

Some New Forms of Elateridae  
in Japan (VIII)

By  
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Reprinted from  
BULLETIN OF THE HEIAN HIGH SCHOOL  
KYOTO, JAPAN  
No. 19, May 1975

# Some New Forms of Elateridae in Japan (VIII)

By  
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Recently, through the kind courtesy of some insect lovers, I fortunately received many interesting Elaterid-beetles from Japan and its adjacent area. Now, in this paper, I wish to describe newly 4 species and 4 subspecies among these samples to science and to add some memories as follows.

Before going further, I want to express my cordial thanks to Messrs. K. Masaki, I. Matoba, T. Shibata and O. Tamura, for their courteous helps given during the course of my studying in offering the precious samples of these Elaterid-beetles.

All the specimens including the types of new forms are preserved in the writer's collection, with the exception of some examples having a conspicuous preserving position in the continuing description of this paper.

## ***Actenicerus giganteus, sp. nov.***

“Yokozuna-shimofuri-kometsuki” (Figs. 3 & 16)

In the large body or the elytral maculation this new *Actenicerus*-species may suggest an intimate relationship with *A. kunimi* (Kishii, 1966), *A. orientalis* (Candèze, 1889) and somewhat *A. maculipennis* (Schwarz, 1902), although by the combination of the continuing characteristics, it can be separable from these resemblers.

Outline : Male  $21.0 \times 5.5 \sim 24.0 \times 6.5$ mm., female  $26.5 \times 7.0$ mm., very robust, elongate fusiform, subcylindrical, weakly complanate medio-longitudinally, parallel-sided medianly. Black entirely with more or less fuscous articulation of each segment of legs. A feeble cupreous lustre recognized on elytral surface, not distinct always. Wholly covered with yellowish tawny, long, softy, dense and recumbent pubescence, excepting narrowly naked pronotal disc medio-longitudinally, elytra have many variable maculae by yellow pubescence and dark brownish one. Its maculation generally allied closely to it of *orientalis*, though usually the spots by yellowish one in *giganteus* large, clean-cut and few, especially terminal macula at each apex large triangular, never bisected nor constricted.

Head : Broader than length, flattened at vertex, shallowly impressed transversely along frontal edge. Crest before each eye well-developed, not continued to anterior margin. Punctures comparatively small and sparse on rear half, thence large and dense conspicuously ahead, generally uneven in density and size. Whole surface among punctures subshiny with microscopical shagreen-like make.

Antennae : In male failing to attain to each tip of pronotal hind angles by 2 apical joints or more, in female subequal to 2-3rds length of head and prothorax combined or less.

Basal joints largest, robust, slightly sinuate ; 2nd smallest, obconical, a little longer than width ; 3rd elongate triangular, more than 2.5 times as long as breadth, about 3 times as long as 2nd ; 4th feebly shorter than 3rd ; 4th to 10th moderately serrated, gradually narrow terminally in male, narrow and short in female ; 11th elongate, slightly longer than 10th in male, a little shorter in female.

Pronotum : Elongate, about 1.5 times as long as width medianly exclusive of hind tips, simply convex, having a shallow medio-longitudinal furrow at hind border. Rear angles well-projecting elongately post-outwards, having a distinct acute unicalination along each lateral margin. Sides subparallel, slightly expanded outwards medially, feebly constricted near base of each rear corner. Punctures small, single, strongly impressed, sparse at disc, thence gradually becoming dense, large and subocellate laterally, sometimes partly reticulate each other. Surface among punctures smooth.

Scutellum : Subpentagonal, convex above, clothed with fine and dense punctures, its intervals subshiny, having an obtuse apex.

Elytra : At humeri wider than across base of each prothoracic hind angle, as wide as span between their tips. Punctate-striae not so distinct, vaguely marked by fine shallow and elongate punctures, but not vanishing apically. Interstices among striae flat, with minute and sparse punctures, subshining, having slight traverse creases partly.

Prosternum : In profile outline of under surface distinctly curved inwards before procoxae, not straight ; mucro well-extending backwards, impunctate, shining, with obtuse apex. Punctures single, very sparse medio-longitudinally, becoming dense, ocellate and large laterally, exclusive of fore rim with small and single ones. Sutures substraight, single.

Other Characteristics : Each propleural punctures similar to those of pronotal lateral border. Metasternal punctures small, sparse and single as compared with propleural ones. Abdomen and legs moderate. Male genitalia as figured (fig. 16), apex of each lateral lobe roundly expanded apically, without sensory setae.

Described from a male holotype, Mt. Takao in Tôkyô, April 27, 1974, K. Emoto leg. ; a female allotype, Mt. Oishi in Wakayama pref., June 5, 1968, M. Umemoto leg. ; 5 male paratypes, Mt. Takao (Tôkyô), Okutama (Tôkyô) and Mt. Iwawaki (Ôsaka), April 29 to June 6, 1965 to 1974, K. Emoto, H. Satô, H. Tanizawa and K. Tsuji leg. (Some paratypes are in coll. K. Masaki).

### ***Sawadapenthes amami masakii*, subsp. nov.**

“Masaki-hoso-kometsuki” (Figs. 12-15)

The present new subspecific *Sawadapenthes* from Is. Okinawa-hontô may be without difficulty divided from the nominate one : *Gamepenthes amami* Kishii, 1959, AKITU, VIII : 59-60, 5 figs. (Is. Amami-ohshima) (figs. 10 & 11), by the combination of the following structures.

1. Body colouration very variable, there are many combining types in head, pronotal disc, elytra, antennae, under surface and legs from wholly yellowish brown individuals (female) to dark specimen (male) like subsp. *amami*, however always more or less paler than the latter.

2. A little elongate, 3.4~3.8×0.8mm. ; in median measurements.

3. Antennae comparatively short.
4. Punctures of head and pronotum smaller and sparser than subsp. *amami*.
5. Apex of 5th abdominal sternite in male weakly truncate only, instead of nominal subspecies having a small emargination at apex.
6. A pair of longitudinal broad impressions on each lateral part of 5th abdominal segment in male rather smaller than those of subsp. *amami*.
7. Male genitalia elongate ; lateral projection of each lateral lobe pointed outwards ; median lobe broad and short generally compared with those of subsp. *amami*.

Described from a male holo-, a female allotopo-, 14 male and 3 female iso-types, Mt. Yonaha-dake in Is. Okinawa-hontô, July 7, 1974, T. Mikage leg. ; 3 male paratypes, ditto, June 27, 1973, T. Hatayama leg. (Some types are in coll. K. Masaki).

**Megapenthes shirozui taichii, subsp. nov.**

"Shibata-tsuyakeshi-kometsuki" (Figs. 1 & 17)

The present new subspecies of *Megapenthes shirozui* Kishii, 1959, Bull. Heian H. S., 3 : 14-15, 10 figs. (Is. Yaku-shima), may be easily distinguishable from it by the combination of structures as shown below.

1. Male 7.0×1.6mm. in median measurements, slender species.
2. Head black with more or less brownish anteriorly.
3. Pronotal disc entirely dusky brown with yellowish fore margin.
4. Head punctures small, subocellate, a little sparse, evenly set, instead of large dense and umbilicate punctures in nominate subspecies.
5. Antennae exceeding tips of pronotal rear angles by about 2 apical joints or less for 3 ones or more in subsp. *shirozui*.
6. Pronotal punctures smaller and sparser than those of subsp. *shirozui*.
7. Pronotal rear angles completely parallel-sided each other, not divergent slightly post-outwards as subsp. *typicus*.
8. Near basal half of elytra, granulation on interstices among striae larger and denser compared with small and sparse ones in nominal subspecies.
9. Male genitalia generally short, in special lateral lobes comparatively broad and short for those of subsp. *shirozui*.

Described from a male holotype, Shin-mura in Is. Amami-ohshima, July 6, 1961, T. Shibata leg.

May *Megapenthes shirozui* (Ohira, 1968, Kontyû, 36 : 140, Amami-ohshima) belong to this new subspecies. And Dr. Ôhira in 1973 withdrew this distributing record in Is. Amami-ohshima by himself without apparent cause.

**Melanotus (Spheniscosomus) masakii, sp. nov.**

"Masaki-ohkushi-kometsuki" (Figs. 6, 7, 20 & 21)

Outline : Male 14.5×4.0mm. Elliptic, voluminous cylindrically, not parallel-sided, very shining. Black with more or less brownish-red front of head, antennae, palpi, pronotal rear angles, scutellar median part, elytral bases, prosternum, propleural latero-margins, me-

sothoracic under parts, abdominal margins and legs. Pubescence yellowish white, sub-erect, long, dense.

Head : Vertex 3.5 times as wide as each diameter of eyes or more in breadth, convex, feebly impressed along fore edge which is well-carinated, roundly extending ahead. Punctures large, coarse, umbilicate, dense, its interspaces smooth.

Antennae : Short, hardly attaining to base of each hind corner of pronotum. Basal joints robust, longest ; 2nd globose, smallest, wider than length ; 3rd obconic, 1.5 times as long as 2nd, subequal in width ; 4th longer than 3rd, shorter than 2 preceding joints combined ; 4th to 10th serrated, becoming elongate apically ; 11th rhombic.

Pronotum : Well convex dome-likely, having a vestige of medio-longitudinal smooth furrow at base ; as wide as length medially ; slightly expanded medio-outwards. Hind angles short, extending straightly back, with a small clear carina along each lateral margin parallelly. Basal sulci deep, distinct. Punctures single, sparse, fine medially, becoming large, ocellate, deep, uneven ante-laterally, its interspaces smooth.

Scutellum : Elongate trapezoidal, oblique, flat, sparsely punctured.

Elytra : About 2.5 times as long as basal width, gently narrowing back. Sutures distinctly furrowed longitudinally at basal one-fifth. Striae subobsolescent with fine punctures, distance between ones about 1.5 times as wide as their diameters. Strial intervals perfectly flattened, minutely punctured sparsely, smooth.

Other Structures : Prosternal sutures straight, short, broad. Process stout, very wide apically in profile, with a distinct apical emargination. Prosternal under surface in profile completely straight from end of process to behind fore rim. Male genitalia broad, each lateral lobe simple at apex, without latero-projection ; median lobe short.

Described from a male holotype, Mt. Yonaha-dake in Is. Okinawa-hontô, July 6, 1974, T. Mikage leg.

Among the Japanese *Melanotus*-species, this new elaterid-beetle is very unique in the short voluminous body, short antennae, sparsely punctured elytral surface, obsolescent elytral striae, broad apex of mucro in profile, broad aedeagus without latero-apical expansion in lateral lobes etc.

### ***Melanotus* (s. str.) *spernendus* kosugi, subsp. nov.**

“Yaku-nagacha-kushi-kometsuki” (Figs. 19 & 25)

*Melanotus spernendus* : Miwa, 1929, Trans. Nat. Hist. Soc. Formosa, XIX (103) : 346, Yakushima.

*Melanotus* (s. str.) *spernendus* : Nakane et Kishii, 1958, Sci. Rep. Saikyo Univ. (Nat. Sci. Liv. Sci.), 2(5) : 38, Kurio in Yakushima.

This new subspecies can be distinguished from the nominate one : *Melanotus spernendus* Candèze, 1873, Mém. Soc. Sc. Liège, (2) V : 21, Nagasaki (fig. 18), by the combination of the following structures.

1. Male 11.2 × 2.8mm., female 12.5 × 3.0mm.
2. Generally elongate, slender, subparallel-sided.
3. Wholly reddish-brown, lighter always than subsp. *spernendus*.
4. Antennae slender, elongate ; 3rd joints obconic, not triangular ; each serration from 4th to 10th conspicuous, their inner sides rather straight.

5. Pronotal punctures distinctly fine, single and sparse medianly.
6. Propleural punctures minute, sparse and elongate.
7. Prosternal sutures comparatively curved inwards medianly.
8. Male genitalia as figured (fig. 19).

Described from a male holotype and a female allotype, Kosugi-dani in Is. Yaku-shima, Kagoshima pref., July 23-25, 1966, Y. Hama leg.

**Melanotus (s. str.) legatoides, sp. nov.**

“Hime-kushi-kometsuki” (Figs. 8, 22 & 23)

In the general appearances, this new species somewhat closely resembles to small individuals of *Melanotus legatus* Candèze, 1860, although by the combination of the structures as follows it may easily divide from *legatus*.

Outline : Male  $14.0 \times 4.0 \sim 15.0 \times 4.2$ mm., female  $13.5 \times 3.5 \sim 16.0 \times 4.5$ mm. Rather slender, subcylindrical, not parallel-sided, widest at pronotal median part, thence straightly narrowing back to apical 4-5ths of elytra. No dissimilar features can find about colouration and pubescence between *legatus* and this new species.

Head : Generally similar to *legatus* exclusive of antennae.

Antennae : Hardly attaining to each apex of pronotal hind angles in male, distinctly failing to reach by one apical joint in female. Basal joints robust, cylindrical, sinuate ; 2nd smallest, globose, as wide as length ; 3rd elongate obconic, nearly twice as long as 2nd in female, or more in male, 1.5 times as wide as 2nd ; 4th large, triangular, weakly longer than 3rd, a little shorter than 2nd and 3rd combined in length ; 4th to 10th gradually becoming slender apically ; 11th elongate rhombic, feebly longer than 10th.

Pronotum : Roundly expanded outwards, slightly constricted near base of each hind angle. Rear corners subparallel-sided each other, short, not divergent outwards, with obtuse apices, each one having a short clear unication, which feebly diverges ahead from lateral margin. Punctures uneven in size, dense, circular, subumbilicate medially, thence becoming laterally dense, ocellate, large ; its interspaces entirely smooth.

Other Structures : Prosternal process in profile simply pointed obtusely at apex, rather triangular, not excavated at under side. Male genitalia as figured (fig. 22); latero-apical expansion of each lateral lobe short, wide, with setae less than 10 ; apex of median lobe broad with a small projection. In the shape, punctuation, surface condition etc. scutellum, elytra, prosternum, propleura, mesothoracic under parts, metasternum, abdomen and legs moderate, universally similar to those of *legatus*.

Described from a male holo-, a female allotopo-, a male and a female iso-type, Okudôgo in Ehime pref., August 21, 1974, T. Wakejima leg. ; 3 male and 10 female paratypes, Kiyosato (Nagano), Mizunashi-dani (Gifu), Is. Kammuri-jima (Kyôto), Mt. Hiei-zan (Kyôto), Toriimoto (Kyôto), Mt. Goma-no-dan (Wakayama), Mt. Daisen (Tottori) and Is. Yaku-shima (Kagoshima), April to August, 1951 to 1973, H. Ishida, Y. Kimura, J. Kitamura, I. Matoba, T. Nakamura, T. Shôji, O. Tamura, K. Tsukamoto and T. Kishii leg. (Some types are in coll. K. Masaki).

The general shape of male genitalia is allied to that of *M. ishigakianus* Kishii, 1974, though the elongate pronotum, dense pronotal punctures etc. in this new species may be

recognized as a clear dissimilar point between them. However there is a possibility that these characteristics may be nothing but a subspecific disparity. Moreover, in some points it resembles to *M. boninensis* Ôhira, 1974, but they may divide by the body outline, appearances of pronotal disc, shape of prosternal process in profile etc.

***Dalopius exilis yakuensis*, *subsp. nov.***

“Yaku-kurosuji-hime-kometsuki” (Figs. 2 & 27)

*Agriotes ferrugineipennis* : Miwa (*nec.* Motschulsky, 1866), 1929, Trans. Nat. Hist. Soc. Formosa, XIX(10) : 350, Yakushima.

*Dolopius ferrugineipennis* : Takeuchi (ditto), 1931, Trans. Kansai Ent. Soc., 2 : 69, Yakushima.

*Dolopius marginatus* : Miwa (in part) (*nec.* Linnaeus, 1758), 1934, Fauna Elat. Japan : 135, Yakushima.

*Dalopius exilis* : Nakane et Kishii (*nec.* Kishii, 1956), 1958, Sci. Rep. Saikyo Univ. (Nat. Sci. Liv. Sci.), 2(5) : 39, 2 figs., Yakushima.

This new subspecies may separate from the nominate ones : *Dalopius exilis* Kishii, 1956. AKITU, V : 20, 3 figs. (fig. 26), by the combination of the continuing structures.

1. Outline generally slender, complanate distinctly.
2. Body colouration more or less paler, black stripes at elytral sutures narrower than those of subsp. *exilis*.
3. Pronotal margins usually yellowish clearly.
4. Antennae in male comparatively elongate, 4th joints not so large.
5. Pronotal hind angles short, slightly diverged outwards.
6. Elytral interstices among striae weakly convex longitudinally.
7. Elytral apex conspicuously emarginate crescently.
8. Mucro in profile having a small emargination at apex.
9. Male genitalia short, broad ; apex of each lateral lobe wide ; apical end of median lobe broad, slightly cut off transversely.

Described from a male holo-, a female allotopo-, 3 male iso-types and a female one, Mt. Miyanoura in Is. Yakushima, August 7-8, 1957, Heian Biological Survey's collection ; 3 male and 2 female paratypes, Hana-no-egô and Kosugi-dani in Is. Yakushima, July 11 to August 1, 1961 to 1968, H. Konishi, H. Nara and K. Ueda leg. The general shape of male genitalia in this new subspecies is similar to that of *D. hirasanus* Kishii, although they may be easily divided in the different structures of body measurements, antennal proportion, lateral side condition of pronotal hind angles etc.

***Silesis hatayamai*, *sp. nov.***

“Hatayama-kuchibuto-kometsuki” (Figs. 4, 5, 9 & 24)

In the general appearances, this new *Silesis* is somewhat allied to *S. musculus* distributed widely in Japan exclusive of the Loochoos, although by the combining structures as follows may easily separate each other.

Outline : Male  $9.5 \times 2.5 \sim 8.0 \times 2.0$ mm., female  $10.5 \times 2.6 \sim 8.5 \times 2.2$ mm. Robust, cylindrical, subshining, subparallel-sided. Brownish-black with more or less reddish-brown

mouth parts, head front, antennae, pronotal fore border, pronotal rear angles, scutellum, elytral bases and most parts of body under parts, and with yellowish-brown legs. Pubescence yellowish white, erect, dense, not so long.

Head : Convex above roundly, inclined forwards, slightly impressed transversely along frontal edge. Punctures single, dense, even. Frontal margin well-definitely carinate, traverse medially, confluent to crest before each eye.

Antennae : Not so slender, hardly attaining to tip of each pronotal hind corner. Basal joints longest, cylindrical, fore sides rounded, inner ones straight ; 2nd small, short, obconic, feebly longer than width ; 3rd similar in shape and size to 2nd ; 4th elongate, ill-triangular, nearly as long as preceding 2 joints combined in male, a little shorter in female ; 5th clearly shorter than 4th ; 5th to 11th becoming gently elongate apically.

Pronotum : Lateral outline in upper view parallel-sided. Disc simply convex dome-like, having no line nor furrow medianly. Hind angles extending back straightly, not diverging outwards, having an acute uncarina which is not so long in Japanese *Silesis*-members, never attaining to half of pronotal length. Punctures fine, sparser than those of head medially, distances among ones plainly broader than its diameter, gently becoming dense ante-laterally, interpunctate surface smooth. Basal sulci broad, clear, shallow.

Scutellum : Oblique, tongue-shaped with a plain constriction behind each fore angle laterally ; punctures fine, sparse ; flattened.

Elytra : More than 2.5 times as long as basal width, well convex, subparallel-sided at anterior half, thence gently narrowing roundly back ; apex moderate. Striae distinct, strongly punctured deeply with elongate punctures ; its intervals elevated longitudinally, distinctly rugose densely and transversely.

Under Parts : Prosternal punctures very fine, dense, single, even, impressed shallowly. Sutures broad, straight, furrowed at anterior ends. Propleural punctures plainly sparser, larger than prosternal ones medianly. Process stout, straightly extending rearwards with a clear large emargination at broad apex in profile. Mesosternal and abdominal punctures finer and denser than prosternal ones. Legs moderate ; 4th tarsal joints distinctly lamellate ; claws dentate with 7 or 8 teeth. Male genitalia plainly elongate.

Described from a male holo-, a female allotopo-, 5 male and 3 female iso-types, Mt. Yonaha-dake in Is. Okinawa-hontô, June 26 to 29, 1973, T. Hatayama leg. ; a female paratype, ditto, July 6, 1974, T. Mikage leg. ; a male paratype, Mikyô in Is. Toku-no-shima, July 28 to August 1, 1965, Heian Biological Survey's collection. (Some types are in coll. K. Masaki).

The large body, antennal ratio from 2nd to 4th joints, plain short carina at each pronotal hind corner, rugose strial interstices of elytra, broad and large emargination at process apex, elongate aedeagus etc. are unique to this new species in the known members of *Silesis* from Japan and the adjacent area.

### Résumé

本研究は最近、多数の同好諸氏の御好意により検し得た、多くの標本中に未記載種がかなり発見されたので、この機会にその中から4新種・4新亜種を報ずるものである。なお末尾であるが種々の面でお世話になった諸氏には、その御厚情に心から謝意を表すものである。



## Plate I

Figs. 1-4, 14 & 15 : Total figure.

Figs. 5 & 6 : Basal half part of elytra.

Figs. 7-9 : Prosternal process in profile.

Figs. 10 & 12 : Male genitalia, preparation mounted into Berlese's medium.

Figs. 11 & 13 : Ditto, apical projection of each lateral lobe.

**Fig. 1.** *Megapenthes shirozui taichii* Kishii, *subsp. nov.*, holotype.

**Fig. 2.** *Dalopius exilis yakuensis* Kishii, *subsp. nov.*, isotype.

**Fig. 3.** *Actenicerus giganteus* Kishii, *sp. nov.*, paratype,  
(Mt. Takao, 5 • VI, 1966).

**Fig. 4.** *Silesis hatayamai* Kishii, *sp. nov.*, isotype.

**Fig. 5.** Ditto.

**Fig. 6.** *Melanotus (Spheniscosomus) masakii* Kishii, *sp. nov.*, holotype.

**Fig. 7.** Ditto.

**Fig. 8.** *Melanotus (s. str.) legatoides* Kishii, *sp. nov.*, paratype,  
(Mt. Gomadan, 26 • V, 1973).

**Fig. 9.** *Silesis hatayamai* Kishii, *sp. nov.*, isotype.

**Fig. 10.** *Savadapenthes amami amami* (Kishii, 1959), Is. Amami-ohshima.

**Fig. 11.** Ditto.

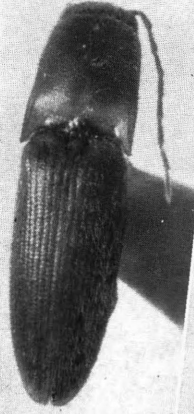
**Fig. 12.** *Savadapenthes amami masakii* Kishii, *subsp. nov.*, isotype.

**Fig. 13.** Ditto.

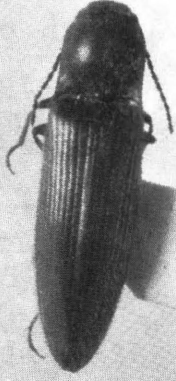
**Fig. 14.** Ditto, holotype.

**Fig. 15.** Ditto, isotype, female.

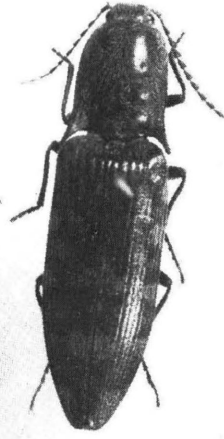
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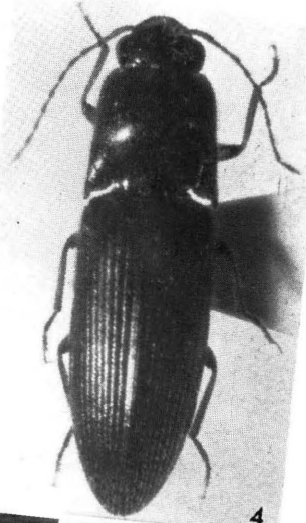
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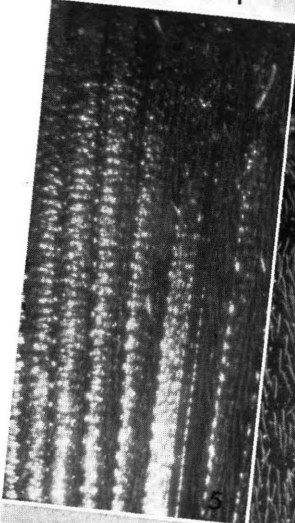
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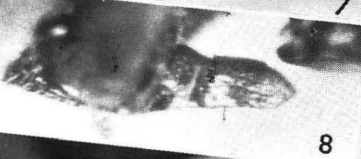
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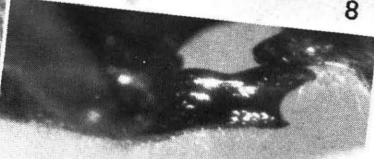
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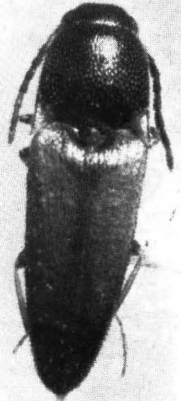
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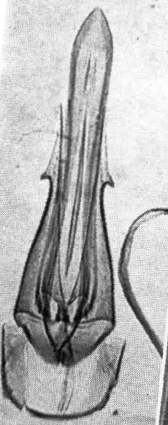
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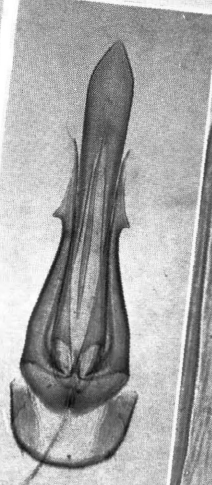
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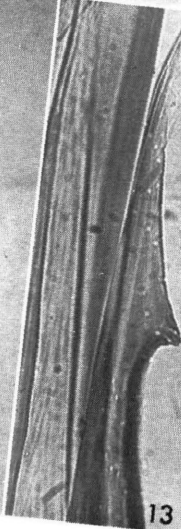
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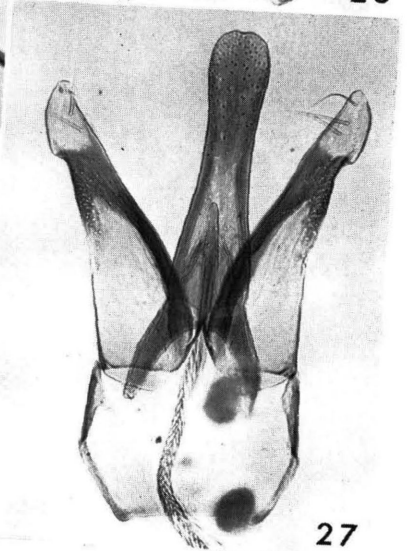
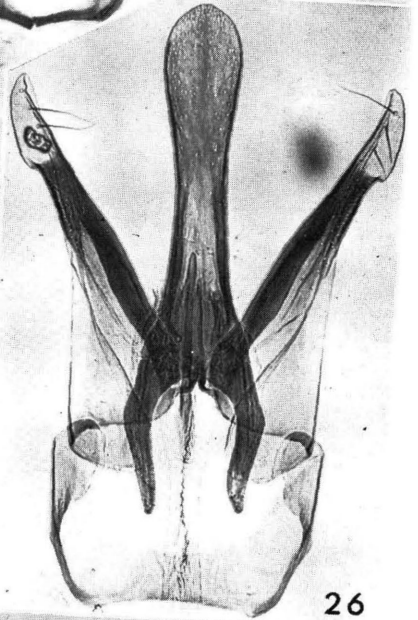
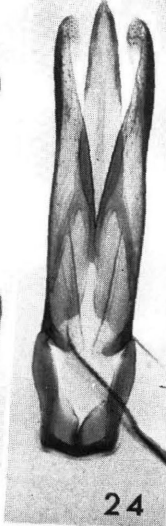
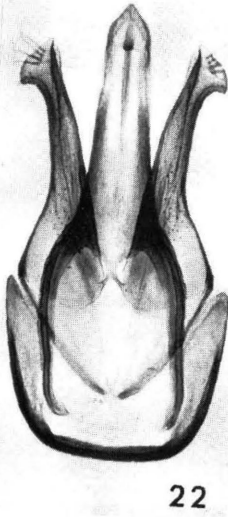
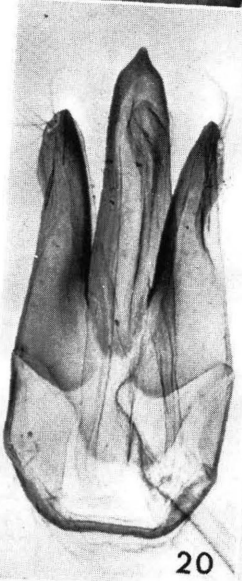
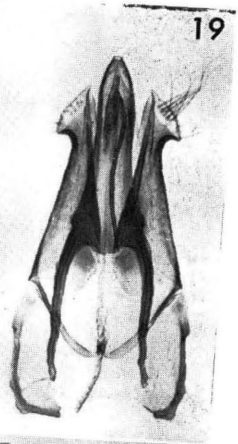
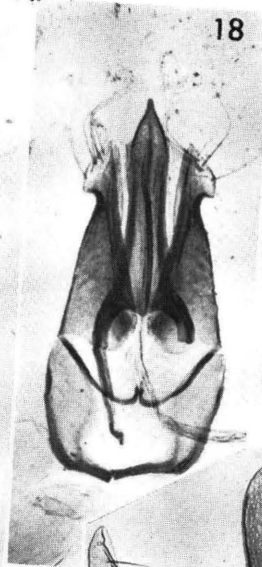
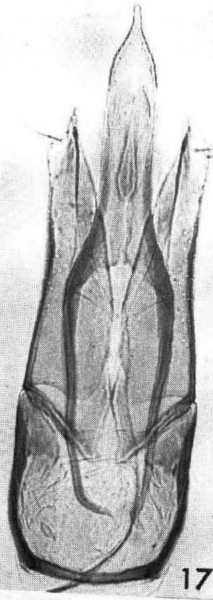
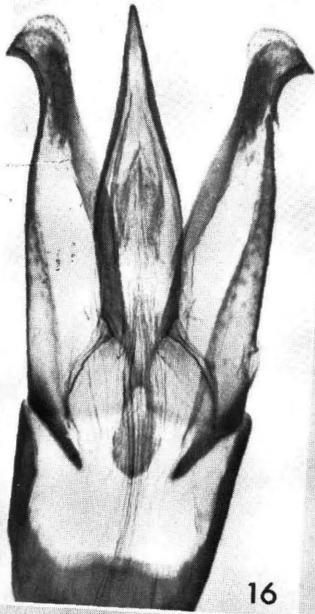
## Plate II

Figs. 16-20, 22, 24, 26 & 27 : Male genitalia, preparation mounted into Berlese's medium.

Figs. 21, 23 & 25 : Total figure.

- Fig. 16. *Actenicerus giganteus* Kishii, *sp. nov.*, paratype,  
(Okutama, 12 • V, 1974).
- Fig. 17. *Megapenthes shirozui taichii* Kishii, *subsp. nov.*, holotype.
- Fig. 18. *Melanotus* (*s. str.*) *spernendus spernendus* Candèze, 1873, Honshû.
- Fig. 19. *Melanotus* (*s. str.*) *spernendus kosugi* Kishii, *subsp. nov.*, holotype.
- Fig. 20. *Melanotus* (*Spheniscosomus*) *masakii* Kishii, *sp. nov.*, holotype.
- Fig. 21. Ditto.
- Fig. 22. *Melanotus* (*s. str.*) *legatoides* Kishii, *sp. nov.*, isotype.
- Fig. 23. Ditto, paratype, (Mt. Gomadan, 26 • V, 1973).
- Fig. 24. *Silesis hatayamai* Kishii, *sp. nov.*, isotype.
- Fig. 25. *Melanotus* (*s. str.*) *spernendus kosugi* Kishii, *subsp. nov.*, holotype.
- Fig. 26. *Dalopius exilis exilis* Kishii, 1956, Kamikôchi.
- Fig. 27. *Dalopius exilis yakuensis* Kishii, *subsp. nov.*, paratype,  
(Hananoegô, 11 • VII, 1963).

Plate II



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23

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