# Some New Forms of Elateridae in Japan (V) 

## By

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## Reprinted from <br> BULLETIN OF THE HEIAN HIGH SCHOOL <br> KYOTO, JAPAN <br> No. 13, December 1968

# Some New Forms of Elateridae in Japan (V)* 

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In this series, I wish to describe new forms of the family Elateridae from Japan and its adjacent regions and to report some knowledge about it.

As for present paper, 4 species, 3 subspecies and an aberrant form are described newly to science as follows.

Previous to my report, I want to express my hearty gratitude to Messrs. K. Baba, director of Kurokawa Hospital in Niigata, S. Inoue in Kyôto city, H. Ishida of Hyôgo Agricultural College, K. Kurata in Ibaragi prefecture, K. Mizuno in Uji city, H. Nitta in Kyôto city, H. Ohira of the Entomological Laboratory of Aichi Educational University, and T. Shibata in Ôsaka city, for their courteous helps given during the course of my studying in various ways.

All the samples including the type specimens of new forms are preserved in the writer's collection, with the exception of some examples having the conspicuous preserving position in the following descriptions of this paper.

Hypolithus (Hypnoidus) korobokkurus sp. nov. (PI. I—fig. 2, Pl. III—figs, 1, 2, 9)
Minute species, $2.5 \times 0.8 \mathrm{~mm}$., gourd-shaped obviously, rather stout, convex above sufficiently as well as beneath moderately, well expanded outwards at prothorax as well as elytra, shining distinctly with feeble aeneous tint. Wholly black with the exception of 3 yellowish brown basal joints of antennae, under parts of mouth and legs, infuscate 4th segments to 11th of antennae, prosternal process, elytral pleura and lateral sides of abdominal sternites. Pubescence rather long, softy, a little dense, recumbent plainly, grieseous to pale golden.

Head conspicuously broad, slightly convex above, having a weak and wide medio-impression behind summit, gently declivous antero-downwards; punctation single, irregular in density, very fine, interspaces among puncta smooth; frontal margin hardly perfect medially, carinate, rounded. Epistome completely bisected

* I. AKITU, Vol.IV, No.4, pp. 77~82, 24 figs., 1955
II. AKITU, Vol. V, No.1, pp. 17~20, 8 figs., 1956
III. Entom. Rev. Japan, Vol. VIII, No. 1, pp. 10~12, 17 figs., 1957
IV. Bull. Heian High School, No. 10, pp. 1~11, 9 figs., 1966
at middle, each antennal scrobe oblong, concave shallowly. Labrum elliptic, small, projecting ahead, convex slightly, punctate minutely. Eyes relatively large, hemispherical, not so protruded outwards, ocelli granular. Antennae short, a trifle stout, failing to attain to tips of pronotal hind corners or in other mention about 3 apical joints of each antenna short as compared with the total length of head and prothorax together; each lst segment largest, clavate, a little depressed above; 2nd obconic, 1.5 times as long as wide or more; 3rd triangular, feebly smaller than 2nd in general outline, subequal in length; 4th triangular, a little wider than 3rd, subequal in length to the preceding; 5th to 10th moniliformed; 5th to 7th near equal to 4 th in width, but shorter weakly; 8th to 10 th rather wider than length slightly; terminal joints large, subrhombic, 1.5 times as long as 10 th in length or more.

Pronotum surely broader than length in median dimension, well convex above simply, having no medio-longitudinal impression nor carination, but a faint mediolongitudinal smooth line plainly; sides roundly expanded outwards, broadest medially; punctures single, minute, not so dense, even in density on whole surface but not in size of puncta, gradually growing finer posteriorly, interspaces among punctures perfectly smooth; each rear corner a little divergent outwards, apex rather acute, having conspicuous well-defined unicarina along lateral side parallelly, extending from tip toward near posterior one-4th; each basal sulcus long, distinct, longitudinal, relatively deep, presenting near hind angle.

Scutellum triangular, widest at base, subequal to length in basal breadth, weakly elevated above medio-longitudinally, very finely and sparsely punctate, sharply pointed at rear apex.

Elytra at base wider clearly than across between apices of pronotal posterior angles, convex above, expanded distinctly at middle, then gently converging roundly to moderate apices; each humerus having a small groove hemed by 2 well-defined carinae to keep each tip of prothoracic rear corners; punctate-striae fine, 4th to 8th partly evanescent, strial intervals flattened above, punctate very finely and sparsely, interspaces among punctures smooth, basal one-4th part of each 2nd interval about 1.5 times as wide as lst one, 3rd broadest and near 1.3 times as wide as 2 nd, 4th a little narrower than 2 nd, 5 th subequal to 2 nd or slightly less.

Prosternum broader than length (process excepted) in median dimension, convex below moderately, having a deep traverse excavation along frontal rim covered with minute creases and fine punctures; frontal rim declivous obliquely antero-downwards, well-limitedly edged trapezoidally, progressively growing denser laterally, intervals among punctures smooth; sutures single, curved outwards medially, anterior ends a little furrowed between prosternum and each propleuron; process extending backwards straightly, inner sides of procoxal cavities carinate
well-definedly, elevated, tip pointed obtusely. Propleura sinuate and elongate triangular, having a faint broad shallow impression longitudinally on anterior half as well as a transverse distinct excavation along posterior margins; punctures fine, dense, single, of which intervals smooth. Mesosternal cavity parallel-sided, horizontal ahead, declivous postero-downwards, rear end rounded. Metasternum having a medio-longitudinal sufficient deep canaliculation on vertex, punctures finer and a little denser than those on prosternal summit. Hind coxal plates strongly expanded rearwards at inner ends, then suddenly narrowed laterally, outer ends acutely pointed indistinctly, frontal margins not straight, distinctly dilated ahead medially.

Legs rather substantial.
Described from a holotype (may be male), Mt. Rishiri-dake (alt.ca. 1700 m ., Lat. $45^{\circ} 15^{\prime} 37^{\prime \prime} \mathrm{N}$ ) in Is. Rishiri, Hokkaidô, August 7, 1958, T. Kishii leg.

In the life-environment and the gourd-shaped body, I think, its metawings may be degenerated.

The new insect having small body, short moniliformed antennae, unique proportion of each antennal segment, a medio-longitudinal smooth line on pronotal summit, triangular scutellum, faint punctate-striae of elytra, single prosternal sutures, metasternal canaliculation, not straight anterior margin of each hind coxal plate etc. $\cdots \cdots$, is in this respect unlike any other known to me in the genus Hypolithus from Japan and its adjacent area.

Moreover, in the general outline, korobokkurus somewhat allied to Elater dermestoides Herbst in 1806 from northern half area of Paraearctic Zone, though may be divided from the latter by the differentiation of subfamilial characteristics etc. as showing below.

1. Pronotal punctation simple, not granular.
2. Pronotal unicarination on each hind angle not so long as dermestoides.
3. Scutellum triangular, not semicircular.
4. Prosternal sutures single distinctly, not double.
5. Mesepimeron large, touching mesocoxae.
6. Metasternum having a deep clear canaliculation medio-longitudinally, not flattened simply.
7. Anterior margin of each hind coxal plate curved, not straight.

New name is based on "Korobokkuru", which is a small god of the Ainos, and is masculine.

## Some notes on Hypolithus (Hypnoidus) motschulskyi Fleutiaux

In 1902, Dr. Fleutiaux (Bull. Mus. Nat. Hist. Paris, p. 22) described originally this apterous snapper belonging under the genus Corymbites being based on the sample from central district in Japan: "Japon central" in his description. The
exact habitat, I think, may be contained within Kamikôchi or its adjacent area on the ground of some body structures in the description: $\cdots \cdots \cdots 10$ millimètres. Oblong, subdéprimé, d'un noir brillant sur la t̂̀te et la pronotum, subopaque sur les élytres; - Antennes d'un brun noirâtre,

Secondly, in 1934, Dr. Miwa (Gov. Res. Inst. Formosa, Dep. Agr., Rep. No. 65, p. 121, Pl. V, f. 28) reported this species from Tokugô-tôge and Kamikôchi under the combination with Corymbites (Selatosomus).

The snapping-beetles always are found only from under stones being near summits of high mountains (alt. ca. 2000 m . to 3000 m .), which are mainly comprised in Japanese central high region, or from vicinity of the verge of a snowy valley, and they usually have degenerate meta-wings. The character of the latter places probably a remarkable limitation on the migrating of this beetles, and according to the researching on the body structural differentiation they may be able to divide some subspecies every isolated habitat.

Being based on this opinion mentioned above, of late years, some elateridresearchers described newly 7 subspecies of this species as follows: subsp. echigoanus Kishii et Ohira, 1956, from Mt. Amakazari-yama; subsp. babai Kishii, 1957, from Mt. Iide; subsp. sawadai Ohira, 1963, from Mt. Kisokoma-ga-dake; subsp. tsurugi Ohira, 1963, from Mt. Tsurugi-san ; subsp. taichii Nakane, 1963, from Mt. Ohdai-ga-hara; subsp. mutsuurai Nakane, 1963, from Mt. Hakusan; subsp. ikutanii Nakane, 1963, from Mt. Tateyama.

Moreover, as a result of my studying, the samples gathered from many districts in Japan at least may be segregated into 11 subspecies or more, and hereopon I wish to make a key to the subspecies inclusive of 3 new ones as showing below.

## Key to the subspecies of Hypolithus (Hypnoidus) motschulskyi Fleutiaux

1. General body outline narrow, not gourd-shaped, shining. Antennae and legs infuscate or dark brownish. Pronotum distinctly longer than width in median dimension; sides more or less sinuate medially, not expanded roundly; punctures very fine, sparse.
$1^{\prime}$. General body outline broad, gourd-shaped conspicuously. Pronotal median length subequal to width or rather wider plainly. 3
2. $10.5 \sim 13.3 \times 3.8 \sim 4.4 \mathrm{~mm}$. Robust, large, subopapue. Antennal proportion in each joint: $5<2=4<3$. Pronotal hind angles divergent outwards distinctly. Elytral sides subparallel to each other; intervals among punctures more or less rugose traversely. ......... subsp. echigoanus Kishii et Ohira (Pl. II-fig. 14)

Hypolithus (Hypnoidus) motschulskyi echigoanus Kishii et Ohira comb.nov. Hypolithus motschulskyi echigoanus Kishii et Ohira, AKITU, V(3), pp.74, 81~82, (1956) (Mt. Amakazari)

Specimen examined: a female allotopotype, Mt. Amakazari, Niigata pref., June 25, 1955, K. Baba leg.
Distribution: Japan (Honshû-Mt. Amakazari-yama, alt. ca. 1900 m., in Myôkô Volcanic Region)
$2^{\prime}$. $7.5 \sim 10.0 \times 2.5 \sim 3.5 \mathrm{~mm}$. Conspicuously slender, shining. Antennal proportion in each joint: $2<5<4<3$. Pronotal hind angles not divergent, straightly extending rearwards or somewhat hardly divergent. Elytral sides slightly expanded roundly; intervals among punctures smooth.
subsp. alpicola subsp. nov. (Pl. II-figs. 7, 8)

## Hypolithus (Hypnoidus) motschulskyi alpicola subsp. nov.

Described from a male holo-, 6 male and 5 female iso-types, Mt. Asahi-dake in Mts. Shirouma-dake, Niigata pref., July 27, 1961, K. Baba leg.; a female allotype, 5 male and 4 female paratypes, Mt. Hachi-ga-dake in Mts. Shirouma-dake, Niigata pref., July 26, 1961, K. Baba leg.
Distribution: Japan (Honshû-Mt. Asahi-dake and Mt. Hachi-ga-dake, alt. ca. $2100 \sim 2600 \mathrm{~m}$., in northern region of the North Japan Alps)
3. Pronotal lateral sides roundly expanded outwards clearly. Pronotal punctation fine, very sparse. Elytral intervals among punctures more or less rugose traversely.4

3'. Elytral intervals among punctures perfectly smooth. ..................................... 5
4. $8.3 \sim 9.5 \times 3.3 \sim 4.0 \mathrm{~mm}$. Opaque plainly, elliptic. Antennae and legs yellowish brown or paler. Antennal proportion in each joint : $5<4<2 \leqq 3$ in male, $5<4=2<3$ in female. Pronotum broader distinctly than median length; hind angles not divergent outwards. .........subsp. kuratai subsp.nov. (Pl. II-figs. 1, 2)

## Hypolithus (Hypnoidus) motschulskyi kuratai subsp. nov.

Described from a male holotype, Mt. Shiomi-dake, Nagano pref., July 17 to 20, 1956, H. Nitta leg.; a female allotype, Mt. Senjyô-ga-dake, Nagano pref., August 7, 1958, K. Kurata leg.; a male paratype, Sampuku pass, Nagano pref., July 17 to 20, 1956, H. Nitta leg.; 2 female paratypes, Mt. Senjyô-gadake, Nagano pref., July 16 to 18, 1957, S. Inoue leg.; a male paratype, Akanagizawa near Mt. Kita-dake, Yamanashi pref., July 24, 1959, K. Kurata leg.; a female paratype, Mt. Kita-dake (or Mt.Shirane-san), Yamanashi pref., July 25, 1959, K. Kurata leg.
Distribution: Japan (Honshû-Mt. Senjyô-ga-dake, Mt. Kita-dake and Mt. Shiomi-dake, alt. ca. $2500 \sim 3100 \mathrm{~m}$., in the South Japan Alps)
New name is dedicated to Mr. K. Kurata who kindly sent many elaterid samples to me.
$4^{\prime}$. $7.0 \sim 9.0 \times 2.5 \sim 3.5 \mathrm{~mm}$. Oblong, shining. Antennae and legs infuscate. Pronotum wider than median length or less; hind angles weakly divergent outwards. Antennal proportion in each segment: $2 \fallingdotseq 5<4<3$.
subsp. sawadai Ohira (Pl. II-fig. 13)
Hypolithus (Hypnoidus) motschulskyi sawadai Ohira comb. nov.
Hypolithus motschulskyi sawadai Ohira, Trans. Shikoku Ent. Soc., VIII (1), pp. 16 $\sim 17$, Pl. 1, figs. L-a, H, I, (1963) (Mt. Kisokoma)
Specimens examined: a male, Mt. Kiso-koma-ga-dake, Nagano pref., August 16, 1964, K. Mizuno leg.; a female, Oguro in Ina, Nagano pref., August 27, 1961, Y. Hayashi leg.
Distribution: Japan (Honshû-Mt. Kiso-koma-ga-dake, alt. ca. 2900 m ., in the Central Japan Alps)
5. Typical gourd-shaped, shining. Antennae and legs usually infuscate. Antennal proportion in each segment: $2-5<4<3$. Pronotum wider than median length or less; lateral sides remarkably expanded roundly outwards.
$5^{\prime}$. Elongately gourd-shaped generally. Antennae and legs yellowish brown. $\ldots \ldots .7$
6. $10.0 \sim 12.5 \times 4.0 \sim 4.5 \mathrm{~mm}$. Antennal 4th joints about 1.4 times as wide as 3 rd or less. Pronotal disc having a medio-longitudinal smooth line clearly. Pronotal punctation large, dense, strongly punctated. Prothoracic hind corners not divergent outwards. ...............subsp. motschulskyi Fleutiaux (Pl. II-fig. 9)

## Hypolithus (Hypnoidus) motschulskyi motschulskyi Fleutiaux

Corymbites motschulskyi Fleutiaux, Bull. Mus. Nat. Hist. Paris, p. 22, (1902) (Japon central)
Hypolithus (Hypnoidus) motschulskyi: Kishii, Bull. Heian H. S., No. 7, p. 15, (1962)
Specimens examined: 7 males and 7 females, Kamikôchi, Tokugô pass and Shimajima valley, Nagano pref., July to August, H. Ishida and T. Kishii leg.
Distribution : Japan (Honshû-Kamikôchi, Tokugô pass and Shimajima valley, alt. ca. $1500 \sim 2100 \mathrm{~m}$., in central region of the North Japan Alps)
$6^{\prime}$. $9.0 \sim 12.5 \times 3.8 \sim 4.5 \mathrm{~mm}$. Antennal 4th joints hardly longer than 3rd. Pronotal disc simply' convex above, having no medio-longitudinal line; punctures minute, sparse, weakly punctate. Hind angles slightly diverging outwards or somewhat subparallel-sided. subsp. babai Kishii (Pl. II-figs. 3, 4)

## Hypolithus (Hypnoidus) motschulskyi babai Kishii comb. nov.

Hypolithus motschulskyi babai Kishii, AKITU, V̇I (3), pp. 69 \& 73, (1957) (Mt. Iide) Specimens examined: a male allotype and 21 examples, Mt. Iide-san, Mt. Takizawa-mine and Mt. Eboshi-dake, Niigata pref., July, 1956 to 1960, K.


Fig. Subspecific geographical distribution of Hypolithus (Hypnoidus) motschulskyi Fleutiaux
A. babai Kishii
B. echigoanus Kishii et Ohira
C. alpicola subsp. nov.
D. ikutanii Nakane
E. motschulskyi Fleutiaux
F. kuratai subsp. nov.
G. sawadai Ohira
H. ontakecola subsp. nov.
I. mutsuurai Nakane
J. taichii Nakane
K. tsurugi Ohira

1. Mt. Asahi-dake, alt. 1870 m .
2. Mt. Takizawa-mine, alt. ca. 1500 m .
3. Mt. Iide-san, alt. 2105 m .
4. Mt. Amakazari-yama, alt. 1963 m .
5. Mt. Hachi-ga-dake, alt. 2620 m .
6. Mt. Tateyama, alt. 3015 m .
7. Mt. Hakusan, alt. 2702 m .
8. Mt. Ontake, alt. 3063 m .
9. Mt. Kiso-koma-ga-dake, alt. 2956 m .
10. Tokugô pass, alt. 2132 m .
11. Mt. Senjyô-ga-dake, alt. 3033 m .
12. Mt. Kita-dake, alt. 3192 m .
13. Mt. Shiomi-dake, alt. 3047 m .
14. Mt. Ôdai-ga-hara-yama, alt. 1695 m .
15. Mt. Inamura-ga-dake, alt. 1727 m .
16. Mt. Tsurugi-san, alt. 1955 m .

Baba and H. Koike leg.
Distribution : Japan (Honshû-Mountainous region of Mts. Iide, alt.ca. $600 \sim 2000 \mathrm{~m}$.)
7. Body length less than 9 mm . Opaque or subshining. Pronotal hind angles not divergent outwards.8
$7^{\prime}$. Body length more than 10 mm . Shining. Pronotal hind angles divergent outwards. 10
8. Subshining. Antennal 3rd joints about 1.2 times as wide as 4th. Pronotal median length subequal to width or more. Elytral punctate-striae perfect, not diminishing.

9
$8^{\prime}$. $8.2 \times 2.8 \mathrm{~mm}$. Opaque especially on elytra. Antennal proportion in each segment: $2=5<4 \fallingdotseq 3$; 3rd joints near 1.5 times as wide as 4th. Pronotum broader than median length plainly; lateral sides roundly expanded outwards; punctures very fine, sparse. Elytral punctate-striae evanescent partly.
subsp. ikutanii Nakane (Pl. II-fig. 12)

## Hypolithus (Hypnoidus) motschulskyi ikutanii Nakane

Hypolithus motschulskyi ikutanii Nakane, Sci. Rep. Kyoto Pref. Univ., (Nat. Sci. \& Liv. Sci.), 3 (5), (1963)

Specimen examined: a male, Mt. Tateyama, Toyama pref., July 24, 1957, H. Nitta leg.

Distribution: Japan (Honshû-Mt. Tateyama, alt. ca. 3000 m ., in western region of the North Japan Alps)
9. $8.5 \times 2.8 \mathrm{~mm}$. Antennal proportion in each joint: $5<2<4<3$ in male, $5 \div 2$ $<3 \leftrightharpoons 4$ in female. Pronotal lateral sides more or less sinuate medially. Pronotal punctures relatively large, dense, strongly punctated.
subsp. mutsuurai Nakane (Pl. II-fig. 11)

## Hypolithus (Hypnoidus) motschulskyi mutsuurai Nakane

Hypolithus motschulskyi mutsuurai Nakane, Sci. Rep. Kyoto Pref. Univ., (Nat. Sci. \& Liv. Sci.), 3(5), (1963)

Specimens examined: a male, Mt. Hakusan, Ishikawa pref., July 25, 1963, S. Inoue leg.; a female, ditto, August 11 to $14,1954, \mathrm{~S}$. Inoue leg.
Distribution: Japan (Honshû-Mt. Hakusan, alt. ca. 2700 m.)
9.. $8.0 \sim 9.0 \times 2.8 \sim 3.0 \mathrm{~mm}$. Antennal proportion in each joint: $2=5<4 \fallingdotseq 3$. Pronotal lateral sides roundly expanded outwards. Pronotal punctures sufficiently fine, sparse. ............................ subsp. ontakecola subsp. nov. (Pl. II-figs. 5, 6)

## Hypolithus (Hypnoidus) motschulskyi ontakecola subsp. nov.

Described from a male holotype and a female allotopotype, Kaidagoya in Mt. Ontake, Nagano pref., July 21, 1952 ; 2 male paratypes and a female, ditto, August 4, 1953, H. Ishida leg.
Distribution: Japan (Honshû-Mt. Ontake, alt. ca. 3000 m. , in southern
region of the North Japan Alps)
10. $10.5 \times 3.5 \mathrm{~mm}$. Pronotum wider than median length; lateral sides a little sinuate medially. Pronotal punctures rather large, dense.
subsp. tsurugi Ohira
Hypolithus (Hypnoidus) motschulskyi tsurugi Ohira comb. nov.
Hypolithus motschulskyi tsurugi Ohira, Trans. Shikoku Ent. Soc. VIII (1), p. 17, Pl. 1, figs. L-b, F, G, (1963) (Mt. Tsurugi)
Distribution: Japan (Shikoku-Mt. Tsurugi-san, alt. ca. 1900 m.)
$10^{\prime} .10 .5 \sim 11.5 \times 3.8 \sim 4.0 \mathrm{~mm}$. Pronotum weakly narrower than median length; lateral sides roundly expanded outwards medially; punctures conspicuously fine, sparse. Antennal proportion in each joint: $5<2=4 \leqq 3$.
subsp. taichii Nakane (Pl. II-fig. 10)

## Hypolithus (Hypnoidus) motschulskyi taichii Nakane

Hypolithus motschulskyi subsp.: Kishii, AKITU, VIII (3), p.64, (1959) (Mt. Ohdai-ga-hara)
Hypolithus motschulskyi taichii Nakane, Sci. Rep. Kyoto Pref. Univ., (Nat. Sci. \& Liv. Sci.), 3(5), (1963)

Specimens examined: a male, Ohdai-tsuji to Kimmeisui in Mt. Ohdai-ga-hara-yama, Nara pref., June 29, 1959, H. Ishida leg.; a male, Mt. Ohdai-ga-hara-yama, June 24, 1961, A. Matsuda leg.; an example, Mt. Inamura-ga-dake, Nara pref., June 15, 1963, M. Yoshikawa leg.

Distribution: Japan (Honshû-Mt. Ohdai-ga-hara-yama and Mt. Inamura-gadake, alt. ca. 1600 m., in Kii mountainous region)

Malloea miyanourana sp. nov. (Pl. I-fig.1, Pl. III-figs. 10, 11)
Male, $10.2 \times 2.5 \mathrm{~mm}$., slender, flattened above as well as beneath, subparallelsided, subnitid, having distinct aeneous lustre on whole surface. Black exception of weakly infuscate brownish pronotal rear angles, mandibles, legs and lateral margins of abdominal sternites. Pubescence recumbent, softy, a little dense, long, silver white, but on elytra shorter and sparser than that on pronotum, not maculate.

Head traversely subtrapezoid, feebly convex above medially; punctation large, dense, ocellate, rather even in size, conglutinating to each other antero-laterally, interstices among punctures sculptured by minute shagreens; frontal margin before eyes strongly carinate distinctly, medio-interruption clear and healing over epistome. Antennal scrobes on epistome plainly defined, deep. Antennae slender exceeding tips of pronotal posterior corners by 2 apical segments or more; basal segments largest, voluminous, subcylindrical ; 2nd smallest in breadth longer than width ; 3rd to 10th ill-serrated, elongately triangular ; 3rd about twice as long as 2nd in
length or less feebly; 4th slightly longer than 3rd.
Pronotum longitudinal rectangle, accurately total length including each rear angle near 1.3 times compared with breadth, simply convex above moderately, having an evanescent medio-longitudinal impression on posterior half only; hind slope not so abrupt, slightly elevated above medially; each hind corner rather flattened, clearly divergent outwards strongly, having a carination indistinct partly conglutinating with edges of punctures, apex elongate, rather acute; lateral sides feebly arcuate beyond the middle, thence narrowed roundly toward eyes; punctation small, subocellate, not so dense, identical in size on vertex, progressively growing denser, larger and more irregular-sized laterally, interstices among punctures smooth generally.

Scutellum oblong, elevated above medio-longitudinally; punctation fine, single, sparse, very irregular in density; frontal margin cut off as a penthouse; posterior end rounded.

Elytra weakly depressed above in longitudinal profile, as wide at humeri as across tips of prothoracic rear angles or more; lateral sides parallel from each base to apical 3-5ths, thence rather straightly narrowed conjointly to apices which are rounded; punctate-striae with minute elongate punctures; intervals flat completely, punctation minute particularly, sparse, interspaces among punctures smooth and sculptured by feeble traverse rugosities; sutural striae a little raised above each other exclusive of each basal one-5th as well as of apical ends; apices moderately ended.

Prosternum feebly convex below longitudinally, having a shallow traverse impression on anterior one-4th as well as on base of frontal rim clearly, punctated sparsely by single, even in size and shallow punctures, coarser and denser on frontal rim which is obliquely curved antero-downwards, edge rounded; process between procoxal cavities swollen out a little, then straightly extending backwards behind coxae, apex bluntly pointed, of which under side having a small shallow emargination ; sutures straight, single, closed. Propleural punctures ocellate, denser and larger than those on prosternal vertex. Mesosternal cavity broad, lateral sides concave medially inwards, broadest behind middle. Metasternal punctures single, even, very finer and clearly sparser than those on prosternum, interspaces among punctures smooth. Metacoxal plates narrow, each hind margin more or less enlarged outwards, outer extremities obtuse.

Legs slender, rather elongate, tarsi moderate.
Genitalia as figured (Pl. III-fig. 11).
Female unknown.
Described from a male holotype, Mt. Miyanoura-dake (alt. ca. 1900 m ., Lat. $30^{\circ}$ $20^{\prime} \mathrm{N}$ ) in Is. Yaku-shima, Kagoshima pref., July 14, 1961, K. Ueda leg.

In the body coloration and in general appearances, this new Malloea member is related to the black elytral group of the genus Acteniceromorphus as follows: Corymbites kurofunei Miwa, Acteniceromorphus tsukamotoi Kishii etc. Though the present new species may be easily separated from these heterogeneous ones eventually by the combination of structures as showing next.

1. Body slender and small.
2. Pronotal rear corners visibly reddish brown.
3. The 3rd joint of each antenna surely shorter than 4th.
4. Metasternal punctation very minute, sparse distinctly.
5. Each lateral lobe of male genitalia having a plain projection.

Moreover, in the small body, general coloration and in the non-maculate elytral pubescence, this new species somewhat resembles Corymbites modestus Lewis, although, miyanourana may be separable by the combination of following characteristics, viz. slender body, elongate antennae, sparse pubescence, not so dense pronotal punctures etc.

Eanus shibatai sp. nov. (Pl. II—fig. 16, Pl. III—figs. 3, 7, 10)
Male, $7.8 \times 2.8 \mathrm{~mm}$. in holotype, $9.5 \times 3.5 \mathrm{~mm}$. in an isotype, relatively slender, well convex above in longitudinal profile as well as beneath, more or less dilated outwards, broadest behind middle of elytra, clearly shining with brassy lustre on whole surface. Black; apical extremities of lst antennal joints, 2nd and 11th, antennal scrobes, most parts of mouth, prosternal sutures, apex of prosternal process, mesosternal cavity and its circumference, lateral margins of abdominal sternites, and legs exclusive of tibiae and tarsi more or less dark brownish; elytral epipleura plainly, lateral boaders of elytra narrowly, tibiae, and tarsi clearly yellowish brown. Pubescence short, golden brown, dense, decumbent.

Head broad moderately, a little convex above medially, declivous flatly anterodownwards before eyes, having a small distinct impression between posterior edge of each eyes; punctation single, minute, dense at summit, intervals among punctures smooth; front well-definedly carinate before each eye, distinctly evanescent medially; epistome imperfect, completely bisected medially; each antennal scrobe shallow, not so broad. Antennae not slender, exceeding end of each prothoracic rear corner by one apical segment or more; basal joints robust, voluminous distinctly, clearly larger than width; 2nd also more or less voluminous but small, subbulbous, surely longer than width; 3rd obconic, smallest, slightly shorter than preceding one joint in length as well as width; 4th to 10th serrated; 4th conspicuously longer than 5th, a little less than total length of preceding 2 joints combined together; 11th spindle-formed, about $11 / 3$ times as long as 10 th in median length. -

Pronotum plainly wider than length in median dimension, convex above dome-
likely and simply, having a pair of traverse shallow broad impressions along anterior margin except for middle, then extending to frontal angles, thereupon bent postero-right-angledly and attaining to about anterior one-5th of lateral borders; basal slope low-pitched, simple; having no sulci near hind corners; leteral sides subparallel medially, thence roundly converging ahead gently; rear angles triangular, sufficiently diverging outwards, each tip rather acutely pointed, having a very obsolescent short unicarina along each lateral side, partly confluent with punctures; punctation single, not so dense, uneven in density and size, intervals among puncta smooth, relatively scabrous at lateral borders.

Scutellum triangular, rather flattened on vertex, widest at frontal edge which is distinctly elevated above, very sparsely punctured; apex pointed obtusely.

Elytra convex in longitudinal profile, as wide at humeri as span of prothoracic rear angles or wider a little; lateral sides slightly dilated outwards narrowly, broadest behind the middle, then rather straightly converging to humeri, as well as narrowed round-conjointly to apices which are moderately ended; punctate-striae almost obscure excepting only basal part from lst to 4th, striate finely; punctation single, uneven, not so small, denser clearly than that on pronotal disc, intervals among punctures glabrous, scabrous partly.

Prosternum obviously wider than length except of process, having a traverse elevation behind anterior rim which is slightly bent obliquely and sculptured rugosely by coarse punctures; punctation finer, a little sparser than that on pronotum, interspaces among punctures sculptured by faint shagreens; sutures semidouble, straight, diverging anteriorly each other; process elevated beneath roundly between procoxal cavities, then abruptly bent inwards right-angledly, apex obtuse, feebly protruded backwards straightly. Propleura very densely punctured by relatively large, semiocellate and partly conglutinated puncta, intervals among punctures sculptured clearly by distinct shagreens. Mesosternal cavity oblong, deep, lateral sides sufficiently concave inwards. Metasternal punctation single, very finer and sparser than that on prosternum. Metacoxal plates narrow, feebly widened posteriorly at inner half, outer ends truncate.

Legs rather stout, tarsal joints simple, claws long and robust.
Genitalia as figured (Pl. III-fig. 7).
Female unknown.
Described from a male holo- and a male iso-type, Tsurugisawa at Mt. Tsurugidake (alt.ca. 2500 m .) in the northern region of the North Japan Alps, Nagano pref., July 14, 1962, Y. Hayashi leg. Types are in coll. of Mr. T. Shibata and in my coll.

According to literatures, in the general outline this new Eanus-species closely allied to Eanus konishii Ohira: KONTYU, XXX (3), pp. 198~199, pl.10, figs. 1~

7, 1962, Yukomambetsu in Hokkaidô......, but its larger body, brassy tint on whole surface, not reddish brown ventral sternites, golden brown pubescence, single impression on head vertex, depressed anterior border of pronotum, triangular scutellum, sparse punctures on prosternum, and subocellate and very dense punctures on propleura are easily distinguishable from the latter.

New name is dedicated to Mr. T. Shibata, who is given me a chance to study this remarkable snapping-beetle.

Ampedus (Ampedus) yezo sp. nov. (Pl. II-fig. 15, Pl. III-fig. 6)
Female, $10.3 \times 3.1 \mathrm{~mm}$., rather broad, a little stout, flattened above in longitudinal profile as well as beneath, subparallel-sided, subshining or not so nitid. Pitchy black; antennae, palpi and lateral side of 5 th abdominal sternite infuscate or brownish; elytra and legs reddish brown without black humeral edge of each elytron narrowly. Pubescence generally fulvous on whole surface exception of black one on elytral apical $3-4$ ths, not so dense, semierect, rather long, softy, except for elytral surface.

Head broad, simply convex above on vertex weakly; punctation rather dense, subocellate, irregular in size, coarser and denser near eyes than that on summit, interspaces among puncta smooth clearly; frontal margin ill-carinate, roundly porrect antero-downwards. Epistome narrow, shallow exclusive of antennal sulcus concave broadly, sculptured coarsely by irregular punctures and minute granulation. Labrum transverse trapezoid, slightly convex above, punctum coarse, irregular in size, countable. Eyes moderately prominent outwards, not so large. Antennae subequal to total length of head and prothorax (inclusive of rear angles' tips) combined together or less; each basal segment cylindrical, voluminous, near twice as long as wide; 2nd smallest, subconic, feebly longer than width; 3rd elongate subtriangle, a little longer than 2 nd and hardly wider; 4th to 10 th serrated, gradually growing smaller and smaller apically; 4th triangular, a little shorter than length of preceding 2 joints combined or subequal.

Pronotum feebly wider than length excepting rear tips, weakly convex above simply, having a vestige of slight medio-longitudinal impression near posterior one-3rd, obsolescent anteriorly but not posteriorly; punctation fine, not even in density, single, progressively growing more subocellate, coarser and denser laterally, and gradually sparser and finer towards hind margin, intervals among punctures very smooth; lateral sides narrowed roundly forewards from near middle, sides parallel from behind middle to base of each divergent rear corner, its tip elongate, unicarinate distinctly, not so acuminate.

Scutellum tongue-shaped, flat, gently declivous anteriorly, having a fine mediolongitudinal carination (sometimes vanishing); punctation dense, small, interspaces
among puncta sculptured by fine shagreens evenly; posterior apex blunt.
Elytra at humeri about as wide as distance across hind angles of prothorax, less than 2.5 times longer than wide (near 2.44 times); lateral sides parallel behind middle, thence a little roundly narrowed conjointly to apices which are obtusely angled, entire; punctate-striae punctured stronger and larger from lst to 9 th little by little; intervals among striae very slightly elevated longitudinally, having fine and sparse puncta.

Prosternum conspicuously convex below medio-longitudinally behind lobe to procoxal cavities, punctation fine, rather sparse and single; frontal rim bent anterodownwards, having many feeble traverse creases anteriorly, margin wide, roundly edged process rather robust, declining inwards behind procoxae, thence extending straightly backwards, not so long, tip individually pointed acutely, having a small knob-like projection near apex on under surface; sutures broadly double, nitid, incurved medially, excavated widely at frontal ends. Propleura flat, punctation denser and larger that on prosternal vertex, each punctum longitudinal. Mesosternal cavity declivous postero-downwards as well as antero-downwards from middle, broadest at middle; fore end distinctly emarginated. Metasternal puncta similar to those on propleura in size and form, but denser. Hind coxal plates clearly widening posteriorly at inner half; each outer end rather pointed sharply.

Legs moderate, tarsi simple.
Male, $9.0 \times 2.8 \mathrm{~mm}$. In comparison with female unlike in following characteristics: generally slender; antennae and legs darker in color; pronotal punctation finer and sparser remarkably.

Described from a female holotype, Kamiotoineppu in Teshio, Hokkaidô, July 28, 1958, T. Kishii leg.; a male allotype, Teshio, Hokkaidô, July 2, 1930, K. Takeuchi leg.

General outline of this new Ampedus-species is closely allied to some reddish Ampedus, especially to Elater galloisi Miwa, Ampedus babai Kishii etc. But from the one may be easily separated in the following dissimilar structures: in galloisi body proportion, very fine and sparse pronotal punctation, clearly sinuated pronotal lateral sides beyond rear corners, conspicuously fine punctate-striae on elytra, perfectly flattened intervals among punctate-striae, narrow and elongate prosternal process (Pl. III-fig.5) etc. Moreover from the other may be divided by the antennal and elytral coloration, shape of process in profile (Pl. III-fig. 4) etc.

New name is based on the old name of Hokkaidô district, and is masculine.
Gamepenthes pictipennis Lewis, mizunoi ab. form. nov. (Pl. III—fig. 8)
Among the Japanese Gamepenthes-species, Megapenthes versipellis and $M$. ornatus of Lewis in 1894 are full of variety in the elytral maculation and the
others always fixed in the characteristics. In pictipennis: Melanoxanthus pictipennis Lewis, Ann. Mag. Nat. Hist., XIII (6), p. 48, (1894) (Fukushima and Natakusugawa) $\cdots \cdots$, mentioned here, the varied form on elytral maculation has not been hitherto given out entirely. Although, recently by good fortune, I had a chance to research an example, of which elytral maculae are almost absent, through the courtesy of Mr. K. Mizuno, the enthusiastic collecter of longicorn-beetles in Uji city, as following. Having only a pair of yellow longitudinal maculae on elytral bases from 3rd to 5th strial interstices and a weak yellowish patch at each elytral pleura, and the rest ones evanescent perfectly.

Specimen examined: a male, Tokugô pass (alt. ca. 2100 m. ), Nagano pref., August 5 to 6, 1967, K. Mizuno leg.

## Addendum

Later on the presentation of this copy, Dr. H. Ôhira described originally a new subspecies of Hypolithus motschulskyi Fleutiaux from Mt. Ôyama (alt. 1246 m .) in Kanagawa prefecture as showing below.

Hypolithus motschulskyi ohbayashii Ohira, Entom. Rev. Japan., XX (1/2), pp. 74 \& 75, April, 1968. Holotype: a male, Ôyama (Kanagawa), May 7, 1939, K. Ohbayashi leg.

According to the original description, in the general appearances this new subspecies, I think, may be close to the subspecies tsurugi or taichii.

## Plate I



1. Malloea miyanourana sp. nov. $10.5 \times 2.5 \mathrm{~mm}$.
2. Hypolithus (Hypnoidus) korobokkurus sp.nov. $2.5 \times 0.8 \mathrm{~mm}$.

## Plate II

1. Hypolithus (Hypnoidus) motschulskyi kuratai subsp. nov., holotype ( 9.3 mm .)
2. ditto, female paratype from Akanagizawa near Mt. Kita-dake ( 8.7 mm .)
3. H. (H.) m. babai Kishii, male from Mt. Takizawa-mine ( 9.8 mm .)
4. ditto, allotype ( 10.2 mm .)
5. H. (H.) m. ontakecola subsp. nov., holotype (7.9mm.)
6. ditto, allotype ( 9.0 mm .)
7. H. (H.) m. alpicola subsp. nov., holotype ( 9.2 mm .)
8. ditto, female paratype from Mt. Hachi-ga-take (9.4mm.)
9. H. (H.) m. motschulskyi Fleutiaux, female from Kamikôchi (12.2mm.)
10. H. (H.) m. taichii Nakane, female from Mt. Inamura-ga-dake ( 10.5 mm .)
11. H. (H.) m. mutsuurai Nakane, male from Mt. Hakusan ( 8.5 mm .)
12. H. (H.) m. ikutanii Nakane, male from Mt. Tateyama ( 8.2 mm .)
13. H. (H.) m. sawadai Ohira, female from Oguro in Ina ( 8.5 mm .)
14. H. (H.) m. echigoanus Kishii et Ohira, allotopotype (13.3mm.)
15. Ampedus (Ampedus) yezo sp. nov., holotype ( 7.8 mm .)
16. Eanus shibatai sp. nov., holotype ( 10.3 mm .)


## Plate III

Hypolithus (Hypnoidus) korobokkurus sp. nov.: 1, 2 \& 9
Eanus shibatai sp. nov.: 3, 7 \& 10
Ampedus (Ampedus) babai Kishii : 4
Ampedus (Ampedus) galloisi Miwa: 5
Ampedus (Ampedus) yezo sp. nov.: 6
Gamepenthes pictipennis Lewis ab. form. mizunoi ab. nov.: 8
Malloea miyanourana sp. nov.: 10 \& 11

1: Left hind coxal plate. 2: Scutellum. 3~6: Prosternal process in profile. 7 \& 11:
Male genitalia. 8: Body maculation. 9: Right antenna. 10: Basal 6 segments of right antenna.

Plate III


