# A New Species of *Syndicus* (Coleoptera, Scydmaenidae) from Vietnam

# Paweł Jałoszyński<sup>1</sup> and Shûhei Nomura<sup>2</sup>

<sup>1</sup>Os. Wichrowe Wzgórze 22/13, 61–678 Poznań, Poland E-mail: japawel@man.poznan.pl <sup>2</sup>Department of Zoology, National Science Museum, Hyakunin-cho 3–23–1, Shinjuku-ku, Tokyo, 169–0073, Japan

**Abstract** A new species of the nominotypical subgenus of the genus *Syndicus* Motschulsky, *S.* (*S.*) *caugiguanus* sp. nov. is described. This is the fourth member of the genus known from Vietnam (the third of the nominotypical subgenus), and its type material was collected in the Hoa Binh Province. The new species resembles *S. difficilis* Jałoszyński, *S. thailandensis* Jałoszyński, *S. saketianus* Jałoszyński, *S. lamdongianus* Jałoszyński and other similarly slender representatives of the genus. It can be identified on the basis of unique structures of the endophallus, which has very short proximal projection and the central complex is only slightly broader than the distal vesicle. Photos of habitus and illustrations of the aedeagus are given.

Key words: Coleoptera, Scydmaenidae, Syndicus, new species, Vietnam.

## Introduction

The genus Syndicus Motschulsky (Scydmaeninae, Cyrtoscydmini) has been recently thoroughly revised, and detailed diagnoses of the nominotypical subgenus and a new subgenus Semisyndicus have been given (Jałoszyński, 2004). The subgenus Syndicus currently comprises twenty species distributed in the Oriental Region and the Himalaya Mts., and two species occurring in Australia. So far, only two species have been known to occur in Vietnam (S. vietnamensis Jałoszyński and S. lamdongianus Jałoszyński), but taking into account of six species inhabiting Thailand and generally poor knowledge concerning the Scydmaenidae of the region, a larger number of species seem likely to be discovered in the Indochina Peninsula. In the present paper, a new species from the northern part of Vietnam is described under the name Syndicus (Syndicus) caugiguanus sp. nov. The nomenclature of endophallus structures and measurements follow those from Jałoszyński, 2004; the holotype is deposited in the Institute of Ecology and Biological Resources, Hanoi, Vietnam (IEBR).

#### Syndicus (Syndicus) caugiguanus sp. nov.

# (Figs. 1A, B, 2A, B)

*Diagnosis.* External characters of this species are very similar to several other members of the genus. Therefore, important diagnostic features can be found mostly in the appearance of the aedeagus, which has endophallus with central complex only slightly broader than distal vesicle, very small proximal vesicle, and very short proximal projection. This combination of characters does not occur in any other species of the nominotypical subgenus.

*Description.* Body moderately large, strongly convex, dark brown with slightly lighter legs and palps, covered with brownish setae.

Male (Figs. 1A, B). Body length: 2.97 mm; head broadest at moderately large, strongly convex eyes, length 0.40 mm, width 0.65 mm; vertex regularly convex; frons nearly flat; supraantennal tubercles distinct, well delimited from frons but not delimited from vertex. Punctation sparse, composed of small but distinct punctures; setation moderately dense, long and erect. Antennae



Fig. 1. Syndicus caugiguanus sp. nov., holotype male: dorsal (A) and lateral (B) views. Actual length 2.97 mm.

as in Fig. 1A, 1.87 mm in length.

Pronotum strongly convex, broadest between anterior fourth and third, length 0.95 mm, maximum width 0.72 mm, width at base 0.45 mm; posterior collar distinctly separated from disc by lateral constriction and dorsal row of four nearly circular, deep foveae; posterior margin nearly straight. Disc with sparse punctation, punctures small but distinct, with slightly raised margins, surface between punctures glossy, dorsal part of posterior collar with similar punctures as those on disc but lateral parts with denser and larger punctation, sides of pronotum posterior to lateral constriction with coarse, dense and irregular large punctures. Setation moderately dense, relatively long, suberect to erect, setae on disc curved, directed posteriorly and toward midline.

Elytra less convex than pronotum, broadly oval, broadest near middle, length 1.62 mm, width 1.07 mm, elytral index (length/width) 1.51. Humeri moderately raised, basal impression on each elytron relatively deep and narrow, apices of elytra separately rounded. Punctation moderately dense, composed of shallow punctures which are larger than those on pronotal disc, separated by spaces  $1.5-2 \times$  as long as puncture diameters; se-

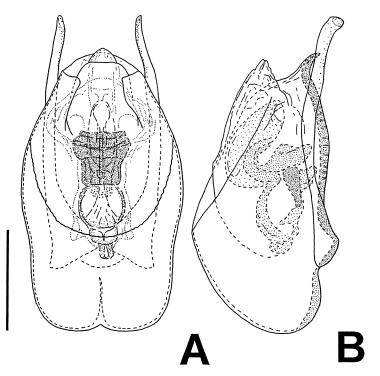


Fig. 2. Syndicus caugiguanus; aedeagus in dorsal (A) and lateral (B) views. Scale: 0.2 mm.

tation similar to that on pronotum. Hind wings well developed, about twice as long as elytra.

Legs relatively long and slender, each femur with small circular opening/pore located distally to middle of clavate part of femur, and dorsal femoral groove well visible from base of clavate part to pore, but slightly less distinct between pore and apex of femur; pro- and metatibiae straight, mesotibiae distinctly curved.

Aedeagus (Fig. 2A, B) 0.55 mm in length, with curved and pointed apex in lateral view; parameres slender, exceeding apex of median lobe, with apices slightly curved and expanded in lateral view, without apical setae. Central complex of endophallus moderately darkly sclerotized, in dorso-ventral view composed of broad, nearly hexagonal distal part and proximal, narrower subrectangular structure; distal vesicle large, slightly narrower than central complex, proximal vesicle very small; proximal projection very short and broad; vesicular part of endophallus and proximal part of central complex are surrounded by lightly sclerotized sheath. Female. Unknown.

Distribution. N Vietnam (Hoa Binh Prov.).

Holotype, &, white printed label "Ban Xa Lenh (890 m), (Truong Yen), Xa Pa Co, Huang Mai Chau, Hoa Binh Prov. [N-VIETNAM], 21. vi. 1997, Masaaki Tomokuni leg.", and red printed label "SYNDICUS (s. str.) caugiguanus m., det. P. Jałoszyński, 2006, HOLOTYPUS" (IEBR).

*Etymology.* "Caugigu" is a name used in Marco Polo's writings, corresponding to "Ciao Chi Quan", the name of Vietnam under the Han dynasty.

*Remarks.* Syndicus caugiguanus has a similar body shape as that of *S. difficilis* Jałoszyński, *S. paeninsularis* Schaufuss, *S. thailandensis* Jałoszyński, *S. saketianus* Jałoszyński, and other slender, moderately large members of the genus. Using the identification key given in Jałoszyński, 2004, the new species keys out together with *S. himalayanus* Franz. Apart from minor external differences, these two species differ clearly in the shape of the endophallus, which in *S.*  caugiguanus has a very short proximal projection (very long in S. himalayanus), and the central complex is not divided into separate lateral parts (which is the case in S. himalayanus). The shape of the central complex in S. caugiguanus is most similar to that in Vietnamese S. lamdongianus, but the latter species has a very long proximal projection and the parameres with strongly broadened apices bearing numerous setae. Other species with short proximal projection of the endophallus (though, not as extremely short as that in S. caugiguanus) are S. indicus Franz from India (which differs in having very broad, bellshaped central complex and entirely lacks the proximal vesicle), and S. pseudothailandensis Jałoszyński from Thailand (also having very broad, subtrapezoidal central apex).

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#### Reference

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