tal et anal sont noirs ; le premier est couvert d'une pruinosité sur sa moitié postérieure, mais il est dépourvu de macrochètes marginaux. Les cerques sont noirs ; les paralobes sont d'un noir-brunâtre.

Armature génitale : fig. 1. Le sternite V (A) a un prolongement médio-ventral sous la forme d'une visière à marge ondulée ; ses lames n'ont pas des brosses denses, mais elles possèdent seulement des macrochètes forts et assez rares sur leurs faces internes. Les cerques (B) sont relativement étroits, légèrement courbés et pointus ; les paralobes ont un aspect normal. Le distiphallus (C) est bien développé ; les lobes membranaux sont soudés sous la forme d'une large plaque avec deux sommets apicaux, courbés et fortement pigmentés, et avec une crête médio-longitudinale dentée. Le paraphallus a une paire de lobes hypophalliques basaux étroits, mais bien sclérifiés et une protubérance dorso-latérale claire. Les apophyses latérales sont peu sclérifiées, longues, larges et pourvues de poils microscopiques. Les styles sont très gros, tubuliformes, noirs et pourvus de grandes dents marginales. Les prégonites (D) sont un peu plus courts et plus étroits que les postgonites (E) ; les premiers sont légèrement courbés ; les seconds sont courbés et dotés avec deux macrochètes superterminaux.

Longueur du corps : 14 mm.

FEMELLE : inconnue.

Holotype : ♂ Liban (Lebanon), Bterram, El Coura, 70 miles SE of Beirut, 11-18.VI.1971. George J. Mallick rec. Dans les collections de l'Académie des Sciences, Entomologie, San Francisco, California, U.S.A.).

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DESCRIPTION OF A NEW SPECIES OF LUCANIDAE FROM FORMOSA (TAIWAN) : **AESALS IMANISHII*** (Coleoptera)

by Nobuo INAHARA** and Pietro RATTI***

« Ilha Formosa » or « Beautiful Island », Portuguese discoverers called Taiwan in 1517. Like a floatting leaf, it lies 100 miles off the Chinese continent. Taiwan is a treasurehouse of Insects. In Lucanidae from Taiwan, we are already known to 44 certain species. Regarding *Aesalus,* Dr. Yushiro MIWA was reported *Aesalus asiaticus* LEWIS from Taiwan (1927 : *A list of Japanese Lucanidae, with the description of one new species,* pp. 29 & 31). However, in 1934 he was cancellation from Formosan Lucanid-Fauna because he found mistake at specimens label (*A Study on the Lucanid-Coleoptera from Japanese Empire,* V, p. 322). Dr. R. DIDIER & E. SÉGUY (1953) and Dr. B. BENESH (1960) described Japan & Formosa on distribution of *Aesalus asiaticus* in their Catalogus was based upon above MIWAS list (1927). We believe they did not understand to Japanese language because MIWAS paper (1934) was described in Japanese language. Therefore, we have not previously certain recorded from Formosa. In fact, there are no other record, despite through searching by a number of collectors during the past 43 years.

In March of 1974, Mr. Osamu Imanishi collected in the mountain district of Taiwan some specimens of a unique stag-beetle, which is new to Science and belongs to the Subfamily Aesalinae. This is the 45 th. species to the Lucanid-Fauna of the Taiwan, and will be described in the following lines in comparison with *Aesalus asiaticus* LEWIS from Japan.

* Received 4 February 1981.

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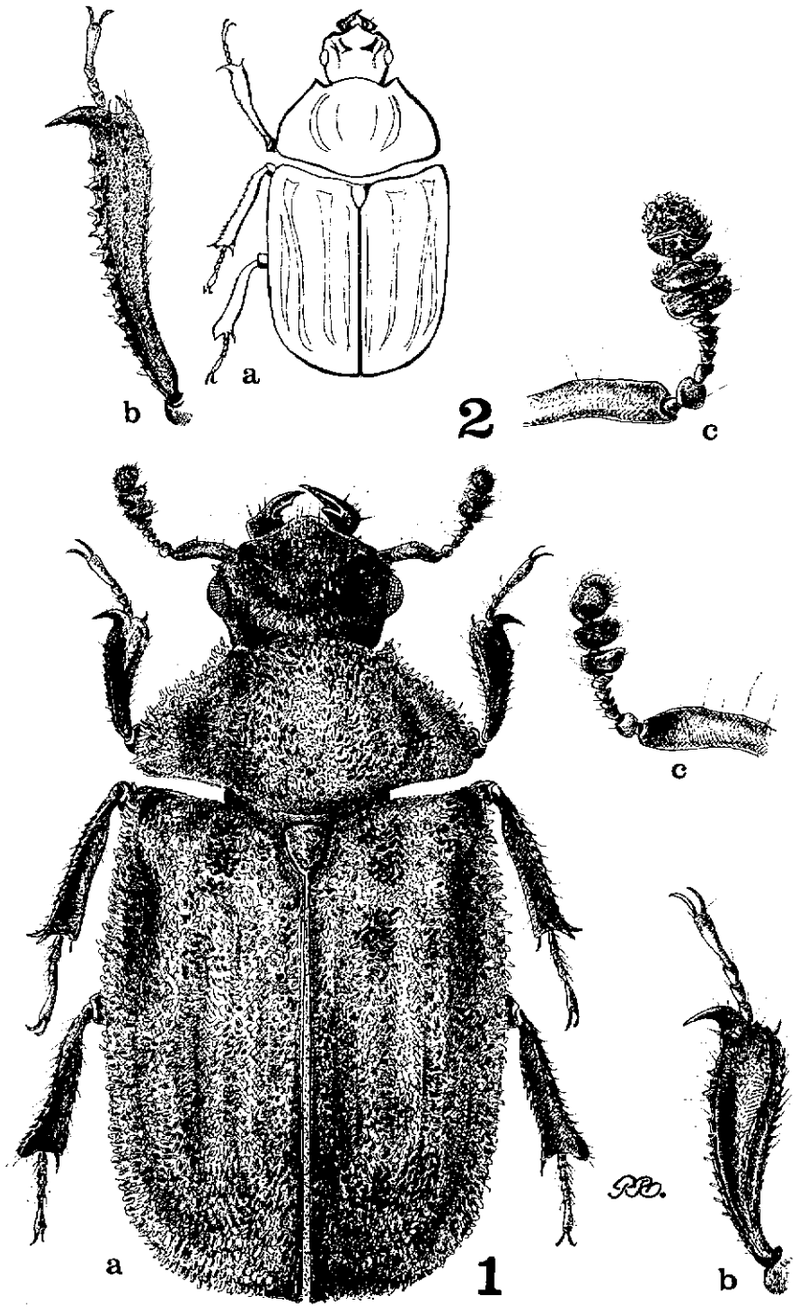

FIG. 1. — *Aesalus imanishii* INAHARA & RATTI n. sp : a) dorsal view (x 25) ; b) right anterior leg (x 50) ; c) right antenna (x 50).
FIG. 2. — *Aesalus asiaticum* LEWIS : a) dorsal view (x 10) ; b) right anterior leg (x 30) ; c) left antenna (x 50).

We are greatly indebted to Mr. Osamu Imanishi of Osaka, who transferred to us the unique specimens he had collected himself. Also we express our heartily gratitude to many specialists of all over the World for their kindness in having furnished us with many useful bibliographies.

Genus **Aesalus**

Fabricius, Syst. Eleuth. II, 1801, p. 254 ; van Roon, Cat., 1910, p. 57 ; B. Benesh, 1960, Coleopt. Catalogus, Suppl., pars 8, pp. 21-22.

Aesalus imanishii INAHARA & RATTI, n. sp. (fig. 1).

Male and Female are external identify (same form) and it is necessary to process at the genitalia observations for separate the two sexes. Body opaque, rather convex, oval but somewhat slender than in *Aesalus asiaticus* LEWIS (fig. 2). Colour dark brown ; dorsum largely covered with many irregular scaly and pinctures mixed yellow and brown.

Description :

Head small, flat, downward, a little narrower than twice the length ; closely covered with brown scaly and minutely granulate ; with a strong semicircular projecting in center of anterior margin, from it to before parts of both frontal angles declivities slightly incurved, in the both frontal angles small concave ; eyes does not divide in above and below ; from beyhind of eyes to postero-lateral angles forming an easy grade. Mandible small, with a inner tooth at near the base.

Antenna is consist of nine segments (fig. 1-c), and not in ten segments as in *A. asiaticus* LEWIS (fig. 2-c). Basal first segment long and somewhat incurved, second segment small and rather globular, from third segment to sixth segment is the distinctly broader than lenghth ; and apical three ones forming a lamella, and seventh forming the first segment of the lamella, distinctly shorter and narrower than the following two lamellate segments.

Maxillary palpus reddish brown and is consist of three pieces, basal two pieces small, apical third piece long and as long as basal

two pieces. Mentum rather formal rectangul, forming semicircular concave in center of anterior margin ; with sculptured as goose-skinned in the whole surface, suberect some yellowish hairs.

Pronotum rather convex, nearly twice as broad as length, and widest at near the postal angles ; anterior margin slightly convex

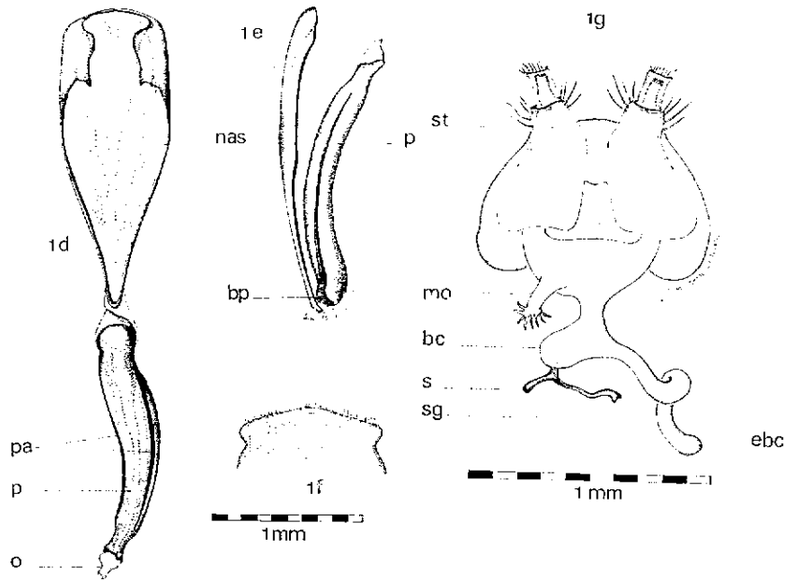

FIG. 3. — Genitalia of *Aesalus imanishii* INAHARA & RATTI. — MALE : 1-d position of Penis, out of Ninth abdominal segment (penis is drawn with rotation of 160°) ; 1-e position of Penis into ninth abdominal segment (natural position) ; 1-f last abdominal tergite (above ...) ; bp = basal piece, nas = ninth abdominal segment, o = ostium, p = penis, pa = parameres. FEMALE : 1-g, st = styli, mo = median oviduct, bc = bursa copulatrix, s = spermatheca, sg = spermathecal gland, ebc = elongating part of spermathecal gland.

in center from it to both angles gently concave, both angles of anterior margins rather sharp projecting in forward ; lateral sides with many black bristles, declivities slightly depressed ; posterior margin very gently convex in center, from it to both angles elevated with slightly up grade. General surface largely covered with rather sparsely scaly yellowish punctures ; disc ornamented with paramedian concentration of many black bristles is consist of two parts. Intercoxal section of receive anterior legs. Metasternum with many

densely minutely granulate and sparsely yellowish scaly. Scutellum obtuse angled triangle, slightly longer than a half of the width, with roughly seventeen or eighteen yellowish scaly in the middle.

Elytra as wide as posterior margin of prothorax, widest behind the middle, and twice as long as wide ; from the middle to the posterior third are very slightly rounded, from the latter to the apices are strongly abruptly rounded ; general surface largely covered with scaly yellowish punctures and black scale in the whole, the latter forming three irregular longitudinal bands of thicker ; posterior declivities with scattered erect bristles : sides margins of elytra with many erect irregular bristles.

Anterior tibia somewhat plump, shorter (fig. 1-b) than A. asiaticus (fig. 2-b) : at the outer edge having irregular ten or eleven external denticles and one large strongly sharp spur as hook in the apex ; at the inner edge having twelve or thirteen blunt saw-like teeth and a small sharp spur as hook in the apex. Middle and posterior tibiae without notable features.

Male genitalia (fig. 1-d, e, f, scale is give by ruller of 1 mm) : Penis cylindrical and curved. Slender internal sac is visible, but it has not been possible to evert this. Parameres slender, appressed to penis and continuous with the basal median rod.

Female genitalia (fig. 1-g ; scale is give by ruller of 1 mm) : Styli are visibles. Bursa copulatrix short and strong with elongating part. Spermatheca small and sclerotized, with spermathecal gland fine and long.

Lenghth : approximate 5 mm. *Width :* approximate 3 mm.

Habitat :

— Holotype : ♂, Central Formosa, Nantou County, Meifeng March 22-23, 1974.

— Allotype : ♀, same date.

— Paratypes : 3 ♀, same date. All the type specimens were collected by Osama Imanishi.

Holotype and Allotype in Inahara Collection (accession N° 107701-107702) ; one paratype in Ratti Collection ; one paratype in Imanishi Collection and one paratype are deposited in the Hiei Natural Science Museum.

Nota by the authors : We are grateful to Mr. J.-P. LACROIX, having compiled drawing and legends on Genitalia male & female, corrected and overhauled entirely text ; and to Mr. H. E. Bomans (Grignon, Drôme, France) for second reading and correction of the text, with their usual competence.

Nota by J.-P. LACROIX (*Attached at M.N.H.N. Paris*) : I am grateful to Miss B. Holloway (Royal Society of New Zealand) and Mister E. Weinreich (Doctor of Biologie from Giessen University R.F.A.), for their Works on Lucanidae, which are very important for our knowledge of this Family.

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HYADESIA AUSTRALIANA

sp. n. (Astigmata, Hyadesiidae) FROM SOUTH-EASTERN AUSTRALIA*

by A. FAIN** and R. SYNNOT***

Abstract

A new species of *Hyadesia,* subgenus *Hyadesia, H. australiana* is described from algae at lower intertidal levels at Gunnamatta Beach, Victoria.

The new species which is described here was discovered by the junior author on the alga *Gelidium pusillum* at low intertidal levels at the Western end of Gunnamatta Beach, Mornington Peninsula, near Melbourne, Victoria, Australia. It belongs to a group of species characterized by the shape of the propodonotal shield which is wider than long, and the small development of the setae *sc i.* It is distinguished from the two species of this group by several important characters.

FAMILY HYADESIIDAE

Genus *Hyadesia* MEGNIN, 1891

Subgenus *Hyadesia* MEGNIN, 1891 (Fain, 1974)

Hyadesia (Hyadesia) australiana sp.n.

Female : (Fig. 1, 2, 5-9) : Holotype 408 μ long and 255 μ wide (idiosoma). In 4 paratypes these measurements are : 430 × 270 μ ; 475 × 275 μ, 455 × 304 μ, 458 × 285 μ. *Dorsum :* Propodono-

* Déposé le 6 mai 1981.
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