# Additions to the Genus *Ochyrotica* Walsingham, 1891, in Southeast Asia (Lepidoptera: Pterophoridae: Agdistinae)

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### ABSTRACT

Ochyrotica taiwanica, n. sp., is described from Taiwan. New distribution data are given for O. borneoica, O. yanoi, O. toxopeusi, and O. breviapex.

### INTRODUCTION

Since recent publications on the genus *Ochyrotica* Walsingham, 1891 (Arenberger & Gielis 1988; Arenberger 1988; Gielis 1988), new material has become available for study. The insects involved originate from China (Hainan, Taiwan), the Philippine Islands, and New Guinea (Irian Jaya and Papua New Guinea). Most specimens belong to the *O. connexiva* and *O. concursa* groups, which have been recently revised. The *O. cretosa/buergersi* group, which has a more Indo-Australian distribution, is still under study.

## MATERIALS AND METHODS

Material was examined from the following institutions: Bishop Museum (BPBM), Honolulu, Hawai'i, USA; National Museum of Natural History (USNM), Smithsonian Institution, Washington, D.C., USA; Zoologisk Museum (ZMUC), University of Copenhagen, Copenhagen, Denmark. Specimens without abdomens are denoted with the abbreviation w.a. Material in the author's collection is abbreviated CG.

# Ochyrotica taiwanica Gielis, new species

Figs. 1-3

MALE (Fig. 1). Wingspan 15 mm. Forewings snow white, pattern golden to dark brown, continuous band along costal and dorsal margins. Costal margin darker. Costal margin narrowed at ½ of wing length, widened at ¾. Dorsal band rather narrow basally, widened at ⅓, but not reaching costal band. Widening at ¾ reaches costal margin. Two small longitudinal lines and wavy transverse line of brown scales in distal field. Some pronounced iridescent scales between longitudinal small lines. Apex prolonged, acute, tornus rounded. Fringes brown, with dark basal fringe-line. Hind wings brown, some darkening near apex and anal angle. Thorax snow white with costal and dorsal continuation of forewing markings. Head with grey-brown bifid scales (characteristic of genus). Palpae slender, greyish white. Frons white. Antennae brown, short ciliate, approximately 0.5 forewing length. Abdominal segments 2, 4, 6, and 7 snow white; segments 1 and 5 dark brown; segment 3 brown, with dorsolateral white line. Hind legs dark brown, some white scales near bases of spur pairs.

Genitalia (Figs. 2-3). Valvae symmetrical, rounded. Sacculus with sharp-angled widening in 1/3 of valvae. Saccular process consisting of spined blotch and stout thornlike process distal

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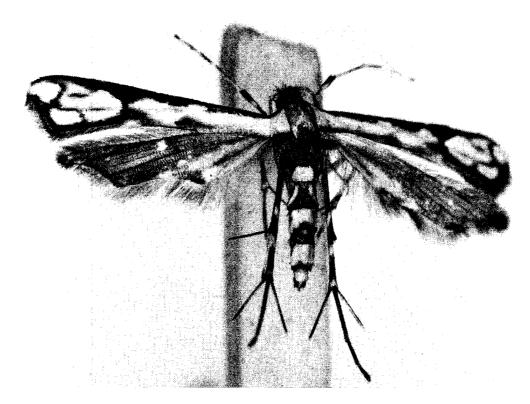


Fig. 1. Ochyrotica taiwanica, n. sp., holotype.

of blotch in middle of valvae. Tegumen simple, rather small. Uncus stout. Vinculum narrow. Juxta small with pair of short anellus arms. Aedeagus straight, stout, end acutely pointed. Cornuti distal in bundle of parallel small spines.

Flight period. November.

FEMALE. Unknown.

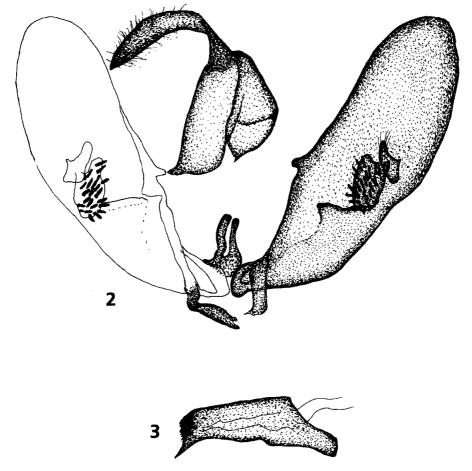
**Type data.** Holotype &, [TAIWAN]: Taihoku [now Taipei], 17.xi.1932, S. Issiki, genitalia CG 1948 (USNM).

**Distribution.** Known only from type locality.

**Remarks.** This species closely resembles the holotype of *O. connexiva* (Walsingham). Since the male of that species is unknown, it is essential to consider the differences.

Table 1. Comparison of Ochyrotica connexiva and Ochyrotica taiwanica.

	O. connexiva	O. taiwanica
Costal and dorsal forewing markings Forewing transverse markings	touch twice	touch once
in distal white field	angulate	sinuous
Forewing longitudinal markings in distal white field Hind wing apical and anal	not pronounced	pronounced
angles	concolorous	darkened



Figs. 2-3. Ochyrotica taiwanica: 2, male genitalia; 3, aedeagus.

# Ochyrotica borneoica Gielis, 1988

Ochyrotica borneoica Gielis in Arenberger & Gielis, 1988:279.

Material examined. PHILIPPINE IS: Tawi Tawi: 5♂♂, 20♀♀, 1 w.a., Tarawakan, North of Batu Batu, 22.x.-13.xi.1961, Noona Dan. Exp. (ZMUC, CG); Balabac: 2♂♂, Dalawan Bay, 7–10.x.1961, Noona Dan. Exp. (ZMUC).

Distribution. Indonesia: Borneo (Kalimantan); Philippine Is: Tawi Tawi: Balabac.

**Remarks.** The distribution of this species appears not to be restricted to the island of Borneo as originally assumed. This revised distribution confirms that the identity of *Ochyrotica* "species 1" from the island of Sumatra is uncertain (Arenberger & Gielis, 1988:284).

# Ochyrotica yanoi Arenberger, 1988

Ochyrotica yanoi Arenberger, 1988:276-79; Gielis, 1989:69.

**Material examined.** [PEOPLES REPUBLIC OF CHINA]: Hainan [I], 13, xi.1942, S. Issiki; Hainan: 2 w.a., Hudibasi, xi.1942, S. Issiki; [TAIWAN]: 12, Taihoku [now Taipei], 23.xi.1932, S. Issiki (all USNM).

Distribution. Japan: Ryukyu Is: Okinawa; China: Hainan I; Taiwan; Vietnam: Tonkin.

**Remarks.** The distributional gap between the Vietnamese and Japanese occurrences has been closed, at least partly, by the recognition of specimens from Hainan and Taiwan.

# Ochyrotica breviapex Gielis, 1989

Ochyrotica breviapex Gielis, 1989:69-72.

Material examined. PAPUA NEW GUINEA: Morobe Prov: 5 & δ, 16 ♀ ♀, Wau, Wau Ecol. Inst., 1,200 m, 12–24.vii, 25–31.vii, 1–10.viii, and 23–31.viii.1983, S. E. & P. M. Miller, secondary montane forest/U.V. light trap and Malaise trap (USNM); 62 specimens, Wau, 1,200–1,250 m, 8.i.1962, 19–31.i.1967, 20.v.1965, 22.v.1965, 26.v.1965, 27.v.1965, 28.v.1965, 3.v.i.1965, 9.v.i.1965, 11.v.i.1965, 14.v.i.1965, 19.v.i.1965, 22.v.i.1965, 24.v.i.1965, 26.v.i.1965, 7.v.ii.1961, 8.v.ii.1961, 25.v.ii.1961, 26.v.ii.1961, 2.v.iii.1961, 4.v.iii.1961, 11.v.iii.1965, 17.v.iii.1961, 22.v.iii.1961, 25.v.ii.1965, 30.v.iii.1965, 8.i.x.1961, 11.x.i.1961, Malaise trap (J. Scdlacek; J. L. Gressitt & J. Sedlacek; R. Straatman) (BPBM); Southern Highlands Prov: 1 ♂, N of Mendi, 1,800 m, 8.x.1958, light trap, Gressitt (BPBM); SOLOMON IS: Guadalcanal: 1 w.a., Kiwi Crk, 18.ix.1944, H. E. Milliron (BPBM); PHILIPPINE IS: Mindanao: 1 ♂, Agusan, Esperanza, 4–11.xi.1959, light trap, C. M. Yoshimoto (BPBM); Mindanao: 1 ♂, Bukidnon, Mt. Katanlad, 1,250 m, 4–9.xii.1959, light trap, L. W. Quate (BPBM); Misamis Or.: 1 ♀, Hindangon, 20 km S of Gingoor, 600–700 m, 20–24.iv.[19]60, Torrevillas (BPBM).

**Distribution.** Indonesia: Borneo (Kalimantan); Papua New Guinea: Wau, Mendi; Philippine Is: Misamis Oriental: Mindanao; Solomon Is: Guadalcanal.

**Remarks.** This species appears to occur not only in the Indonesian Archipelago and New Guinea but also in the Philippine Islands.

# Ochyrotica toxopeusi Gelis, 1988

Ochyrotica toxopeusi Gielis, 1988:285-86.

**Material examined.** INDONESIA: New Guinea: [Irian Jaya]: 1♀, Nabire, S of Geelvink Bay, 0–20 m, 6. vii.1962, Gressitt (BPBM).

Distribution. Indonesia: Sulawesi, Irian Jaya.

**Remarks.** With the material presently examined, the species seems to have an extension of its distribution toward the Australian faunal elements.

### **ACKNOWLEDGMENTS**

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