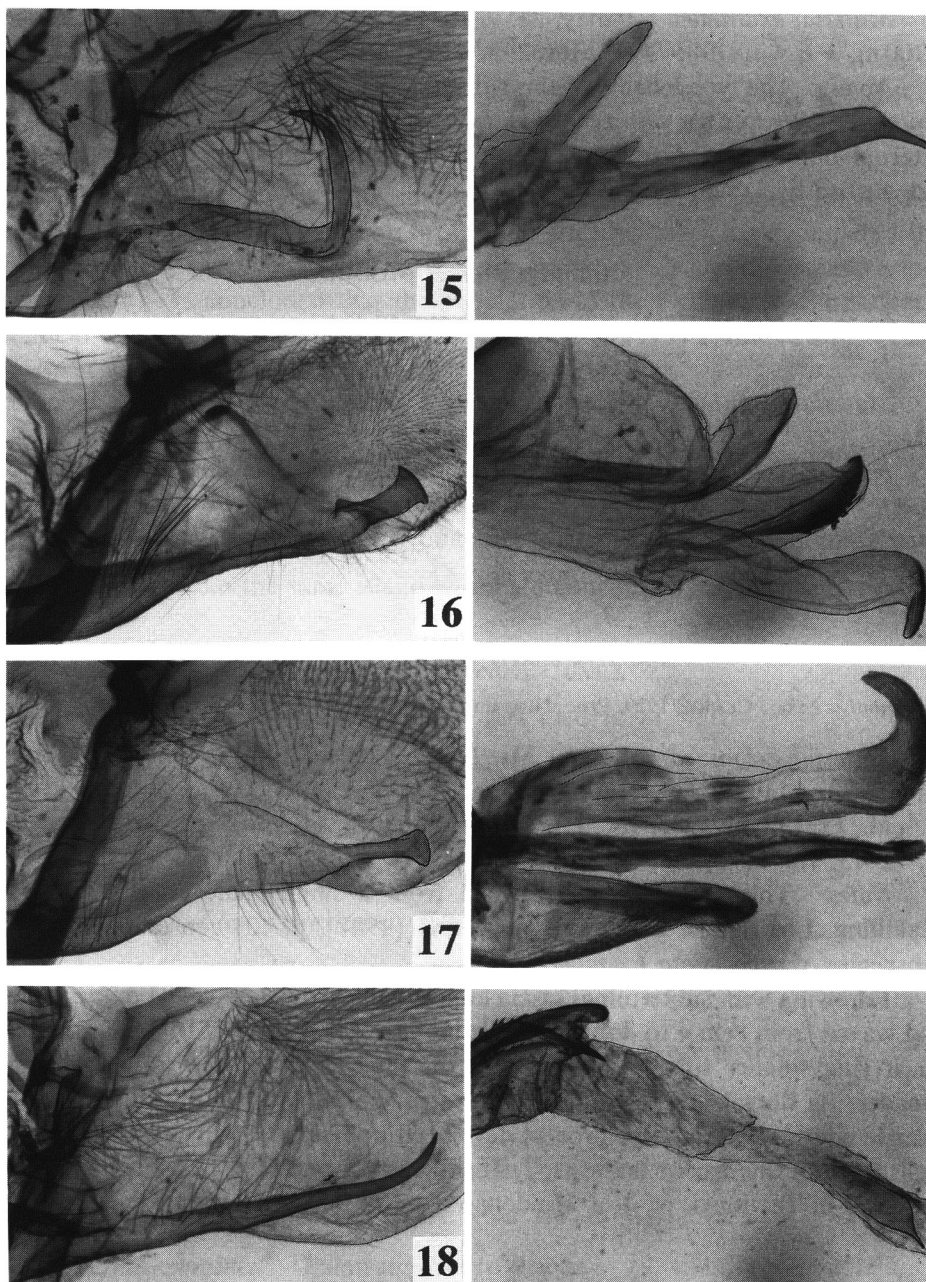
*Material examined.* Negros: Mt. Canlaon, ca 1,000 m, viii–ix. 1995, 1♂, HI. Mindanao: Mt. Talomo, 1,100 m, 3–6. vii. 1985, 6♂; id., 3–6. viii. 1985, 10♂; id., 17–19. viii. 1985, 14♂, 1♀; Gasy, 700 m, 12–13. viii. 1985, 1♂ (MO).

*Notes.* On a single female from “probably Manila” this species was described as a subspecies of *liturata*, but the author (1936, *op. cit.*, 15: 91) upgraded it as a valid species by examining a male.

*Ambulyx canescens flava* (CLARK)

*Oxyambulyx canescens flava* CLARK, 1924, Proc. New Engl. zool. Club, 9: 16.





Figs. 15–18. Male genitalia of *Ambulyx* spp., right valva (left) and cornuti (right). 15. *A. wilemani* (ROTHSCHILD et JORDAN) (HI Slide 12392). 16. *A. moorei* MOORE (HI Slide 15898). *A. bakeri* (CLARK) (HI Slide 15899). 18. *A. immaculata* (CLARK) (HI Slide 12394).

*Material examined.* Panay: 23. v. 1995, 1♂, HI. Mindanao: Mt. Talomo, 1,100 m, 3–6. viii. 1985, 4♂; Motoklot, 650 m, 11. viii. 1985, 1♀ (MO).

*Notes.* The type-locality of this subspecies is Mindanao. The nominotypical *canescens* (WALKER) was recorded from Palawan by JENSEN (1973). The external differences of this subspecies from the nominotypical subspecies are redescribed by D'ABRERA [1987]: 60.

### *Ambulyx moorei* MOORE

*Ambulyx moorei* MOORE, [1858], in HORSFIELD & MOORE, Cat. lepid. Insects Mus. East-Ind. Co., 1: 266.

*Material examined.* Palawan: Puerto Princesa, 14 & 19. v. 1988, 1♂, 1♀, HI.

*Notes.* This species was already recorded from Palawan and Balabac by JENSEN (1973, p. 2). KITCHING and SPITZER (1995, p. 178), considered *Smerinthus decolor* SCHAUFUSS, 1870, and *Ambulyx subocellata* R. FELDER, [1874], as junior synonyms of *moorei*.

### *Ambulyx bakeri* (CLARK), sp. rev.

*Oxyambulyx bakeri* CLARK, 1929, Proc. New Engl. zool. Club, 11: 10.

*Material examined.* Luzon: Mt. Data, 2,250 m, 14. vii. 1985, 1♂ (MO). Panay: 23. v. 1995, 3♂, HI. Mindanao: Mt. Talomo, 1,100 m, 3–6. viii. 1985, 4♂; id., 17–19. viii. 1985, 4♂, 1♀; Mitoklot, 650 m, 11. viii. 1985, 1♂; Gasy, 700 m, 12–13. viii. 1985, 2♂.

*Notes.* This species was described from a single male collected at Mt. Makilling, Los Baños, Luzon. D'ABRERA ([1987], p. 60) considers it to be a subspecies of *subocellata* (= *moorei*).

Forewing with subterminal fascia almost vanished below vein 4 or weakened and waved from vein 4 to dorsum, while in *moorei* it is straight to dorsum, discal black ring smaller than in *moorei*. In the male genitalia the transtilla much broader, its dorsal margin minutely serrated, harpe without dorsally extended sclerite emitting a spine-like process developed in *moorei*. A line drawing of the right valva of this species is shown by JENSEN (1973, p. 2, fig. 1) from a specimen collected in Tawitawi, west of Mindanao close to Sabah, Borneo.

### *Ambulyx tattina* (JORDAN)

*Oxyambulyx substrigilis tattina* JORDAN, 1919, Novit. zool., 26: 192.

*Oxyambulyx tattina*: JORDAN, 1929, Novit. zool., 35: 62.

*Oxyambulyx tattina uichancoi* CLARK, 1938, Proc. New Eng. zool. Club, 17: 40. Syn. nov.

*Ambulyx tattina nichancoi* (!): BRIDGES, 1993, Cat. family-group, genus-group and species-group Sphingidae World: VII. 54, VIII. 3, incorrect subsequent spelling.

*Material examined.* Luzon: Los Baños, 200 m, 11–13. ix. 1985, 1♂ (MO). Panay: 23. v. 1995, 2♂, HI. Mindanao: Motoklot, 650 m, 11. viii. 1985, 2♀; Mt. Talomo, 1,100 m, 17–19. viii. 1985, 4♂ (MO).

*Notes.* CLARK described his subspecies based on a single female collected at Laguna (=Los Baños), Luzon, by Prof. L. B. UICHANCO. I have compared the above recorded specimens with those from Peninsular Malaysia, Sumatra and Borneo and have concluded that the population of the Philippines are perfectly identical with the Sundanian populations. JENSEN (1973) recorded this species (misspelt as *tatina*) from Palawan.

#### *Clanis stenosema* ROTHSCHILD et JORDAN

*Clanis stenosema* ROTHSCHILD et JORDAN, 1907, Novit. zool., 14: 93.

*Notes.* JENSEN (1973) recorded from Palwan, and D'ABRERA ([1987]) again recorded from the same island based a colour photograph of a female.

#### *Clanis surigaoensis* CLARK

*Clanis surigaoensis* CLARK, 1928, Proc. New Engl. zool. Club, 10: 41.

*Material examined.* Mindanao: Gasy, 700 m, 12–13. viii. 1985, 1♂ (MO).

*Notes.* The type-locality of this endemic species is Surigao, northeastern Mindanao.

#### *Clanis negritensis* HOGENES et TREADAWAY

*Clanis negritensis* HOGENES et TREADAWAY, 1993, Nachr. entomol. Ver. Apollo, Frankfurt, N. F., 13: 534, figs. 1, 2, 4.

*Notes.* Originally this species was recoded from Negros, but subsequently Luzon was added by HAXAIRE (1994, p. 35).

#### *Leucophlebia lineata* WESTWOOD

*Leucophlebia lineata* WESTWOOD, 1847, Canibet orient. Ent., [p. 46], pl. 32: 2.

*Material examined.* Palawan: Puerto Princesa, 19. v. 1988, 1♀, HI.

*Notes.* ROTHSCHILD and JORDAN (1903) recorded from Luzon.

*Polyptichus trilineatus philippinensis* ROTHSCHILD et JORDAN

*Polyptichus trilineatus philippinensis* ROTHSCHILD et JORDAN, 1903, Novit. zool., 9 (Suppl.): 239.

*Notes.* The type-locality of this subspecies is Luzon. According to the authors "*Polyptichus dentatus* CRAMER" and "*P. timesius* STOLL" of SEMPER (1896) from Mindanao belong to this subspecies.

*Marumba dyras javanica* (BUTLER)

*Triptogon javanica* BUTLER, 1875, Proc. zool. Soc. Lond., 1875: 254.

*Notes.* SEMPER (1896) recorded from Luzon, Cebu and Mindanao.

*Marumba juvenicus* ROTHSCHILD et JORDAN

*Marumba juvenicus* ROTHSCHILD et JORDAN, 1912, Novit. zool., 19: 132, fig. 6.

*Notes.* JENSEN (1973) recorded from Palawan.

*Marumba amboinicus luzoni* CLARK

*Marumba amboinicus luzoni* CLARK, 1935, Proc. New Engl. zool. Club, 15: 21.

*Material examined.* Luzon: Laguna, 19. viii. 1951, 1 ♀ (N. CABRIGA), HI. Sagada, 1,550 m, 21–23. vii. 1985, 1 ♂ (MO). Panay: 23. v. 1995, 2 ♂, HI.

*Notes.* CLARK (1935) describes that the genitalia of a male from Luzon show some differences from those of Celebes (=Sulawesi) (subsp. *celebensis* ROTHSCHILD et JORDAN), while a male from Mindanao is identical with the latter.

*Daphnusa ocellaris* WALKER

*Daphnusa ocellaris* WALKER, 1856, List Specimens lepid. Insects Colln Br. Mus., 8: 238.

*Material examined.* Luzon: Los Baños, 200 m, 11–13. ix. 1985, 1 ♂ (MO). Mindoro: Puerto Galera, 50 m, 10. ix. 1985, 1 ♂ (MO).

*Notes.* ROTHSCHILD and JORDAN (1903) recorded from Mindanao, and JENSEN (1973) from Palawan.

*Cyba decolor decolor* (WALKER)

*Smerinthus decolor* WALKER, 1856, List Specimens lepid. Insects. Colln Br. Mus., 8: 255.

*Cyba decolor manilae* CLARK, 1930, Proc. New Engl. zool. Club, 12: 28, *syn. nov.*

*Material examined.* Luzon: Barlig, 1,550 m, 19. vii. 1985, 1 ♀ (MO). Mindanao: Mt. Talomo, 1,100 m, 3–6. viii. 1985, 1 ♂ (MO).

*Notes.* In the original description Luzon and Sumatra were included for subsp. *manilae*. I cannot find any constant geographic differences among the specimens from Indian subcontinent (type-locality: India), Sundaland and from the Philippines.

### *Cypa claggi* CLARK

*Cypa claggi* CLARK, 1935. Proc. New Engl. zool. Club, 15: 22.

*Notes.* Based on a male from Mt. Apo, Mindanao, this species was described.

### *Phyllosphingia dissimilis*, subsp. (?)

*Material examined.* Luzon: Laguna, 10. viii. 1963, 1 ♂ (C. BALILING), HI.

*Notes.* As I (INOUE, 1973, p. 115) already recorded, the single male has abnormal genitalia and it is impossible for me to compare them with the other subspecies.

### *Cephonodes hylas hylas* (LINNAEUS)

*Sphinx hylas* LINNAEUS, [1771], Mantissa Plantarum, (2): 539.

*Material examined.* Luzon: Nr Abatan, Benguet Prov., 29. v. 1977, 1 ♀ (Y. KUROSAWA).

*Notes.* SEMPER (1896) recorded from Luzon, Camiguin and Mindanao.

### *Cephonodes picus* (CRAMER)

*Sphinx picus* CRAMER, 1777, Uitlandsche Kapellen, 2: 83, pl. 148: B.

*Material examined.* Luzon: Manila, 21. viii. 1973, 1 ♂ (H. KEZUKA), HI. Palawan: Calandagau Is., 11. viii. 1992, 1 ♂, HI.

*Notes.* The male genitalia are remarkably different from *hylas*: valvae of the both species are asymmetrical, but the left one of *picus* is much longer with a rounded apex while in *hylas* it is apically expanded and deeply emarginated.

### *Cephonodes banksi* CLARK

*Cephonodes banksi* CLARK, 1923, Proc. New Engl. zool. Club, 8: 75.

*Notes.* From a single female collected at Baguio, Luzon, this species was described. Although D'ABRERA ([1987], p. 116) said "See Appendix plate", he did not show a specimen.

***Sataspes tagalica cerberus* SEMPER**

*Sataspes cerberus* SEMPER, 1896, Schmett. Philipp., 2: 408.

*Notes.* Originally described from Luzon based on a single female, and subsequently ROTHSCHILD and JORDAN (1903, p. 474) treated it as a "form".

***Gnathothlibus erotus eras* (BOISDUVAL)**

*Deilephila eras* BOISDUVAL, 1832, in Voy. Astrolabe, Lépid., p. 185.

*Material examined.* Luzon: Sagada, 1,550 m, 21–23. vii. 1983, 3♂ (MO). Palawan: Victoria Peak, 500 m, 3–5. ix. 1985, 1♂ (MO).

*Notes.* SEMPER (1896) recorded from SE Mindanao (Palau Islands), and JENSEN (1973) from Palawan and Balabac.

***Daphnis hypothous hypothous* (CRAMER)**

*Sphinx hypothous* CRAMER, 1780, Uitlandsche Kapellen, 3: 165, pl. 285: D.

*Material examined.* Luzon: Mt. Data, 2,250 m, 14. vii. 1985, 1♂; Barlig, 1,550 m, 19. vii. 1985, 1♂ (MO). Mindanao: Iligan, 18–20. iv. 1969, 1♀; Mt. Talomo, 1,100 m, 3–6. viii. 1985, 1♂ (MO). Palawan: Matalangao, 180 m, 27–30. viii. 1985, 1♂; Victoria Peak, 500 m, 3–5. ix. 1985, 1♂ (MO). Puerto Princesa, 16. v. 1988, 2♀, HI.

*Notes.* SEMPER (1896) recorded from Cebu, and JENSEN (1973) from Palawan and Balabac.

***Daphnis vriesi* HOGENES et TREADAWAY**

*Daphnis vriesi* HOGENES et TREADAWAY, 1993, Nachr. entomol. Ver. Apollo, Frankfurt, N. F., 13: 538, figs. 3, 5.

*Material examined.* Palawan: Matalangao, 180 m, 27–30. viii. 1985, 2♀ (MO).

*Notes.* This species was recently described as a close relative of *D. hypothous* (widespread in the Indo-Australian Region) and *D. hayesi* CADIOU (Sulawesi) from Luzon, Mindanao (including Samal Islet) and Palawan.

*Daphnis placida placida* (WALKER)

*Darapsa placida* WALKER, 1856, List Specimens lepid. Insects Colln Br. Mus., 8: 186.

**Material examined.** Palawan: Matalangao, 180 m, 28–30. viii. 1985, 1♂ (MO). Puerto Princesa, 14 & 20. v. 1988, 2♀, HI.

**Notes.** SEMPER (1896) recorded from Luzon, Cebu and Mindanao as “*Daphnis angustans* FELDER” and from Palawan as “*D. andamana* DRUCE”.

*Acosmeryx socrates* BOISDUVAL

*Acosmeryx socrates* BOISDUVAL, [1875], in BOISDUVAL & GUENÉE, Hist. nat. Insectes, (Spec. Gén. Lépid.), 1: 219.

**Material examined.** Luzon: Los Baños, 28. v. & 22. ix. 1984, 2♂ (Y. YOSHIYASU), HI. Barlig, 1,550 m, 19. vii. 1985, 1♂; Sagada, 1,550 m, 21–23. vii. 1985, 1♂; id., 25. vii. 1985, 1♂ (MO). Panay: 23. v. 1995, 1♂, HI. Negros: Mt. Canlaon, ca 1,000 m, viii–ix. 1995, 1♂, HI. Mindanao: New Bataan, 10–15. iv. 1969, 1♀; Gasy, 700 m, 12–13. viii. 1985, 1♂; Mt. Talomo, 1,100 m, 17–19. viii. 1985, 2♂ (MO).

**Notes.** The type-locality of this species is Manila, Luzon. SEMPER (1896) recorded from Luzon and Cebu and his *sericeus* from Luzon is a misidentification of this species. Although JENSEN (1973) considered *Acosmeryx cinerea* BUTLER and *A. socrates* as occurring on Palawan, the specimens he observed from that island must be *A. shervillii* BOISDUVAL (= *cinerea*), and *socrates* seems to be confined to the islands east of Neo-Wallace Line and Sulawesi.

*Acosmeryx anceus subdentata* ROTHSCHILD et JORDAN

*Acosmeryx anceus subdentata* ROTHSCHILD et JORDAN, 1903, Novit. zool., 9 (Suppl.): 528.

**Material examined.** Panay: 23. v. 1995, 1♂, HI. Mindanao: Mt. Talomo, 1,100 m, 3–6. vii. 1985, 4♂, 1♀; id., 17–19. viii. 1985, 5♂; Motoklot, 650 m, 11. viii. 1985, 1♂ (MO).

**Notes.** JENSEN (1973), recorded from Palawan, Balabac and Tawitawi.

*Elibia dolichus* WESTWOOD

*Sphinx dolichus* WESTWOOD, 1847, Cabinet orient. Ent., [p. 61], pl. 30: 1.

*Elibia linigera* BOISDUVAL, [1875], in BOISDUVAL & GUENÉE, Hist. nat. Insectes, (Spec. Gén. Lépid.), 1: 180; D’ABRERA, [1987], Sphingidae Mundi: 130, pl. [47]: [5]. **Syn. nov.**

*Ampelophaga linigera*: ROTHSCHILD and JORDAN, 1903, Novit. zool., 9 (Suppl.): 519, pl. 48: 11; pl. 54: 22; SEITZ, 1929, in SEITZ, Macrolepid. World, 10: 549.

*Material examined.* Palawan: Matalangao, 180 m, 28–30. viii. 1985, 1♂ (MO).

*Notes.* JENSEN (1973) recorded from Palawan and Tawitawi. *Elibia linigera* was described from a single male from Manila, Luzon, which seems to be a pale and small form of this widespread species, see D'ABRERA's illustration.

*Eupanacra malayanana* (ROTHSCHILD et JORDAN)

*Panacra malayana* ROTHSCHILD et JORDAN, 1903, Novit. zool., 9 (Suppl.): 537, pl. 7: 24; pl. 44: 25, 26; pl. 49: 1; pl. 55: 5, 6.

*Notes.* JENSEN (1973) recorded from Palawan.

*Eupanacra tiridates* (BOISDUVAL)

*Panacra tiridates* BOISDUVAL, [1875], in BOISDUVAL & GUENÉE, Hist. nat. Insectes, (Spec. Gén. Lépid.), 1: 286, pl. 7: 4.

*Notes.* Originally described from "Philippines", and SEMPER (1896) recorded from Luzon and Bohol.

*Eupanacra mydon elegantulus* (HERRICH-SCHÄFFER)

*Thyreus elegantulus* HERRICH-SCHÄFFER, [1856], Samml. neur. aussereurop. Schmett., fig. 479.

*Material examined.* Luzon: Baguio, viii. 1961, 1♂, HI. Barlig, 1,550 m, 19. vii. 1985, 1♂ (MO).

*Notes.* SEMPER (1896) recorded from Luzon and Bohol.

*Eupanacra cadioui* HOGENES et TREADAWAY

*Eupanacra cadioui* HOGENES et TREADAWAY, 1993, Nachr. entomol. Ver. Apollo, Frankfurt, N. F., 13: 542, figs. 7, 8.

*Notes.* This species was described from a pair of specimens from Luzon and Leyte.

*Angonyx testacea* (WALKER)

*Perigonia testacea* WALKER, 1856, List Specimens lepid. Insects Colln. Br. Mus., 8: 102.

*Material examined.* Luzon: Los Baños, 28. v. 1984, 1♂ (Y. YOSHIYASU), HI. Palawan: Victoria Peak, 3–5. ix. 1985, 1♀ (MO).



*Eurypteryx alleni* HOGENES et TREADAWAY

*Eurypteryx alleni* HOGENES et TREADAWAY, 1993, Nachr. entomol. Ver. Apollo, Frankfurt, N. F., 13: 544, figs. 9, 11.

*Material examined.* Palawan: Matalangao, 150 m, 28–30. viii. 1985, 1♂ (MO).

*Notes.* This species was described from specimens from the Philippines: Negros (type-locality) and Palawan (the above specimen, one of the paratypes), Sarawak, Burnei, Sumatra and Seram. According to the authors, DIEHL ([1982], p. 49, pl. 6: 70) from Sumatra and HOLLOWAY (1987, p. 159, pl. 16: 4) from Borneo recorded and illustrated as *E. falcata* GEHLEN 1922 (New Guinea) belong to this species. In my collection there is a male of *alleni* from Taiping, Peninsular Malaysia in Augst 1988 caught by a native collector.

*Neogurelca hyas* (WALKER)

*Lophura hyas* WALKER, 1856, List Specimens lepid. Insects Colln. Br. Mus., 8: 107.

*Notes.* SEMPER (1896) recorded from Luzon, Camiguin and Palawan, and JENSEN (1973) from Balabac.

*Macroglossum avicula* BOISDUVAL

*Macroglossa avicula* BOISDUVAL, [1875], in BOISDUVAL & GUENÉE, Hist. nat. Insectes, (Spec. Gén. Lépid.), 1: 334.

*Material examined.* Luzon: Nr Abatan, Benguet Prov., 29. v. 1977, 1♂; Mt. Data, Bontoe Prov., 2–4. vi. 1977, 1♀ (Y. KUROSAWA).

*Notes.* ROTHSCHILD and JORDAN (1903) recorded from Palawan.

*Macroglossum caldum philippinense* CLARK

*Macroglossum caldum philippinense* CLARK, 1928, Proc. New Engl. zool. Club, 10: 46.

*Material examined.* Luzon: Banaue, Ifugao Prov., 2–4. vi. 1977, 1♀ (Y. KUROSAWA).

*Notes.* Based on two females from Baguio, Luzon, this subspecies was described. Here will be designated one of them preserved in Carnegie Museum the lectotype and the other in The Natural History Museum, London, the paralectotype. The holotype, male, of the nominotypical *caldum* JORDAN (1926) (New Guinea) and the paralectotype of *philippinense* are illustrated by D'ABRERA ([1987], p. 160, pl. [57]: [6, 7]), with incorrect authorship as "JORDAN" and the sex as "♂".

*Macroglossum pyrrhosticta* BUTLER

*Macroglossa pyrrhosticta* BUTLER, 1875, Proc. zool. Soc. Lond., 1875: 242, pl. 36: 8.

*Notes.* SEMPER (1896) recorded from Luzon.

*Macroglossum glaucoptera* BUTLER

*Macroglossa glaucoptera* BUTLER, 1875, Proc. zool. Soc. Lond., 1875: 241, pl. 36: 9.

*Material examined.* Mindanao: Dinagat Is., v. 1984, 1♂, HI.

*Macroglossum unguis* ROTHSCHILD et JORDAN

*Macroglossum unguis* ROTHSCHILD et JORDAN, 1903, Novit. zool., 9 (Suppl.): 643, pl. 3: 7; pl. 51: 11, 51.

*Material examined.* Luzon: Los Baños, 200 m, 11–13. ix. 1985, 1♀ (MO).

*Notes.* The authors described that “The ♂♂ from the Philippine which we have been able to dissect belong all to *unguis*, but some of the ♀♀ are apparently not different from *sitiene*, .....”. *M. unguis* and *M. sitiene* WALKER are very difficult to separate from their appearance. I have dissected the above recorded female and confirmed it to be *unguis*. I suppose that specimens of the Philippines east of the Neo-Wallace Line belong to *unguis*, but those from Palawan (unknown to me) are *sitiene*.

*Macroglossum sitiene* WALKER

*Macroglossa sitiene* WALKER, 1856, List Specimens lepid. Insects Colln. Br. Mus., 8: 92.

*Notes.* JENSEN (1973) recorded from Palawan.

*Macroglossum sylvia* BOISDUVAL

*Macroglossa sylvia* BOISDUVAL, [1875], in BOISDUVAL & GUENÉE, Hist. nat. Insectes, (Spec. Gén. Lépid.), 1: 350.

*Notes.* SEMPER (1896) recorded from Luzon, Camiguin, Mindanao.

*Macroglossum passalus* (DRURY)

*Sphinx passalus* DRURY, 1773, Illust. nat. Hist., 2: Index [91], pl. 29: 2.

*Notes.* SEMPER (1896) recorded from Babuyan, Luzon, Bohol and Camiguin.

*Macroglossum heliophila heliophila* BOISDUVAL

*Macroglossa heliophila* BOISDUVAL, [1875], in BOISDUVAL & GUENÉE, Hist. nat. Insectes, (Spec. Gén. Lépid.), 1: 354, pl. 11: 2.

*Material examined.* Mindoro: Puerto Galera, 50 m, 9–10. ix. 1985, 1 ♀ (MO).

*Notes.* ROTHSCHILD et JORDAN (1903) recorded from the Philippines.

*Macroglossum prometheus prometheus* BOISDUVAL

*Macroglossa prometheus* BOISDUVAL, [1875], in BOISDUVAL & GUENÉE, Hist. nat. Insectes, (Spec. Gén. Lépid.), 1: 355.

*Notes.* JENSEN (1973) recorded from Palawan.

*Macroglossum arimasi* HOGENES et TREADAWAY

*Macroglossum arimasi* HOGENES et TREADAWAY, 1993, Nachr. entomol. Ver. Apollo, Frankfurt, N. F., 13: 548, figs. 10, 13.

*Notes.* On a single male from Mt. Canlaon, Negros, this species was described as an ally of *M. heliophila*.

*Macroglossum aquila* BOISDUVAL

*Macroglossa aquila* BOISDUVAL, [1875], in BOISDUVAL & GUENÉE, Hist. nat. Insectes, (Spec. Gén. Lépid.), 1: 340.

*Notes.* ROTHSCHILD et JORDAN, (1903), recorded from Manila, Luzon.

*Macroglossum corythus luteata* BUTLER

*Macroglossa luteata* BUTLER, 1875, Proc. zool. Soc. Lond., 1875: 241, pl. 37: 5.

*Material examined.* Luzon: Los Baños, 200 m, 11–13. ix. 1985, 2 ♀ (MO). Mindanao: Bislig, Surigao d. S., 3–8. vii. 1977, 1 ♂ (Y. KUROSAWA). Dinagat Is., v. 1984, 2 ♀, HI.

*Notes.* SEMPER (1896) recorded from Luzon, Mindanao and Palawan as *M. sylvia*, nec BOISDUVAL.

*Macroglossum hemichroma* BUTLER

*Macroglossa hemichroma* BUTLER, 1875, Proc. zool. Soc. Lond., 1875: 243, pl. 37: 1.

*Notes.* SEMPER (1896) recorded from Cebu as *M. tinnunculus*, nec BOISDUVAL.

***Macroglossum haslami* CLARK**

*Macroglossum haslami* CLARK, 1922, Proc. New Engl. zool. Club, 8: 15.

*Notes.* This species was described from Manila, Luzon, based on a single female resembling to *M. passalus*.

***Hippotion boerhaviae* (FABRICIUS)**

*Sphinx boerhaviae* FABRICIUS, 1775, Syst. Ent., p. 542.

*Notes.* Although SEMPER (1896) recorded from Luzon, Bohol, Camotes and Cebu, the specimens he examined must be the following species or a mixture of the two. JENSEN (1973) recorded 8 specimens from Palawan, probably overlooking the following species known as *H. depictum* DUPONT in those days.

***Hippotion rosetta* (SWINHOE)**

*Chaerocampa rosetta* SWINHOE, 1892, Cat. Lepid. Heteroc. Colln Oxford Univ. Mus., 1: 16.

*Material examined.* Luzon: Banaue, Ifugao Prov., 2–4. vi. 1977, 1♂, 1♀ (Y. KUROSAWA). Barlig, 1,550m, 17. vii. 1985, 1♂ (MO). Mindoro: Puerto Galera, 50m, 9–10. ix. 1985, 2♂ (MO). Panay: 23. v. 1995, 2♂, HI. Leyte: Baybay, 20. i. 1985, 1♂ (Y. YOSHIYASU), HI. Mindanao: Davao City, 24. vi. 1977, 1♂ (Y. KUROSAWA). Mt. Talomo, 1,100m, 3–6. viii. 1985, 2♂ (MO). Palawan: Matalangao, 180m, 28–30. viii. 1985, 2♂ (MO). Puerto Princesa, 19. v. 1988, 1♂, HI.

***Hippotion echeclus* (BOISDUVAL)**

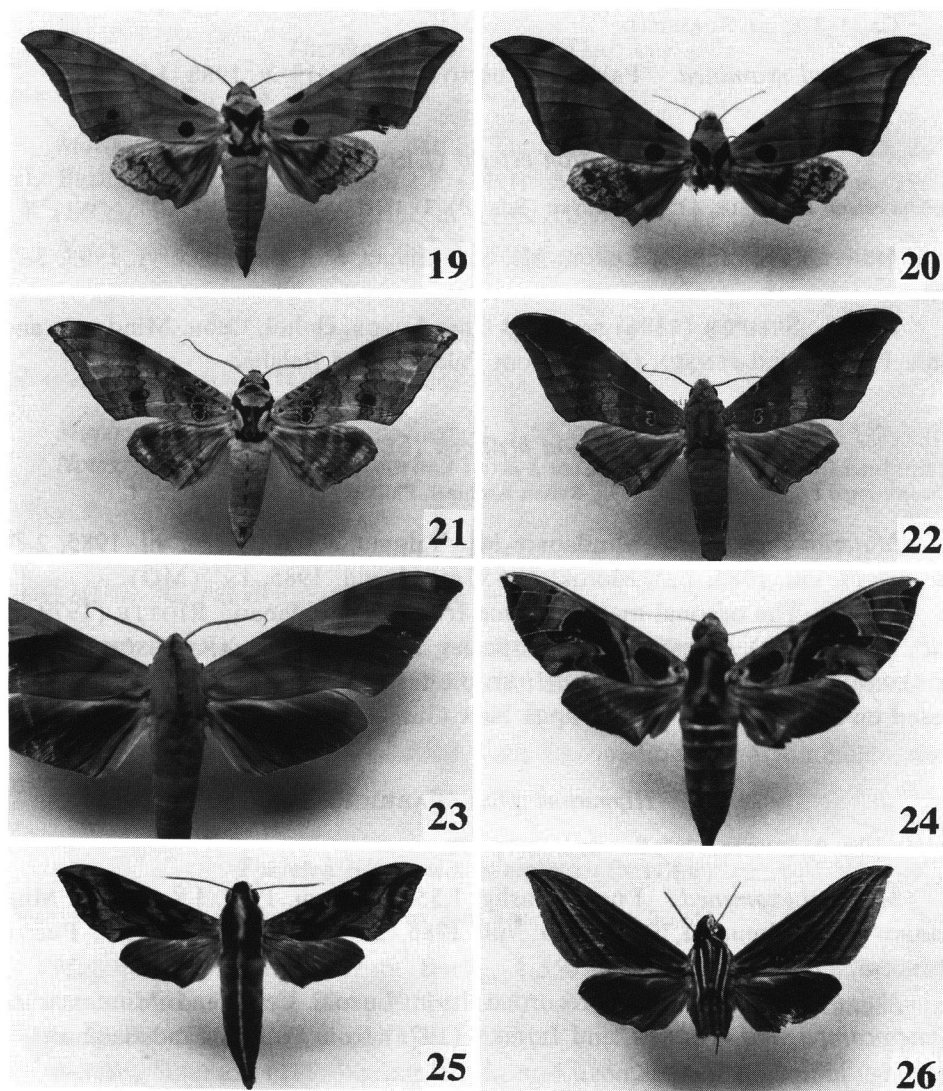
*Choerocampa echeclus* BOISDUVAL, [1875], in BOISDUVAL & GUENÉE, Hist. nat. Insectes, (Spec. Gén. Lépid.), 1: 233.

*Material examined.* Luzon: Mt. St Thomas, S of Baguio, v–vi. 1985, 1♂, HI.

*Notes.* SEMPER (1896) recorded from Luzon, Bohol and Cebu as *Chaerocampa eson* CRAMER.

***Hippotion rafflesii* (MOORE)**

*Chaerocampa rafflesii* MOORE, [1858], in HORSFIELD & MOORE, Cat. lepid. Insects Mus. East-Ind.



Figs. 19–26. *Ambulyx*, *Clanis*, *Daphnis*, *Hippotion* and *Theretra* spp. 19. *A. wilemani* (ROTHSCHILD et JORDAN), ♂. 20. Ditto, ♀. 21. *Ambulyx canescens flava* (CLARK), ♂. 22. *A. bakeri* (CLARK), ♂. 23. *C. surigaoensis* CLARK, ♂. 24. *D. vriesi* HOGENES et TREADAWAY, ♀. 25. *H. brunnea* (SEMPER), ♂. 26. *T. manilae* CLARK, ♂.

Co., 1: 276, nec HORSFIELD.

**Material examined.** Palawan: Puerto Princesa, 19. v. 1988, 1 ♀, HI.

*Hippotion celerio* (LINNAEUS)

*Sphinx celerio* LINNAEUS, 1758, Syst. Nat. (Edn 10), 1: 491

**Material examined.** Luzon: Mt. St Thomas, S of Baguio, v–vi. 1985, 3 ♂, HI.

**Notes.** SEMPER (1896) recorded from Luzon, Bohol, Cebu, Mindanao and Sulu Islands, and JENSEN (1973) from Palawan and Balabac.

*Hippotion brunnea* (SEMPER)

*Chaerocampa brunnea* SEMPER, 1896, Reisen Archipel. Philipp., (2), 6: 400, pl. 52: 1.

**Material examined.** Mindanao: Mt. Talomo, 1,100 m, 3–6. vii. 1985, 2 ♂; id., 17–19. viii. 1985, 3 ♂; Motoklot, 650 m, 11. viii. 1985, 1 ♂ (MO).

**Notes.** The original material came from SE Mindanao. RIOTTE (1979, p. 225, figs. 2, 3c) transferred this species from *Theretra* (ROTHSCHILD and JORDAN, 1903: 785) to *Hippotion* from the feature of palpus and male genitalia based on material from Wau, Papua New Guinea.

*Hippotion velox* (FABRICIUS)

*Sphinx velox* FABRICIUS, 1793, Ent. Syst., 3(1): 378.

**Material examined.** Luzon: Barlig, 1,550 m, 19. vii. 1985, 1 ♀ (MO). Mindanao: Mt. Talomo, 1,100 m, 3–6. viii. 1985, 2 ♂ (MO). PALAWAN: Puerto Princesa, 17. v. 1988, 1 ♂, HI.

**Notes.** SEMPER (1896) recorded from Luzon, Cebu and Mindanao as *Chaerocampa vigil* GUÉRIN, and JENSEN (1973) from Palawan and Balabac.

*Theretra nessus* (DRURY)

*Sphinx nessus* DRURY, 1773, Illust. exot. Ins., 2: Index [91], pl. 76: 1.

**Material examined.** Luzon: Mt. St Thomas, S of Baguio, v–vi. 1985, 1 ♀, HI. Barlig, 1,550 m, 19. vii. 1985, 1 ♂ (MO). Palawan: Victoria Peak, 500 m, 3–5. ix. 1985, 1 ♂ (MO).

**Notes.** SEMPER (1896), recorded from Luzon, Mindanao and Palawan.

*Theretra clotho clotho* (DRURY)

*Sphinx clotho* DRURY, 1773, *Illustr. exot. Ins.*, 2: Index [91], pl. 28: 1.

*Material examined.* Luzon: Mt. St Thomas, S of Baguio, v-vi. 19185, 2♂, HI. Barlig, 1,550 m, 17. vii. 1985, 1♀ (MO). Mindanao: Iligan, 18-20. iv. 1969, 1♀ (MO). Palawan: Puerto Princesa, 14 & 20. v. 1988, 2♂, HI.

*Notes.* SEMPER (1896), recorded from Luzon, Bohol, Cebu and Palawan.

*Theretra alecto* (LINNAEUS)

*Sphinx alecto* LINNAEUS, 1758, *Syst. Nat.* (Edn 10), 1: 492.

*Material examined.* Luzon: Sagada, 1,550 m, 21-23. vii. 1985, 1♂ (MO).

*Notes.* SEMPER (1896) recorded from Luzon, Bohol, Cebu and Mindanao.

*Theretra oldenlandiae oldenlandiae* (FABRICIUS)

*Sphinx oldenlandiae* FABRICIUS, 1775, *Syst. Ent.*, p. 542.

*Material examined.* Luzon: Mt. St Thomas, S of Baguio, v-vi. 1985, 1♀; Banaway, Ifgao Prov., 9. v. 1986, 1♂, HI. Paoay, 2,400 m, 10. vii. 1985, 1♀ (MO).

*Notes.* SEMPER (1896) recorded from Luzon, Bohol and Mindanao, and JENSEN (1973) from Balabac.

*Theretra silhetensis intersecta* (BUTLER)

*Chaerocampa intersecta* BUTLER, 1875, *Proc. zool. Soc. Lond.*, 1875: 623.

*Material examined.* Luzon: Barlig, 1,550 m, 19. vii. 1985, 1♂ (MO). Mindanao: Puerto Galera, 50 m, 10. ix. 1985, 1♂ (MO). Palawan: Matalangao, 150 m, 28-30. viii. 1985, 2♂ (MO).

*Notes.* SEMPER (1896) recorded from Luzon, Bohol and Sulu Islands. Although JENSEN (1973) recorded from Palawan, Balabac and Tawitawi, and treated subsp. *intersecta* a junior synonym, the Palawan population should be assigned to the nominotypical subspecies.

*Theretra latreillii lucasii* (WALKER)

*Chaerocampa lucasii* WALKER, 1856, *List Specimens lepid. Insects Colln. Br. Mus.*, 8: 141.

*Material examined.* Luzon: Mt. St Thomas, S of Baguio, v-vi. 1985, 1♂, HI. Mt. Data, 2,250 m, 12. vii. 1985, 1♀; Barlig, 1,550 m, 17. viii. 1985, 1♂

(MO). Mindanao: Mt. Talomo, 3–6. viii. 1985, 3♂ (MO). Lalawan: Matalangao, 150 m, 28–30. viii. 1985, 1♂, 1♀ (MO).

*Notes.* SEMPER (1896) recorded from Luzon, Bohol, Cebu and Mindanao, and JENSEN (1973) from Palawan, Balabac and Tawitawi.

### *Theretra rhesus* (BOISDUVAL)

*Choerocampa rhesus* BOISDUVAL, [1875], in BOISDUVAL & GUENÉE, Hist. nat. Insectes, (Spec. Gén. Lépid.), 1: 254.

*Material examined.* Luzon: Mt. St Thomas, S of Baguio, v–vi. 1985, 1♂, HI. Barlig, 1,550 m, 17. vii. 1985, 1♂; Los Baños, 200 m, 12. ix. 1985, 1♂, 1♀ (MO). Panay: 23. v. 1995, 2♂, HI. Palawan: Puerto Princesa, 19. v. 1988, 1♀, HI.

*Notes.* The original locality of this species is the Philippines. SEMPER, (1896) recorded from Luzon and Cebu, and JENSEN, (1973) from Palawan and Balabac. Now it is known from Peninsular Malaysia, Sumatra, Borneo to the Solomon Islands. *Theretra javanica* ROTHSCHILD, 1894 cannot be retained as a subspecies as was treated by DUPONT & ROEPKE, (1941, p. 75).

### *Theretra manilae* CLARK

*Theretra manilae* CLARK, 1922, Proc. New Engl. zool. Club, 8: 22.

*Material examined.* Luzon: Mt. Data, 2,250 m, 25. vii. 1985, 1♀ (MO). Banaway, Ifgao Prov., 20. v. 1986, 1♂, HI. Mindanao: Mt. Talomo, 1,100 m, 3–6. viii. 1985, 4♂; id., 17–19. viii. 1985, 1♂ (MO).

*Notes.* This species was founded on a single female from Manila, Luzon, as a close relative of the preceding species.

### *Pergesa acteus* (CRAMER)

*Sphinx acteus* CRAMER, 1779, Uitlandsche Kapellen, 3: 93, pl. 248: A.

*Material examined.* Luzon: Los Baños, 200 m, 11–13. ix. 1985, 1♂ (MO). Mindanao: Motoklot, 650 m, 11. viii. 1985, 2♂ (MO).

*Notes.* SEMPER, (1896) recorded from Luzon, Cebu, Bohol, Mindanao and Palawan, and JENSEN, (1973) from Palawan and Balabac.

### *Cechenena helops helops* (WALKER)

*Philampelus helops* WALKER, 1856, List Specimens lepid. Insects Colln. Br. Mus., 8: 180.



*Material examined.* Luzon: Los Baños, 200 m, 12. ix. 1985, 1♂ (MO). Panay: 23. v. 1995, 1♂, HI. Mindanao: Mt. Talomo, 1,100 m, 3–6. viii. 1985, 2♂; id., 17–19. viii. 1985, 2♂, 3♀ (MO). Palawan: Victoria Peak, 500 m, 3–5. ix. 1985, 1♂ (MO).

*Notes.* JENSEN (1973) recorded from Palawan and Balabac.

### *Cechenena pollux* (BOISDUVAL)

*Choerocampa pollux* BOISDUVAL, [1875], in BOISDUVAL & GUENÉE, *Hist. nat. Insectes*, (Spec. Gén. Lépid.), 1: 261.

*Notes.* This species was originally described from Java and the Philippines.

### *Cechenena aegrota* (BUTLER)

*Pergesa aegrota* BUTLER, 1875, *Proc. zool. Soc. Lond.*, 1875: 246.

*Material examined.* Panay: 23. v. 1995, 1♂, HI.

### *Cechenena transpacific* (CLARK)

*Xylophanes transpacific* CLARK, 1923, *Proc. New Engl. zool. Club*, 8: 75.

*Notes.* Based on a single female from Manila, Luzon, this species was described. The author (1926, *op. cit.*, 9: 59), transferred it to *Cechenena* and said, "It is closely allied to *C. aegrota* BUTLER, but is a more brightly colored insect". Probably this is a synonym of the preceding species.

## References

- D'ABRERA, B., 1987. *Sphingidae Mundi. Hawk Moths of the World*. 226 pp., 78 pls. E. W. Classey, Oxon, U.K.
- BOISDUVAL, J. B. A., 1875. Famille de Sphingides. In BOISDUVAL, J. B. A., & M. A. GUENÉE, *Hist. nat. Insectes*, (Spec. Gén. Lépid.), 1: 1–380. Paris.
- BRIDGES, C. A., 1993. *Catalogue of the Family-group, Genus-group and Species-group Names of the Sphingidae of the World*. xxii + 253 pp. Bridges, Illinois.
- BUTLER, A. G., 1879. Descriptions of two new Lepidoptera of the family Sphingidae. *Trans. ent. Soc. Lond.*, 1879: 261–262.
- CADIOU, J.-M., & J. D. HOLLOWAY, 1989. Endemic Sphingidae from Sulawesi (Lepidoptera). *Lambillionea*, 89: 130–158.
- CLARK, B. P., 1917. New Sphingidae. *Proc. New Engl. zool. Club*, 6: 57–72.
- 1922. Sixteen new Sphingidae. *Op. cit.*, 7: 65–78.
- 1923. Thirty-three new Sphingidae. *Op. cit.*, 8: 47–77.
- 1924. Twelve new Sphingidae. *Op. cit.*, 9: 11–21.
- 1928. Sundry notes on Sphingidae and descriptions of ten new forms. *Op. cit.*, 10: 33–46.

- 1929. Sundry notes on Sphingidae, descriptions of sixteen new forms, and of one new genus. *Op. cit.*, 11: 7–24.
- 1930. Sundry notes on Sphingidae and descriptions of seven new forms. *Op. cit.*, 12: 25–30.
- 1935. Descriptions of twenty new Sphingidae and notes on three others. *Op. cit.*, 15: 19–39.
- 1938. Eight new Sphingidae and notes on two others. *Op. cit.*, 17: 37–44.
- DIEHL, E. W., 1982. *Heterocera Sumatrana. Band 1: Sphingidae.* vii+97 pp., 11 pls. E. W. Classey, London.
- DUPONT, F., & W. ROEPKE, 1941. Heterocera Javanica. Fam. Sphingidae, hawk moths. *Verh. ned. Akad. Wet.*, (Tweede Sectie), 40: 1–104, 23 pls.
- HAXAIRE, J., 1994. Note sur quelques Sphingidae Asiatiques. *Lambillionea*, 94: 35–38.
- HOGENES, W., & C. G. TREADAWAY, 1993. New hawk moths from the Philippines (Lepidoptera, Sphingidae). *Nachr. entomol. Ver. Apollo, Frankfurt*, N.F. 13: 533–552.
- HOLLOWAY, J. D., 1987. *The moths of Borneo. Part 3., Lasiocampidae, Eupterotidae, Bombycidae, Brahmaeidae, Saturniidae and Sphingidae.* 199 pp., 20 pls. malayan Nature Society, Kuala Lumpur.
- INOUE, H., 1973. An annotated and illustrated catalogue of the Sphingidae of Taiwan (Lepidoptera). *Bull. Fac. domest. Sci., Otsu Univ.*, 9: 103–179.
- JENSEN, O., 1973. The Sphingidae of the Noona Dan Expedition to the Philippine, Bismarck and Solomon Islands (Insecta, Lepidoptera). *Steenstrupia*, 3: 1–10.
- KITCHING, I. J., & K. SPITZER, 1995. An annotated checklist of the Sphingidae of Vietnam. *Tinea*, 14: 171–195.
- RIOTTE, J. C. E., 1979. Zur Gattungs zugehörigkeit von “*Theretra*” *brunnea* (Lepi.: Sphingidae). *Ent. Z.*, 88: 225–230.
- ROTHSCHILD, L. W., 1894. Additional notes on Sphingidae. *Novit. zool.*, 1: 541–543.
- 1895. Descriptions of new Sphingidae in the collection of Dr. Otto STAUDINGER. *Dt. ent. Z., Iris*, 7: 297–302.
- 1906. New Sphingidae. *Novit. zool.*, 13: 178–185.
- & K. JORDAN, 1903. A revision of the lepidopterous family Sphingidae. *Op. cit.*, 9 (Suppl.): 1–972, 67 pls.
- SEMPER, G., 1896. *Reisen im Archipel der Philippinen von Dr C. SEMPER. Zweiter Theil. Wissenschaftliche Resultate. Sechster Band. Die Schmetterlinge der Philippinischen Inseln. Beitrag zur Indo-Malayische Lepidopterenfauna. Zweite Abtheilung de Nachfalter. —Heterocera* —, pp. 390–408, pls. D–J, LI–LII. Wiesbaden.
- SCHULTZE, W., 1907. New Lepidoptera of the Philippin Islands. *Philipp. J. Sci.*, (A)2: 361–375.
- SEITZ, A., 1928–1929. Sphingidae. In SEITZ, A., *Macrolepid. World*, 10: 523–576, pls. 56c, 60–68.
- WAGNER, H., 1913–1919. Sphingidae. In WAGNER, H., *Lepidopterorum Catalogus*. 12: (1913), 18 (1914), 21 (1915), 23 (1919). 440 p. Berlin.