

NOTES ON A COLLECTION OF ENDOMYCHIDAE
(INSECTA : COLEOPTERA) FROM NEFA WITH
DESCRIPTION OF A NEW SPECIES

By

T. G. VAZIRANI AND G. N. SAHA
Zoological Survey of India, Calcutta

(With 1 Text-figure)

I—INTRODUCTION

During the course of a general faunistic survey of the NEFA region, conducted by the Zoological Survey of India, our colleagues Dr. K. C. Jayaram and Shri S. Biswas, made a small collection of this interesting family. It consists of five species belonging to four genera. One of these species is considered to represent a hitherto unknown species and is described below. Systematic notes are given for the remaining species.

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II—SYSTEMATIC ACCOUNT

Family ENDOMYCHIDAE

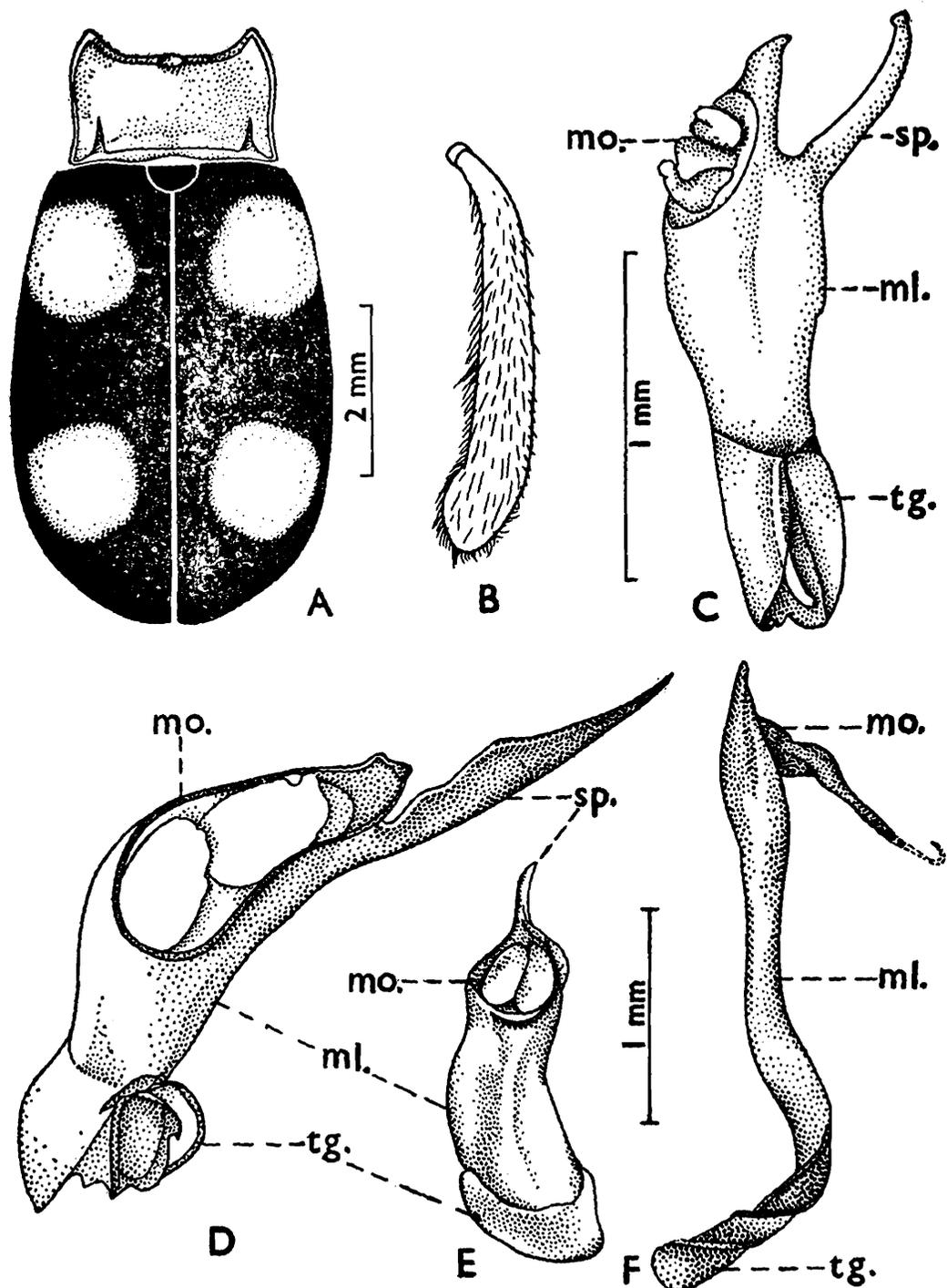
1. *Eumorphus quadriguttatus* (Illiger)-
(Text-fig. 1 D)

1800. *Erotylus quadriguttatus* Illiger, in Wiedemann's, *Archiv. F. Zool.*,
1 (2), : 124.
1925. *Eumorphus quadriguttatus* : Arrow, *Fauna of British India, Coleoptera, Clavicornia* : 305.

Material examined.—INDIA : N.E.F.A. Kameng Frontier Division: 10 exs., Rupa, 1676 m,—iii.1961; 3 exs., Bitselling Vill., 915 m, 14.iii.1961; 3 exs., Duplako Bank, 1676 m., 1.iv. 1961; 2 exs., Amatulla, 233 m., 9.iii.1961; 2 exs., Dirong Dzong road, 6 km. west to Rahung, 2134 m., 9.iv:1961 (All *K.C.J.* Coll.).

Remarks.—In certain minor characters of variable nature, the above examples differ from the description of the species given by Arrow (1925) who has stated that each elytron has two large, pale yellow, nearly round or slightly transverse spots, about equal in diameter to the interval between each horizontal pair. The interval in the present specimens is about 1.5 times of the diameter of the spot. In the case of pronotum, the channel along the middle of posterior

half is not distinct. In males, the hairy pad is confined to the median part of the last two or three abdominal sternites. The other specimens in Zoological Survey of India, from the same region, also agree with the present observations.



TEXT-FIG. 1. A. Dorsal view of the pronotum and elytra of *Engonius kamengensis* sp. n. (Holotype). B. Middle tibia of male as above. C. Lateral view of aedeagus of *Engonius kamengensis* (Paratype). D. Lateral view of aedeagus of *Eumorphus quadriguttatus* (Illiger). E. Dorsal view of aedeagus of *Ancylopus melanocephalus* (Olivier). F. Lateral view of aedeagus of *Eucteanus cruciger* Gorham. ml.—median lobe (penis), mo.—median orifice, sp.—spine, tg.—tegmen,

All the above examples conform to the var. *pulchripes* Gerst., in the character of femora being bright coral-red except in the basal half. Arrow (*l.c.*) has observed a series of specimens from S. India (Sidapur, Coorg) comprising about equal numbers of typical form and those belonging to var. *pulchripes* and he has also seen a collection from Sikkim representing both these forms, but throughout the Malayan region the red-legged form is evidently rare, if not absent, and in Ceylon that variety alone is found. It shows that a separate name is not justified because both forms are available in the same geographical area.

The male genitalia (Text-fig. 1 D) are figured here for the first time. On the ventral face projects a large, narrow rather irregularly shaped spine, the median orifice is closed by the protruding internal sac and the tegmen, at the base, is ill defined.

2. *Engonius kamengensis* sp. n. (Text-fig. 1 A-C)

Material.—Holotype : ♂ INDIA : N.E.F.A. Kameng Frontier Division, Bokhar, 27.v.1961. Paratype : 1 ♀, 1 ♀ Chug, Kameng Frontier Division (All K.C.J. Coll.).

Description.—Body black, moderately large, rather narrow, strongly convex and clothed with very minute grey pubescence. Length : 7.0—7.6 mm. (7.6 mm. Holotype). 3.6 mm. Breadth : 3.1—3.6 mm. Holotype).

Head.—Black, longer than wide ; punctation moderately strong, rather irregular, on the vertex separated by about its own diameter.

Pronotum.—Less strongly punctate than the head, punctation almost similar and as close as on the head but closer to the sides ; transverse, about twice as broad as long ; sides narrowly but distinctly margined ; anterior angles sub-acute and blunt ; posterior angles acute, a little prominent but blunt ; each side with a small median, submarginal tubercle ; with a median transverse groove along the base, extending upwards sublaterally upto the $\frac{1}{4}$ of pronotal length ; without a median groove.

Scutellum.—Semicircular, punctation very close, rather coarse.

Elytra.—Black, each elytron with two transverse orange patches, the anterior one just behind the shoulder reaching the outer but not the inner margin, slightly obliquely placed and the posterior one not reaching either margin and more rounded in shape than the anterior one ; punctation larger and denser than on the head and pronotum, more or less regular, on the disc coalescent but not confluent.

Ventral side.—Almost black including legs, with ferruginous tinge here and there ; finely pubescent ; prosternal process narrow, sides almost parallel, apex a little rounded, but without any distinct knob ; metasternum minutely and sparingly punctate ; abdominal sternites moderately punctate, punctures progressively denser/closer and more regular from the 1st to the apical sternite, apical abdominal sternite slightly notched at the apex.

Male.—Anterior tibiae, bearing an oblique tooth on the inner edge just after the middle and the middle tibiae (Text-fig. B) only a little bent at the base and slightly incurved at the apex but almost straight in the middle portion and without any teeth.

Male genitalia.—(Paratype—Text-fig.C) Penis (median lobe) an irregularly shaped strongly chitinised tube with two spines projecting from the apex, smaller one nearer the median orifice (mo) and the other larger and more slender in shape; the median orifice being closed by the folding over of a part of the protruding internal sac; the tegmen consisting of a single undefined piece and the basal internal sac armature not distinct.

Relationship.—This species comes nearer to *Engonius pubescens* Arrow, in the upper surface being pubescent and in the absence of median groove on the pronotum but it differs from it in (i) more or less rounded shape of the elytral orange patches as against the irregular shape of these patches (ii) punctation on pronotum not so close (iii) basal groove on the pronotum not angulate in the middle (iv) prosternal process not knobbed at the apex versus knobbed at the apex, (v) metasternum impunctate versus finely punctate (vi) third segment of antenna not as long as the fourth and fifth segments together versus third segment of antenna as long as the fourth and fifth segments together, (vii) the middle tibiae in male not bearing any angular internal flange a little beyond the base versus an angular internal flange present a little beyond the base.

3. *Engonius signifer* Gorham

1875. *Engonius signifer* Gorham, *Trans. ent. Soc.* : 311.

1925. *Engonius signifer* : Arrow, *Fauna of British India, Coleoptera, Clavicornia* : 316.

Material examined.—INDIA : N.E.F.A, Kameng Frontier Division : 1 ex., Rupa, 1676 m. 1.vi.1961; 1 ex., Dengza village, 1234 m., 15.iii.1961 (All K.C.J. Coll.)

Remarks.—It is known in India from Assam, Manipur and Punjab and from Burma. Both the above examples are female.

4. *Ancylopus melanocephalus* (Olivier)

(Text-fig. 1 E)

1808. *Endomychus melanocephalus* Olivier, *Entomologie*, 6 : 1073.

1925. *Ancylopus melanocephalus* : Arrow, *Fauna of British India, Coleoptera, Clavicornia* : 334.

Material examined.—INDIA : N.E.F.A. Kameng Frontier Div.: 43 exs., Rupa, 1676 m., 2.iv.1961; 6 exs., Dirong Rd., Jungla, 2134 m., 24. iv. 1961; 3 exs., Dirong Dzong, 1600 m., 11.iv. 1961; 8 exs., Milan Kang, 1981 m., 20.iv.1961; 4 exs., Milan Kang, 2134 m., 18.iv.1961; 3 exs., Naphra, 1829 m., 25.iv 1961; 11 exs., Sanglichu, 1676 m., 12.iv.1961; 18 exs., Rahung Vill., 1829 m., 8.iv. 1961; 1 ex., Dengzi, 1234 m., 29. v. 1961; 1 ex., Nukmadong, 2469 m., 21.iv.1961.

Remarks.—In a large collection of 98 examples there is hardly any variation worth mentioning. Both the sexes are almost equally represented (45♂ & 53♀). The male genitalia are figured (Text-fig. E) for the first time. The penis (median lobe) is a small, curved slightly twisted highly chitinised plate with a single tubular pointed spine on the ventral side exceeding the dorsal side; median orifice (mo.) opening is on the dorsal side and is covered with folding over of the protruding internal sac; armature of the internal sac not distinct and the tegmen is undefined.

5. *Eucteanus cruciger* Gorham (Text-fig. 1 F)

1897. *Eucteanus cruciger* Gorham, *Proc. zool. Soc. Lond.*, : 460.
1925. *Eucteanus cruciger* : Arrow, *Fauna of British India, Coleoptera, Clavicornia* : 353.

Material examined.—INDIA : N.E.F.A. : Kameng Frontier Div. 2 exs., Kalaktang, Shergaon, 2010 m., 31.viii.1961; 1 ex., Dirong Dzong, Milankhang Valley, 2135 m., 7.viii.1961; 1 ex., Dirong Dzong Chug Vill., 2135 m., 13.viii. 1961; 1 ex., Bomdila town, 2620 m., 16.iv. 1961. (All S. B. Coll.).

Remarks.—It is previously known in India from Manipur only. The width of the interval between the elytral patches is rather variable in the specimens before us, it is distinctly less than half the diameter of one of the patches. The male genitalia (Text-fig. F) are figured and described here for the first time. The penis (media nlobe) is a long, narrow, strongly chitinised, doubly twisted plate, almost forming a right angle at the base; the ventral spine is directed upwards and then backwards, sharply and abruptly reduced to a sharp point.

III—SUMMARY

This paper deals with five species of Endomychidae from N.E.F.A., India. Of these, one species *viz.*, *Engonius kamengensis* is described as a new species. Systematic notes, including descriptions of male genitalia are given for all the species.

IV—REFERENCES

- ARROW G. J. 1925. *The Fauna of British India, Coleoptera, Clavicornia*. 416 pp., 76 figs, 1 pl., London.