



TWO NEW SPECIES OF “*ACRONICTA*” OCHSENHEIMER, 1816 FROM CHINA AND VIETNAM (LEPIDOPTERA, NOCTUIDAE, ACRONICTINAE)

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PEKARSKY, O. 2023. Two new species of “*Acronicta*” Ochsenheimer, 1816 from China and Vietnam (Lepidoptera, Noctuidae, Acronictinae). *Entomofauna carpathica*, 35(2): 15-20.

Abstract: Two uncommonly looking noctuids supposedly belonging to the subfamily Acronictinae Harris, 1841 studied, described and illustrated in this paper. One of them, “*Acronicta*” *fuscantenna* sp. n. occurs in China, Fujian province while the second one “*A*”. *sandrae* sp. n. lives in Vietnam, Quang Nam province.

Key words: Lepidoptera, Noctuidae, Acronictinae, *Acronicta*, new species, China, Vietnam

INTRODUCTION

The assignment of these species to the genus *Acronicta* is temporary, additional research is necessary to clarify their correct generic placement and suprageneric position. Checking diverse literature sources did not yield any result. The most complete illustrated books do not contain images of these Noctuidae (CHEN 1999, HOLLOWAY 1989, 2009, 2001, KONONENKO et al. 1998, KONONENKO et al. 2007, KONONENKO & PINRATANA 2013). Genitalia structures of the new species resemble mostly those of the taxa of the genus *Acronicta* (s. l.) by their long, strong clasper positioned along ventral margin of valva in 2/3 from base of the valva in males, and especially by the very wide ostium bursae, and the characteristically sclerotized, wrinkled antrum (FIBIGER et al. 2009).

Abbreviations: HNHM – Hungarian Natural History Museum (Budapest, Hungary); MHNG (NHMG) – Natural History Museum of Geneva; HSV – Helmut Seibald (Vienna, Austria), OP – Oleg Pekarsky (Budapest, Hungary).

SYSTEMATIC PART

“*Acronicta*” *fuscantenna* sp. n.

(Figs 1, 2)

Holotype. Male (Fig. 1), China, Fujian, Wuyi Shan, 1400 m, 27°41'N, 117°33'E, V–VII.2006, leg. Team of Victor Siniaev; slide No. OP1601m (coll. HNHM).

Etymology. The name of the species refers to the brown colour of the antennae.

Diagnosis. “*A*”. *fuscantenna* sp. n. differs externally from “*A*”. *sandrae* (Figs 3, 4) by greyish-brown ground colour and brownish lower part of the forewing, whereas the ground colour of the sister species is greyish dark-brown and the lower part of the forewing is greyish-black. The reliable identification is possible, however, by the genital structures only. Despite the high external similarity of the two species, the male genitalia of the species are strikingly different. Clasp apparatus of “*A*”. *fuscantenna* (Fig. 5) is smaller in size, the valva is short with rounded apex, the clasper is small and claw-like, the aedeagus is bent and the main chamber of vesica globular, while in “*A*”. *sandrae* (Fig. 6) the valva is longer with acute apex, the clasper is larger and longer, distally tapering, the aedeagus is straight and the main (basal) part of vesica is elongated and densely wrinkled.

Description (Fig. 1). Wingspan of Holotype 32 mm. Forewing elongated with acute apex and oblique outer margin. Head white, frons black; thorax blackish-grey, collar black with sparse single white and brown scales, edging by numerous white and brown scales forming a light line apically; tegulae grey with brown scales; antennae thick, brown, grey at base. Forewing ground colour greyish-brown, with some small black dots, lower section of wing largely dark greyish-brown; wing pattern distinctly marked with well-developed postmedial and subterminal lines; subbasal and antemedial lines curved, hardly traceable; medial line S-shaped; postmedial line undulate, dentate, dark grey with outer white fascia and small black tornal streaks; subterminal line grey with white fascia, moderately serrate with two different in size black dots; terminal line a row of black streaks and arrowhead patches; reniform, orbicular and claviform stigmata absent; longitudinal cellular fascia more or less lanceolate, pure white, located between base of wing and postmedial line; cilia as ground colour. Hindwing light greyish-brown, with broad, diffuse pale grey-brownish transverse line and marginal suffusion, discal spot large, lunulate.

Male genitalia (Fig. 5). Uncus strong, thick, rod-like, medium long, basally curved, apically pointed; tegumen broad, penicular lobes covered densely with long hair-like seta; vinculum strong, V-shaped, longer than tegumen; juxta asymmetrical, wide, with two posterior extensions laterad of deep dorsal cleft. Valva strong, short, wide, with almost parallel margins, slightly constricted near middle, with rounded apex; clasper/harpe strong, curved, claw-like with long basal bar. Aedeagus tubular, short, heavily sclerotized, bent at middle, ventral carinal tooth triangular, large and serrate; dorsal and lateral parts of carinal area strongly scobinated; vesica membranous, densely scobinated, main chamber nearly globular, with small medial diverticulum, distal tube long, membranous.

Female genitalia Unknown.

Distribution. The new species known to occur in Fujian province of China.

***“Acronicta” sandrae* sp. n.**

(Figs 2–4)

Holotype. Male (Fig. 2), Vietnam, Prov. Quang Nam Tay, Giang Axan mts., 1300 m, II.2018, leg. Thanh & Hanh; slide No. OP7874m (coll. H. Seibald).

Paratypes. Vietnam: 1 female, with the same data as Holotype, slide No. OP7875f (coll. H. Seibald); 1 female, Axan, Tay Giang-quang Nam, 1300 m, VII.2020 leg. Collector (coll. O. Pekarsky); 1 male, S. Vietnam, Dalat, Datanla Waterfall, 26.V.1995, T. Endo, MHNG ENTO 00061912, (coll. MHNG).

Etymology. The species is dedicated to Sandra, the daughter in law of the famous collector Helmut Seibald (Vienna, Austria), who granted his Noctuidae material for investigation.

Diagnosis. The new species is similar externally to *A. fuscantenna* (Fig. 1) of which it can be separated only by the genitalia structures. The male genitalia of *A. sandrae* (Fig. 6) differ from those of *A. fuscantenna* (Fig. 5) by the larger size of the clasp apparatus, the longer valva with convex costal margin and acute apex, the more rhomboidal juxta with thicker postero-lateral extensions, the straight aedeagus with two long carinal plates, and the more elongated and strongly wrinkled basal section of the vesica.

Description (Figs 2–4). Wingspan 26–34 mm. Forewing elongated with acute apex and oblique outer margin. Head white with dark brown scales, frons brown; thorax brown with sparse white scales, collar brown edged with light scales, tegulae dark brown; antenna thick, brown, with grey suffusion at base. Forewing ground colour greyish dark-brown, with some black areas; wing pattern well marked with well-developed postmedial and subterminal lines; subbasal and antemedial lines hardly traceable; medial line curved; postmedial line curved, dentate, blackish brown with outer grayish white fascia, subterminal line waved, grey with white fascia, with narrow black streaks on veins and two black oval dots; terminal line as a row of elongated black streaks; reniform stigma partly developed as paired white and black arched lines and several black dots, orbicular and claviform stigmata absent; longitudinal cellular fascia located between base of wing and postmedial line, wide and pure white, with almost strait costal and inner margins; cilia as ground colour. Hindwing light greyish-brown, with broad, diffuse darker grey-brownish transverse line and marginal suffusion, discal spot large, lunulate.

Male genitalia (Fig. 6). Uncus strong, medium long, curved, apically pointed; tegumen shorter than vinculum, peniclar lobes with long, thin setae; vinculum strong, V-shaped; juxta rhomboidal, with deep dorso-medial cleft and, thick,

heavily sclerotized postero-lateral extensions. Valva elongated, with straight dorsal and convex ventral edges and acute apex; clasper slightly asymmetrical, thick, triangular, apically acute, surpassing costal margin; left process narrower with more acute tip. Aedeagus tubular, medium-long, straight, caecum somewhat knob-like, ventral carinal ridge with small dents, carina with dorsal and ventral eversible laminae; vesica membranous, wrinkled, main part elongated with rounded subterminal diverticulum, distal tube long, membranous.

Female genitalia (Fig. 7). Ovipositor broad, strong, rather short, covered with thin, short, hair-like setae; anterior apophyses short, thin, with fine ends, posterior apophyses slightly thicker and longer than anterior ones, their tips fine. Ostium bursae funnel-like, antrum sclerotized, large, widely circle-like; ductus bursae tapering towards junction to corpus bursae, its anterior part densely scobinate; appendix bursae large, corpus bursae elongated-elliptical, membranous with two triangular-dentiform sclerotised signa medially.

Distribution. The new species known to occur in Quang Nam and Lam Đong provinces of Vietnam.



1 *A. fuscantenna* sp. n., HT, OP1601m, 32 mm 2 *A. sandrae* sp. n., HT, OP7874m, 26 mm



3 *A. sandrae* sp. n., PT, OP7875f, 34 mm 4 *A. sandrae* sp. n., PT, 32 mm

Figures 1–4. *Acronicta* spp, adults. **1)** *A. fuscantenna* sp. n., male, Holotype, China, Fujian (HNHM); **2)** *A. sandrae* sp. n., male, Holotype, Vietnam, Quang NamTay (HSV); **3)** *A. sandrae*, female, Paratype, Vietnam, Quang Nam Tay (HSV); **4)** *A. sandrae*, PT, Vietnam, Giang (OP).



5 *A. fuscantenna* sp. n., HT, OP1601m

6 *A. sandrae* sp. n., HT, OP7874m

7 *A. sandrae* sp. n., PT, OP7875f

Figures 5–7. *Acronicta* spp, male and female genitalia. 5) *A. fuscantenna* sp. n., Holotype, China, Fujian (HNHM); 6) *A. sandrae*, Paratype, Vietnam, Quang Nam Tay (HSV); 7) *A. sandrae*, Paratype, Vietnam, Quang Nam Tay (HSV).

ACKNOWLEDGEMENTS

I would like to express my gratitude to László Ronkay (HNHM, Budapest) for critical comments to the manuscript and access to the collection of HNHM in 2012.

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