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Two new species of *Syndicus* Motschulsky from Oriental Region (Coleoptera: Scydmaenidae)

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Abstract. *Syndicus* (s. str.) *lombokensis* n. sp. from Lombok Is. (Indonesia) and *S.* (s. str.) *schawalleri* n. sp. from Leyte Is. (Philippines) are described. Habitus and aedeagi of both species and the spermatheca of *S. schawalleri* are illustrated. Both species represent first members of the genus known from Lombok and Leyte; *S. schawalleri* is the first *Syndicus* known to occur in the Philippines.

Key words: entomology, taxonomy, Coleoptera, Scydmaenidae, Cyrtoscydmini, *Syndicus*, new species, Orient, Indonesia, Philippines.

INTRODUCTION

The nominotypical subgenus of *Syndicus* Motschulsky (Scydmaenidae, Scydmaeninae, Cyrtoscydmini) currently comprises 24 species distributed in SE Asia, and 2 known to occur in Australia (Jałoszyński 2004; Jałoszyński & Nomura 2006). These moderately large ant-like stone beetles can be encountered in humid forests in rotten wood and under bark of trees, sometimes in large groups. Two new species, inhabiting the Indonesian island Lombok and Leyte Is. in the Philippines, are described below. *Syndicus lombokensis* n. sp. is the third species of *Syndicus* (s. str.) known to occur in Indonesia; and *S. schawalleri* n. sp. is the first member of the genus found in the Philippines. Both new species are remarkably large and easily distinguishable from all remaining congeners on the basis of external characters and unique aedeagi.

The measurements are as follows: body length is a sum of lengths of the head, pronotum and elytra measured separately; length of head is from the occipital constriction to anterior margin of the frontoclypeal area; width of head includes eyes; length of pronotum was measured along midline; length of elytra measured along suture, from

a hypothetical line joining the humeral calli to the apex; width of elytra is maximum, combined; elytral index (EI) is length divided by combined width. The type material is deposited in the Staatliches Museum für Naturkunde, Stuttgart, Germany (SMNS), and private collection of the author (PCPJ).

TAXONOMY

Syndicus (s. str.) *lombokensis* n. sp.

(Figs. 1, 3, 5, 6)

1. 2. Dorsal habitus of holotype males: 1 – *Syndicus lombokensis* Jałoszyński, 2 – *Syndicus schawalleri* Jałoszyński (scale bars: 0.5 mm)

Name derivation

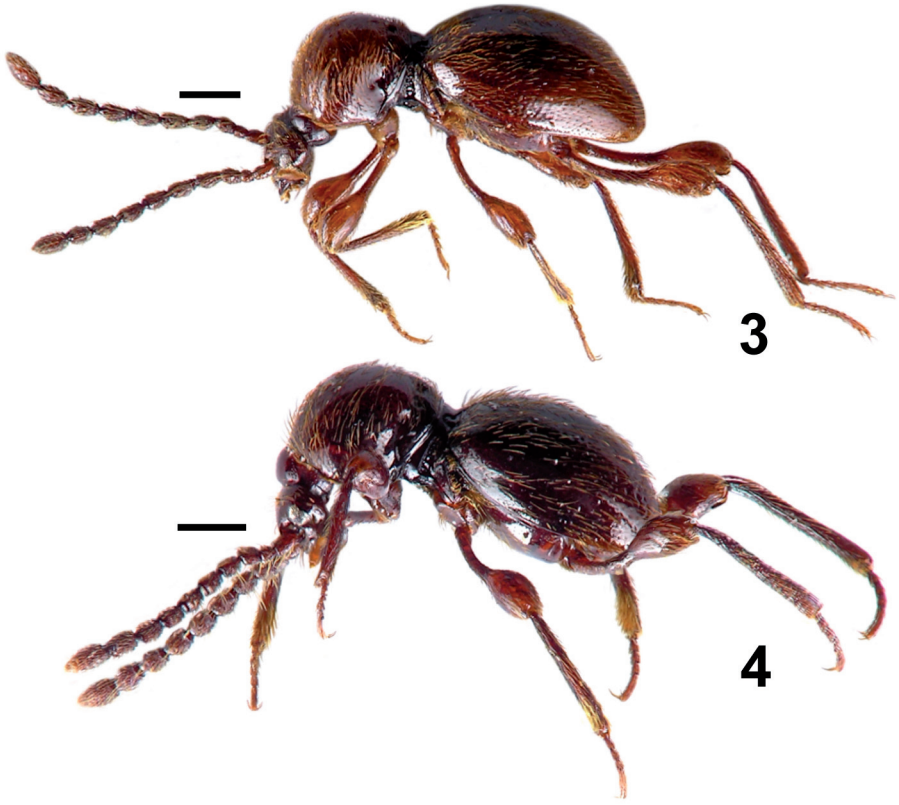
Locotypical, after the type locality, Lombok Is.

Diagnosis

The following set of characters is unique for this species: body over 3.5 mm in length; pronotum covered with fine punctures; pronotal disc oval, with strongly rounded sides, distinctly constricted from much narrower basal collar; elytra strongly narrowing toward apices; hind trochanters in males unmodified; internal armature of aedeagus with very small proximal vesicle and very long proximal projection.

Description

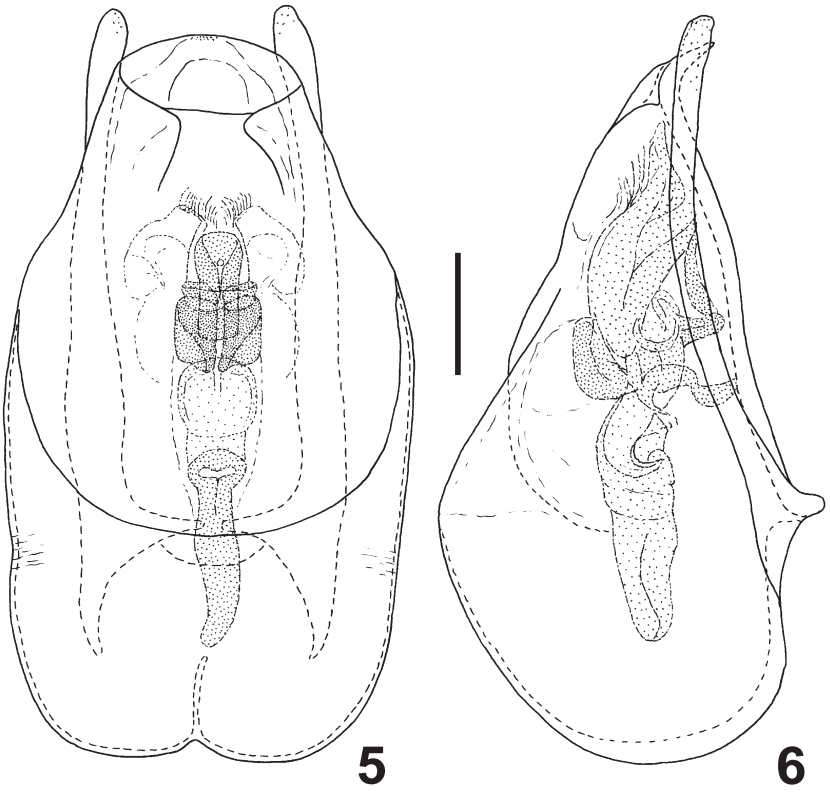
Male (Figs. 1, 3). Body very large, slender, very convex, shiny, moderately dark brown, covered with slightly lighter vestiture; body length 3.63 mm. Head broadest at large and strongly convex eyes, length 0.55 mm, width 0.73 mm; tempora as long as about 1.5x length of eye in dorsal view, rounded and indistinctly bent at obtuse angle near middle; vertex weakly convex; frons flattened; supraantennal tubercles weakly



3. 4. Lateral habitus of holotype males; 3 – *Syndicus lombokensis* Jałoszyński, 4 – *Syndicus schawalleri* Jałoszyński (scale bars: 0.5 mm)

raised, indistinctly delimited from vertex and moderately distinctly delimited from frons; punctures on vertex and frons fine and sparse, unevenly distributed, separated by spaces 2-5x as long as puncture diameters; clypeus with distinct narrow transverse groove in middle separating two rows of large, coarse punctures. Setation of dorsal surface of head composed of long, sparsely distributed, erect setae. Antennae slender, distinctly longer than half length of body, length 2.18 mm; relative lengths of antennomeres (antennomere XI as 1): 2.67; 1.33; 2.33; 2.67; 3; 3; 3; 3.33; 3; 3.33; 1.

Pronotum very broad and strongly convex, broadest between middle and anterior third, length 1.13 mm, width at base 0.53 mm, maximum width 0.95 mm; discal part oval, strongly narrowing posteriorly to sharply marked posterior constriction separating narrow basal collar; hind angles obtuse and blunt; posterior margin arcuate; base of pronotum with arcuate row of six moderately large, deep circular pits, two more pits (one deep and one very shallow) are located at each side of posterior constriction. Punctures on disc very fine and shallow but relatively sharply marked, unevenly distributed, separated by spaces 1-4x as long as puncture diameters; setation sparse, long, suberect.



5, 6. *Syndicus lombokensis* Jałoszyński, aedeagus: 5 – ventral view, 6 – lateral view (scale bars: 0.1 mm)

Elytra broad and very convex, broadest near anterior third, from broadest place strongly narrowing toward base and apices, length 1.95 mm, width 1.18 mm, EI 1.66. Pair of basal pits distinct; humerus moderately distinct, separated from adsutural area by very short, broad and very shallow basal impression; suture weakly raised; apices of elytra separately rounded. Punctures slightly more distinct than those on pronotum; setation sparse, moderately long, suberect. Metathoracic wings well developed.

Dorsal margin of clavate part of each femur with very distinct dorsal groove and small glandular pore located close to apex of clavum; ventral surface of femoral clava with two rows of thick, straight setae directed ventrally and posteriorly.

Aedeagus (Figs. 5, 6) 0.60 mm in length; internal armature relatively simple, in ventral view central complex composed of distinctly separated, elongate lateral parts and distally connected to moderately well developed lateral lobes; distal vesicle slightly narrower than central complex; proximal vesicle very small and thick-walled; proximal projection thick and very long. Parameres long, moderately slender, without setae.

Female. Unknown.

Type material

Holotype (male): white printed label "INDONESIA, LOMBOK Is., SAPIT-SEMBALUN BUMBUNG, 14.-16. Feb. 1994, Bolm lgt., 900-1500 m" (SMNS).

Distribution

S Indonesia: Nusa Tenggara Barat Prov.: Lombok Is. (between Bali and Sumbawa).

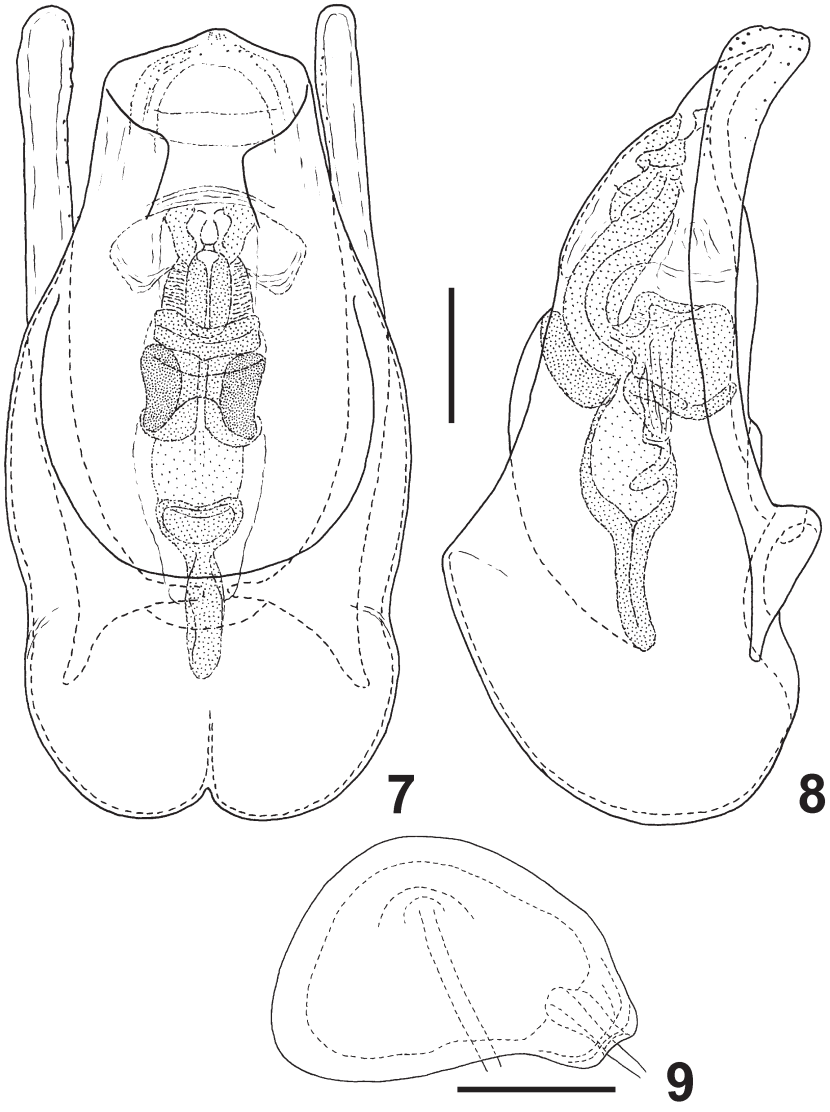
Remarks

Two other species of *Syndicus* (s. str.) are known to occur in Indonesia: *Syndicus molukkensis* Franz, and *Syndicus paeninsularis klapperichi* Franz (reviewed in Jałoszyński 2004). They inhabit the Moluccas and Sumatra, respectively, and can be easily distinguished from *S. lombokensis* on the basis of much smaller body. The new species, the only representative of the genus found so far in Nusa Tenggara Barat province of Indonesia, is the largest known *Syndicus* s. str. Only *S. rugosicollis* Jałoszyński from India reaches a similar size, and only four other species reach or exceed 3.4 mm: *S. calcarifer* Franz, *S. magnus* (Franz), *S. saketianus* Jałoszyński, and *S. schawalleri* n. sp. described below. *Syndicus lombokensis* can be distinguished from these large species on the basis of the following characters: the pronotum covered with very fine and sparse punctures (very dense, large and coarse in *S. rugosicollis*); hind trochanters in males unmodified (strongly modified in *S. calcarifer*); the elytra strongly narrowing toward apices (strongly narrowing from the broadest place toward base and feebly toward apices in *S. magnus*); the pronotum has very broad, rounded disc (elongate, subtrapezoidal in *S. saketianus*); and the sides of the pronotum strongly convergent toward very distinct posterior constriction (weakly convergent, and constriction indistinct in *S. schawalleri*).

Syndicus (s. str.) *schawalleri* n. sp.
(Figs. 2, 4, 7-9)

Name derivation

This species is dedicated to Wolfgang Schawaller, who kindly lent me interesting material for study and hosted me during my visits in Stuttgart.



7-9. *Syndicus schawalleri* Jałoszyński: 7 – aedeagus in ventral view, 8 – aedeagus in lateral view, 9 – spermatheca in lateral view (scale bars: 0.1 mm)

Diagnosis

This species can be distinguished from all congeners by very large, strongly convex and dark brown body; broad pronotum, with its discal part short and nearly subtrapezoidal in shape, only slightly narrowing toward very indistinct posterior constriction; and internal armature of aedeagus in ventral view with central complex composed of widely separated, darkly sclerotized elongate structures, and parameres with apices broadened in lateral view.

Description

Male (Figs. 2, 4). Body very large, relatively stout, very convex, shiny, very dark brown, covered with brownish vestiture; body length 3.38-3.45 mm (mean 3.41 mm). Head broadest at moderately large, strongly convex eyes, length 0.50-0.53 mm (mean 0.51 mm), width 0.78 mm; tempora as long as about 1.8x length of eye in dorsal view, rounded and indistinctly bent at obtuse angle near middle; vertex weakly convex; frons flattened; supraantennal tubercles weakly raised, indistinctly delimited from vertex and frons; punctures on vertex and frons distinct but fine and sparse, very unevenly distributed, separated by spaces 2-10x as long as puncture diameters; clypeus without transverse groove and covered with fine punctures. Setation of dorsal surface of head composed of long, very sparse, erect setae. Antennae moderately slender, distinctly longer than half length of body, length 2.00-2.05 mm (mean 2.03 mm); relative lengths of antennomeres (antennomere XI as 1): 2.33; 1.33; 2; 2.33; 3; 3; 3; 3; 3; 3; 1.

Pronotum very broad and very strongly convex, broadest near anterior third, length 1.10-1.15 mm (mean 1.13 mm), width at base 0.63-0.65 mm (mean 0.64), maximum width 0.95 mm; discal part subtrapezoidal, weakly narrowing posteriorly to indistinctly marked posterior constriction separating narrow basal collar; hind angles strongly obtuse and blunt; posterior margin arcuate; base of pronotum with arcuate row of six small, deep circular pits, two shallow pits are located at each side of posterior constriction. Punctures on disc very fine and shallow but relatively sharply marked, unevenly distributed, separated by spaces 2-5x as long as puncture diameters; setation very sparse, long, suberect.

Elytra broad and very convex, broadest slightly anterior to middle, weakly narrowing from broadest place toward apices, length 1.75-1.80 mm (mean 1.78 mm), width 1.20-1.23 mm (mean 1.21 mm), EI 1.43-1.50. Pair of basal pits on each elytron distinct; humerus moderately distinct; basal impressions missing; suture weakly raised; apices of elytra separately rounded. Punctures slightly larger and sparser than those on pronotum; setation sparse, moderately long, suberect. Metathoracic wings well developed.

Dorsal margin of clavate part of each femur with very distinct dorsal groove and very small glandular pore located closer to highest point of clavum than to apex; ventral surface of femoral clava with two rows of thick, straight setae directed ventrally and posteriorly, and additionally with 2-3 longer setae within each row.

Aedeagus (Figs. 7, 8) 0.58 mm in length; internal armature relatively simple, central complex composed of broadly separated, elongate lateral parts, connected distally to indistinct lateral lobes; distal vesicle much narrower than central complex; proximal

vesicle small and flattened; proximal projection moderately long. Parameres long and broad, in lateral view with gradually, strongly broadened apices, without setae.

Female. Very similar to male but slightly smaller; body length 3.33 mm, length of head 0.53 mm, width of head 0.75 mm, length of antennae 1.98 mm, length of pronotum 1.10 mm, width of pronotum at base 0.58 mm, maximum width of pronotum 0.90 mm, length of elytra 1.70 mm, width of elytra 1.13, EI 1.51. Spermatheca (Fig. 9) 0.23 mm in diameter, with short but distinct collar surrounding insertion of ductus spermathecae.

Type material

Holotype (male): yellow printed label "PHILIPPINES: LEYTE VISCA N Baybay, 1991, prim. forest, 200-500m, leg. SCHAWALLER & al.", white printed label "2.3.91" (SMNS). Paratypes: 1 male, 1 female, same data as holotype (SMNS, PCPJ).

Distribution

Philippines: Leyte Is. (Visayan island group).

Remarks

Syndicus schawalleri is the first member of the genus found in the Philippines; it can be expected that more species inhabit these islands. With the body length exceeding 3.4 mm, the new species is similar to several other large *Syndicus*, listed in remarks for *S. lombokensis*. *Syndicus schawalleri* is mostly similar to that Indonesian species, but it clearly differs in shapes and proportions of the pronotum and elytra.

Acknowledgments

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