

# New species of *Sarothrias* (Coleoptera, Jacobsoniidae)

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Objektyp: **Article**

Zeitschrift: **Mitteilungen der Schweizerischen Entomologischen Gesellschaft = Bulletin de la Société Entomologique Suisse = Journal of the Swiss Entomological Society**

Band (Jahr): **68 (1995)**

Heft 1-2

PDF erstellt am: **22.07.2024**

Persistenter Link: <https://doi.org/10.5169/seals-402581>

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## New species of *Sarothrias* (Coleoptera, Jacobsoniidae)

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The following new species of Jacobsoniidae are described: *Sarothrias amabilis* from West Malaysia, *S. pacificus* from New Caledonia, and *S. audax* from Moluccas. A key to all species of *Sarothrias* is provided.

Keywords: Coleoptera, Jacobsoniidae, *Sarothrias*, taxonomy.

### INTRODUCTION

Adequate sampling methods reveal new species even in groups notoriously known to be rare. This is nicely illustrated by the genus *Sarothrias*, a conspicuous and widely distributed jacobsoniid. Until 1978, the genus has been known only from five specimens representing two species. Since then, DAJOZ (1978), SLIPINSKI (1986), LÖBL & BURCKHARDT (1988), and POGGI (1991) have added seven species, all but *S. morokanus* POGGI from recently collected specimens. The present paper gives descriptions of additional three species. Noteworthy is also a second record of *S. indicus* DAJOZ from India, Kerala, Thekkady, Periyar W.L.S., 2.IX.1989, leg. A. RIEDEL (SMNS, MHNG).

The following acronyms indicate depositories for specimens: BPBM, Bernice P. Bishop Museum, Honolulu; MHNG, Muséum d'histoire naturelle, Geneva; NHMW, Naturhistorisches Museum, Wien; RSCW, R. SCHUH Collection, Wien; SMNS, Staatliches Museum für Naturkunde, Stuttgart; ZMPA, Muzeum i Instytut Zoologii PAN, Warszawa.

### DESCRIPTIONS

#### *Sarothrias amabilis* sp.n.

Length 1.75-1.80 mm. Body brown to piceous, shiny except for areas covered with secretions. These are predominantly located at: clypeus, two longitudinal lines along frontal sides, antennomeres 1-8; anterior, posterior and irregular lateral areas of pronotum; bases, apices and fine longitudinal lines of elytra; dorsal and ventral sides of femora and tibiae; most of the ventral side.

Head: clypeus flat, rounded anteriorly; frontoclypeal suture deep and well-developed. Frontal and vertical punctures as large as eye facets, slightly elongated, irregular. Antennal scape 0.14-0.16 mm long; pedicel distinctly wider than following five segments. Antennomeres 2-11, each with a whorl of squamiform setae; setae on terminal segment approximately twice as long as those on 2nd; antennomeres 9-11 without secretions, with both, normal and squamiform setae.

Pronotum 1.5-1.6 x as long as wide, without setae laterally; median groove narrow, extending from basal 1/4 to apical 1/10 of pronotum. Punctures on disc similar to those on head.

Elytra (Fig. 1) 1.7-1.8 x as long as wide and about 1.9 x as long as pronotum, widest near middle. Basal bulge well-developed, with 3 subbasal impressions. Each elytron with 6 rows of punctures visible from above: rows 1-3, 7 and 8 impressed or grooved on their entire length, remaining rows consisting of separate punctures. Row 1 parallel to suture, ending subapically; 2 and 3 joined at about apical third to form an opaque line; rows 4-6 weakly impressed at base only, disappearing at apical half; row 7 entirely grooved, weakly keeled and with secretions apically. Elytral setae irregularly arranged near apex on row 3 (4-5 setae along) and single seta present near each basal impression.

Ventral side: metasternum with median impression gradually deepened toward metacoxae and laterally not clearly delimited; secretions forming a pair of medio-apical stripes.

Holotype male: "Malaysia: Pahang; Tioman Island Kg. Tekek Umgeb.; 15.-26.7.1992 (13); leg. R. SCHUH" (MHNG). Paratypes: 1 as above (MHNG), 5 with same data as holotype but (7) (MHNG, NHMW, RSCW, ZMPA).

*Sarothrias pacificus* sp.n.

Length 2.0 - 2.4 mm. Body brown to piceous, shiny except for areas covered with secretions. These located predominantly at: clypeus, two longitudinal lines along frontal sides, antennomeres 1-8; anterior, posterior and irregular lateral areas of pronotum; bases, apices, and fine longitudinal lines of elytra; dorsal and ventral sides of femora and tibiae; most of ventral surface of body.

Head: clypeus flat, rounded anteriorly; fronto-clypeal suture deep and well-developed. Frons with two lateral and two admedian lines, the latter converging anteriorly. Frontal and vertical punctures not visible except for those arranged in "lines". Antennal scape 0.17-0.20 mm long; pedicel distinctly wider than following five segments. Antennomeres 2-10, each with a whorl of squamiform setae of approximately similar length on all antennomeres; apex of scape with a few short squamiform setae; antennomeres 9-11 without secretions, 9 and 10 with both normal and squamiform setae; terminal antennomere with normal setae and a few long apical bristles.

Pronotum 1.4-1.5 x as long as wide, with 3 setae on each side. Median groove narrow, extending from basal 1/8 to almost anterior margin, with wide and deep pit near base. Lateral parts in anterior third with irregular transverse zigzag lines covered with secretions; a regular transverse impression near base. Punctures on disc irregular and about as large as eye facets, usually semi-connected in chains or incorporated into irregular lines.

Elytra (Figs 2, 3) 1.5-1.6 x as long as wide and about 1.9-2.0 x as long as pronotum, widest near middle. Basal bulge well-developed with 3 subbasal impressions. Each elytron with 6 rows of punctures visible from above. Rows 1-2 impressed or grooved only in apical third where they are opaque with secretions; rows 3-5 entirely punctated; 6 very finely impressed on entire length with secretions near humerus and apical half; 7 entirely impressed with secretions in apical half; 9 distinctly subcarinate, entire. Squamiform setae present near humeral impressions, and along rows 2 and 6 apically.

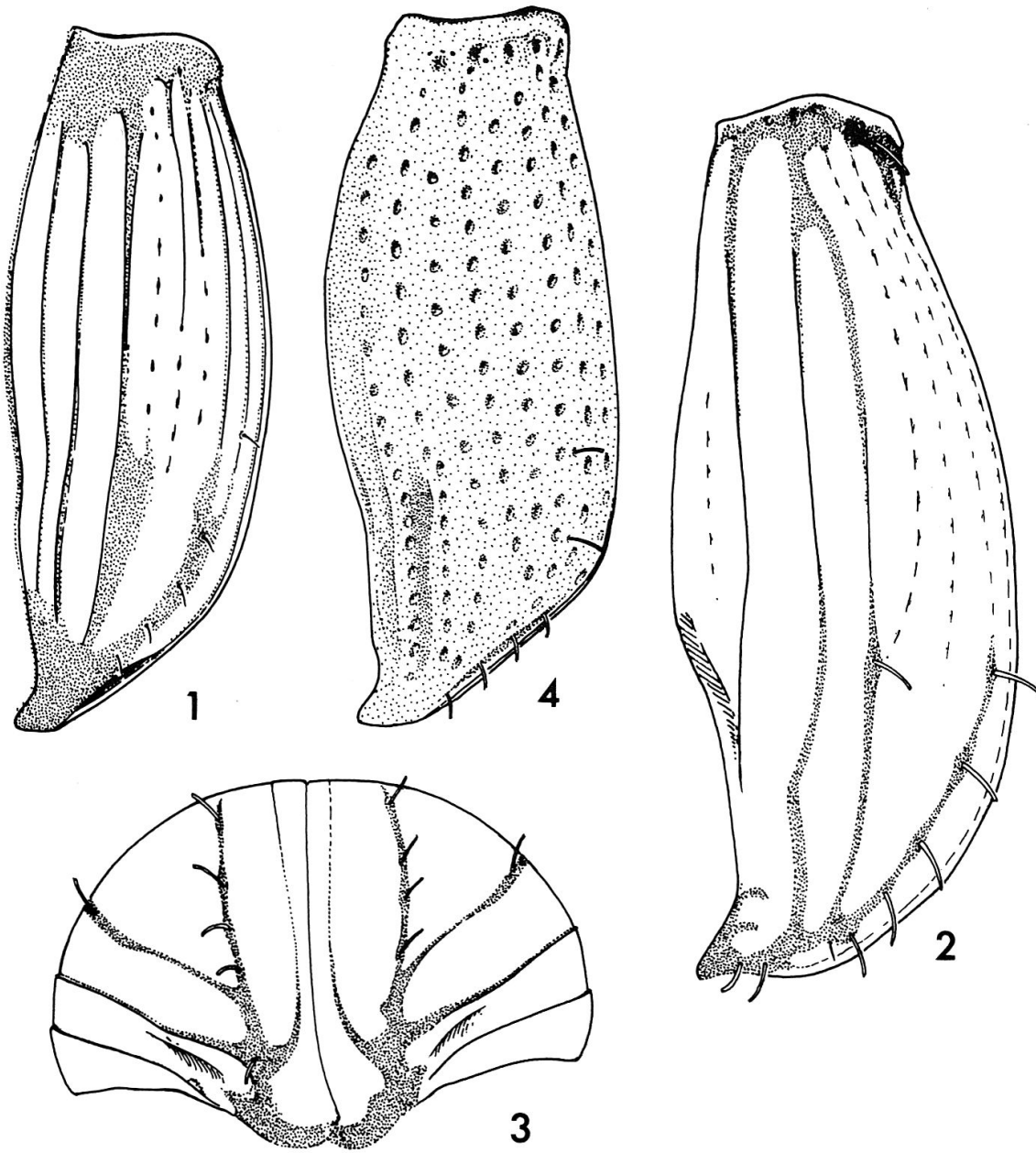


Fig. 1: *Sarothrias amabilis* sp.n., elytron in lateral view; Figs 2 and 3: *Sarothrias pacificus* sp.n., elytron in lateral view (2) and elytra in apical view (3); Fig. 4: *Sarothrias audax* sp.n., elytron in lateral view.

Ventral side: metasternum with median impression in basal  $\frac{1}{3}$  laterally delimited by weak ridges.

Holotype female: "New Caledonia, Mt. Koghi, 400-600m, ii.1973, NLH KRAUSS" (BPBM). Paratypes: same data as holotype (2, BPBM; 1, MHNG; 1, ZMPA).

*Sarothrias audax* sp.n.

Length 1.65-2.10 mm. Body brown; opaque except for the shiny narrow stripe along the elytral suture.

Head: clypeus flat, rounded anteriorly; fronto-clypeal suture deep and well-developed. Frontal sides slightly raised; frontal and vertical punctures irregular, approximately as large as eye facets, 0.2-1.2 diameters apart. Antennal scape 0.13-0.15 mm long; pedicel relatively stout, only slightly shorter than scape, wider than the following five segments; antennomere III distinctly narrower and shorter than II. Antennomeres 2-11, each with a whorl of squamiform setae; setae approximately of similar length on all antennomeres; apex of scape with a few short squamiform setae; antennomeres 10-11 without secretions, with both normal and squamiform setae.

Pronotum 1.32-1.45 x as long as wide, without sublateral setae. Median groove sharply delimited, extending from basal  $\frac{1}{3}$  to apical  $\frac{1}{6}$  of pronotum. Punctures on disc about as large as those on head, usually 0.5-1.5 diameters apart, near anterior margin larger and more widely spaced than those near middle.

Elytra (Fig. 4) 1.7-1.8 x as long as wide, and about 2.0-2.1 x as long as pronotum, widest near middle. Basal bulge well-developed with 3 subbasal impressions. Each elytron with 8 rows of punctures; striae punctures approximately twice as large as those in middle of pronotum. Squamiform setae present near humeral impressions, and irregularly near apical part.

Ventral side: mesosternal process flattened between coxae, metasternum with median impression weak and laterally not clearly delimited except for near the coxae.

Holotype male: "INDO: Moluc F911133 Tanimbar Isl.: Yamdera Sangliat Krawain, 16.IX.1991, leaf litter, AGOSTI" (MHNG). Paratypes: 5 as above (MHNG, ZMPA).

KEY TO SPECIES OF *SAROTHRIAS*

1. Elytra entirely covered by secretions, except for the narrow stripe along the suture; none of the elytral rows grooved or subcarinate ..... 2
- Elytra partly shiny, leaving secretions along intervals, bases and apices of elytra; at least one row impressed or grooved ..... 6
2. Terminal antennomere with a whorl of squamiform setae ..... 3
- Terminal antennomere without a whorl of squamiform setae ..... 4
3. Lateral portion of pronotum with 2-3 short squamiform setae. Antennomere II 2 x as long as III. Mesosternal process raised between coxae. Sabah .....  
..... *S. crowsoni* LÖBL & BURCKHARDT
- Lateral portion of pronotum without setae. Antennomere II 1.4 x as long as III. Mesosternal process flat between mesocoxae. Moluccas ..... *S. audax* sp.n.

4. Epipleural keel of elytra extending more towards base than lateral keel ..... 5  
 – Epipleural and lateral keels of elytra ending at about the same level. New Britain ..... *S. bournei* SLIPINSKI
5. Median depression of metasternum laterally not clearly delimited, narrowing towards apex beyond the middle, matt, covered in secretions. Seychelles .....  
 ..... *S. eximius* GROUVELLE  
 – Median depression of metasternum laterally well delimited, gradually narrowing towards apex, apical portion shiny, free from secretions. Fiji .....  
 ..... *S. fijianus* LÖBL & BURCKHARDT
6. Secretions on elytra forming longitudinal stripes which are separated by shiny intervals. Southern India ..... *S. indicus* DAJOZ  
 – Secretions of elytra different ..... 7
7. Pronotum with 2-3 squamiform setae laterally ..... 8  
 – Pronotum without setae ..... 9
8. Elytral secretions forming apical drop-shaped loop. Antennomere XI with squamiform setae. Sumatra ..... *S. dimerus* (HELLER)  
 – Elytral secretions strongly reduced (Figs 2,3). Antennomere XI without squamiform setae ..... *S. pacificus* sp.n.
9. Elytron with row 5 entirely deeply impressed, merged with 4 apically. Queensland ..... *S. lawrencei* LÖBL & BURCKHARDT  
 – Elytron with row 5 at most impressed near base, then continued as separate punctures, not joined to 4 ..... 10
10. Elytron with row 3 weakly impressed at base, then continued as a weak row of separate punctures, not joined with row 2. Papua New Guinea .....  
 ..... *S. papuanus* SLIPINSKI  
 – Elytron with row 3 entirely impressed and joined with 2 ..... 11
11. Rows 2 and 3 joined very close to elytral apex, much further than the last point of row 5, and apparently behind a level of metacoxae. Papua New Guinea ...  
 ..... *S. morokanus* POGGI  
 – Rows 2 and 3 joined far before the level of metacoxae and at the level of last puncture of row 5. West Malaysia ..... *S. amabilis* sp.n.

ACKNOWLEDGEMENTS

Mrs N. LAVOYER assisted with the drawings. The material was made available by W. SCHAWALLER (Stuttgart), R. SCHUH (Wien) and G. A. SAMUELSON (Honolulu). D. AGOSTI (Zürich - New York) collected beetles on our behalf.

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(received December 20, 1994; accepted January 19, 1995)