

STRUMIGENYS RECTIDENS species nov.

Insecta: Hymenoptera: Formicidae

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DIAGNOSIS: Resembling African *Strumigenys* of the *rogeri* group, especially in general form of the mandibles and in pilosity, but with only a single preapical tooth on each mandible. Differs from members of the *godeffroyi* group in its straight mandibles with rectangularly interned apical fork combined with the position of the preapical mandibular tooth at the apical quarter. Humeral hair on each side long and flagellate; a pair of mesonotal hairs and the other specialized erect hairs of nodes and gaster stiff and narrowly spatulate. Postpetiolar disc reticulopunctate and opaque.

FURTHER DESCRIPTION OF HOLOTYPE WORKER: TL 2.3, HL 0.61, ML 0.28, WL 0.58 mm; CI 78, MI 46. Form of head as shown in the figure. Cephalic depression of cranium moderate, both dorsal and ventral surfaces gently convex; an inconspicuous median longitudinal sulcus divides the verticoccipt. Scrobe border not indented above eye; scrobes distinct, reaching approximately to the point of greatest head width. Eyes small, about 0.05 mm greatest diameter, with about 12 facets, weakly convex, with at most a very weak tendency to prospection; ventrolateral borders on each side just anterior to eye with a very shallow indentation. Clypeus small, broader than long (W ca. 0.19 mm), anterior border shallowly excised in the middle. Antennal scape (L 0.34 mm) very slender, feebly curved; funiculus slender, L 0.44 mm; apical segment L 0.26 mm; segments I and IV subequal; II and III short.

Mandibles straight, parallel at full closure, their external borders very feebly convex and drawn in at the insertions, which are close together. Inner borders straight or very feebly convex, not excavate between preapical tooth and apical fork, and without expanded lamellate margins. Apical fork consisting of a longer (L 0.08 mm) straight spiniform tooth set at an abrupt right angle to the shaft, this angle sharper than in the other East Indian *Strumigenys*, and a shorter inferior tooth (L 0.05 mm), without intercalary denticles. Each mandible has a single stout preapical tooth, about half as long as dorsal apical tooth and situated at the distal quarter of the ML, distant from the apex by a little more than its own length, inclined slightly dorsad and basad.

Promesonotum convex, seen from above nearly circular, without humeral angles, but with low, extremely indistinct humeral tubercles. Promesonotal suture obsolete, but the sutural line marked by a feeble sulcus. Posterior mesonotum very slightly depressed below the convex portion of promesonotum and forming a continuous, approximately straight profile with the propodeal dorsum. Metanotal groove visible as a transverse line, scarcely interrupting the surface. Propodeal teeth small, about half as long as their interbasal distance, lamelliform, acute and strongly elevated, each subtended by a narrow, convex, almost cariniform infradental lamella. Petiole, postpetiole and gaster similar in form, sculpture and spongiform appendages to those of certain African *rogeri* group members, especially *S. rogeri* and *S. rufobrunnea*. Petiolar node high, slightly broader than long, rather narrowly rounded above as seen from the side and with finely bicarinate anterior face; its peduncle roughly equal in length to the node; spiracular swellings rather prominent. Spongiform appendages reduced to a thin, narrow posterodorsal collar and a narrow, even midventral strip. Postpetiole transversely ellipsoidal, about 2/3 the greatest width of the gaster and about twice as broad as its own length and twice the breadth of the petiolar node, rounded and swollen dorsally; the only spongiform appendages visible from above are restricted to the posterior border, but ventral lobes are well developed. Gaster moderate in size, its anterior dorsal spongiform margin meeting the posterior margin of the postpetiole. Basal costulae coarse, showing a tendency to bilateral grouping, extending over a bit more than the basal third of the segment. Remainder of gaster smooth and shining. Entire body otherwise densely reticulopunctulate and opaque; postpetiole with superimposed weak suggestion of longitudinal striation, subopaque. Mandibles, fore coxae and antennal funiculi feebly shining.

Ground pilosity of head consisting of short, inverted cochlear to long-spatulate hairs, decumbent and mesally directed in more or less oblique lines, larger and more conspicuous in the region between the clypeus and cephalic midlength, and also in a strip extending back along each dorsal scrobe border. Hairs of posterior verticoccipt smaller narrower and more sparsely arranged, so that this area appears nearly

bald by contrast; this pattern is characteristic of several *rogeri*-group members. Anterior clypeal border fringed by about 8 small, projecting, broadly spatulate hairs. Anterior scape border with about 9 or 10 small, distally-inclined and very slender spatulate hairs forming an even fringe. Head without specialized longer erect hairs.

Ground pilosity of alitrunk fine, appressed, very inconspicuous and sparse. Pair of humeral hairs long, finely and crookedly flagellate; a mesonotal pair of hairs stiffly erect and narrowly spatulate. Posteriorly-inclined, narrowly spatulate hairs prominent: one pair on petiolar node and rows of 4 each on postpetiole, anterior and posterior parts of basal gastric tergite, and on the next two gastric segments, where they are shorter. Legs with short, decumbent spatulate hairs. Mandibles each with a sparse row of long, oblique fine hairs directed mesad along the inner borders. Color uniform medium ferruginous; mandibles antennae and legs yellowish.

HOLOTYPE WORKER a unique deposited in the Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, USA. TYPE LOCALITY: Mao Marroe, 450 m, Soemba Island, Indonesia, May 1925 (K. Dammerman leg.).

The relationships of this species within the genus are difficult to guess. Its similarity to members of the *rogeri* group might mean that it is close to the stock from which the African and Indo-Australian *Strumigenys* diverged, but it seems just as likely that its *rogeri*-like traits are due to convergence in isolation. It is not greatly removed from the *godeffroyi* group, and is probably related to *S. esrossi* and some of the other less aberrant members of that assemblage.

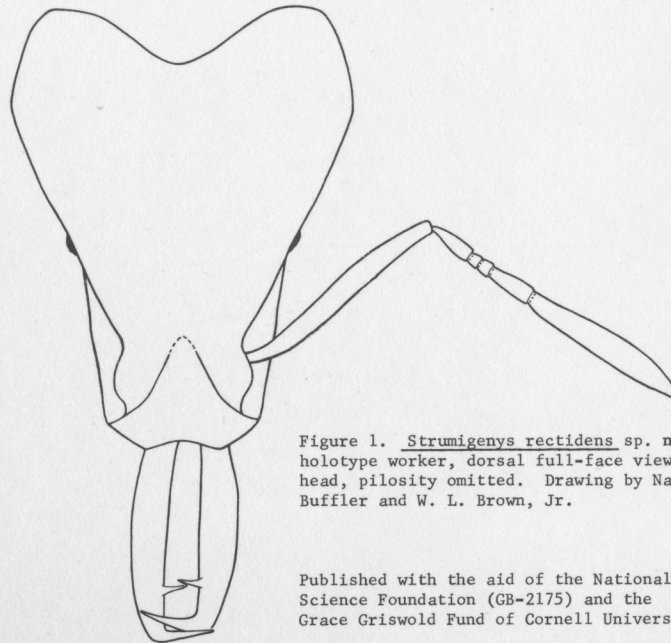


Figure 1. *Strumigenys rectidens* sp. nov., holotype worker, dorsal full-face view of head, pilosity omitted. Drawing by Nancy Buffler and W. L. Brown, Jr.

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