DESCRIPTIONS OF SOME NEW EROTYLIDAE (COLEOPTERA) FROM THE JAPANESE EMPIRE

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In the present paper the author will describe a new subfamily, a new genus and eleven new species of the Japanese Erotylidae. The materials, based on this paper, were sent to the author from Drs. Walther HORN and Hans SACHTLEBEN of the Deutsches Entomologisches Institut in Berlin-Dahlem, Dr. Kenzi NAKAMURA of Kyôto Imperial University, Mr. Syôziro ASAHINA of Tôkyô Imperial University, Mr. Kôichi TAMANUKI of the Saghalien Central Experiment Station and Akira UMENO in Kyûsyû for his study. The author wishes to express his sincere thanks to the above mentioned gentlemen for their kindness of sending many very interesting specimens.

The author's acknowledgements are also due to Prof. Dr. Tokuichi SHIRAKI of Taihoku Imperial University for his very kind help in various ways.

Subfamily **RENANIINAE** nov.

This new subfamily is consisting of only two genera—*Renanina* LEWIS and *Hornerotylus* CHÛJÔ, gen. nov.—at present, and may be separated from other subfamilies as follows:

1. Club of antenna solid and rounded.....Subfam. **Euxestinae**
1′. Club of antenna composed of three or more segments ..... (2)
2. Inner lobe of maxillary palpus armed with two sharp spines or teeth ..... (3)
2′. Inner lobe of maxillary palpus whithout spine or tooth ..... (4)
3. Sides of mouth-cavity carinate, mentum not transverse, last segment of maxillary palpus strongly transverse, three basal segments of tarsus widening from 1st to 3rd.....Subfam. **Encaustinae**
3′. Sides of mouth-cavity forming flattened lobes, mentum not transverse, last segment of maxillary palpus nearly circular or strongly transverse, three basal segments of tarsus widening from 1st to 3rd or narrowing from 1st to 3rd .....Subfam. **Renaniinae** nov.

4. Sides of mouth-cavity forming flattened lobes, mentum not transverse, last segment of maxillary palpus strongly transverse, three basal segments of tarsus widening from 1st to 3rd .....Subfam. **Tritominae**

4′. Sides of mouth-cavity carinate, mentum strongly transverse, last segment of maxillary palpus not transverse, three basal segments of tarsus not widening from 1st to 3rd .....Subfam. **Dacninae**

The range of this new subfamily is Japan proper (represented by Gen. *Renania* LEWIS) and Formosa (represented by *Hornerotylus* CHÛJÔ, gen. nov.) at present.

Genus ***HORNEROTYLUS*** nov.

Body oblong, moderately convex and shining. Head rather small, slightly convex, with an oblique depression on each side of clypeus, the latter not limited from frons and the anterior margin slightly emarginate. One pair of stridulatory file distinctly existing on occiput. Eyes large, prominent and finely facetted. Antennae short, not reached to base of pronotum when turned them back, 1st segment strongly thickened, 2nd the shortest and nearly globular, 3rd much longer than 4th, the latter and its four followings nearly equal to each other, terminal club distinct and forming of 3 rather loosely articulated segments. Sides of mouth-cavity broadly raised, forming flattened lobes and shallowly excavated on the centre. Mandibles very stout, with sharply bifidate tips. Inner lobe of maxilla elongate, and its apical portion armed with a pair of sharp spinicules and colsely covered with strong setae; second segment of maxillary palpus elongate and rather longer than its two followings combined together, the last segment very large and strongly transverse. Mentum pentagonal and distinctly margined (basal margin excepted), submentum transverse and last segment of labial palpus strongly widened terminally. Pronotum transverse, moderately convex, anterior and basal margins trisinuate, sides distinctly margined, with a pore on each apical corner. Scutellum nearly pentagonal. Elytra elongate, moderately convex and punctate-striate. Prosternum rather broad between anterior coxae, widely produced posteriorly and slightly emarginate behind, with distinct side-carinae, but without convergent lateral lines anteriorly. Mesosternum transverse between middle coxae. Metasternum with very short middle coxal lines. Abdomen without coxal lines on its 1st segment. Legs rather stout, femora with a broad sulcus on their lower surface, tibiae widened terminally, three basal segments of each tarsus stongly dilated and distinctly narrowing from 1st to 3rd, 4th segment minute, 5th elongate and feebly clubate, and claws simple.

Female: Elytra extremely finely shagreened and rather opaque, tibiae not so strongly widened terminally as in male, three basal segments of each tarsus narrow and very slightly widening terminally.

Genotype—*Hornerotylus sauteri* CHÛJÔ, sp. nov.

This new genus is most closely related to Genus *Renania* LEWIS, but may be separated from the latter by the last segment of maxillary palpus not nearly circular, the paired spinicules of maxillae much smaller and not so curving, the last segment of labial palpus not oval, body above more strongly convex, and the three basal segments of tarsus not widening from 1st to 3rd in both sexes.

This new generic name is dedicated to the late Dr. Walther HORN, who was a great systematic entomologist.

Hornerotylus sauteri sp. nov.

(Fig. 1)

Black, with abdomen yellowish brown or orange yellow, and tarsi dark or light piceous.

Head strongly punctured and anterior angles of clypeus rounded. Third antennal segment nearly equal in length to the two followings united together. Pronotum transverse, a little narrowed anteriorly with sides rounded, distinctly punctured, the punctuation stronger and closer laterally. Scutellum slightly convex, but often depressed longitudinally on its centre, and very finely but sparsely punctured. Elytra distinctly punctate-striate, but the striations obsolete at their terminal portions, and of their intervals finely but distinctly punctured. Body beneath punctured and pubescent, the punctuation much stronger on both sides than on the median portion.

Female: Characters as in the generic description.

Length—7.0~9.0 mm. (in both sexes).

Cotype—14 ♂♂ & 21 ♀♀, Kosenpo, Fornosa, 7. XII. 1911 (Coll. H. SAUTER).

The type specimens will be preserved in the collection of the Deutsche Entomologische Institut in Berlin-Dahlem and also in the Entomological Laboratory of Taihoku Imperial University.

Subfamily **TRITOMINAE**

Genus *Spondotriplax* CROTCH

Spondotriplax flavofasciata sp. nov.

(Fig. 2)

Oval, moderately convex, smooth and shining. Yellowish brown to dark reddish brown; in many cases the centre of pronotum, meso- and metasternum and abdomen more or less infuscated, and elytra pitchy brown to black. Each elytron decorated with a large yellowish brown patch at the base, which is occupied the whole humeral

angle and its inner hind corner produced latero-posteriorly but not reached to scutellum and sutural margin, and also a broad transverse fascia behind the middle, which is reached completely to both sutural and lateral margins and its inner anterior corner a little produced forwardly along sutural margin.

Head closely punctured and anterior margin of clypeus emarginate. Antennae short, 3rd segment a little curved and nearly equal in length to the three followings combined together, the five apical segments strongly transverse and compactly articulated to each other. Pronotum transverse, narrowed anteriorly, closely punctured, side margins feebly rounded and narrowly bordered. Scutellum transverse, nearly pentagonal and finely but very sparsely punctured. Elytra elongate, distinctly punctate-striate, the interstices very finely but not closely punctured. Body beneath strongly and rather closely punctured and finely pubescent.

Length—3.0~3.5 mm.

Cotype—5 Exs., Tyokakurai, Daibu, Taitô, Formosa, 26. VII. 1936 (Coll. S. ASAHINA); 3 Exs., Kuraru, Kôsyun, Formosa, 15. VI. 1937 (Coll. M. CHÛJÔ).

This new species is closely allied to *S. soror* ARROW from Burma and Tenasserim, but may be distinguished by the coloration of body lighter, the postmedian fascia of elytra completely reached to both sides and the body beneath much strongly punctured.

Spondotriplax flavomaculata sp. nov.

(Fig. 3)

Oval, convex, smooth and shining. Blackish brown to black; head, antennae, sides of thorax and legs reddish brown; elytra black, with two yellowish brown markings on each elytron, the first subquadrate one being situated at the base (excepting the humeral angle which has a black spot), much distant from the suture but closely approached to the side margin, and the second one near the apex and equidistant from both sides.

Head rather closely and strongly punctured, the anterior margin of clypeus emarginate. Antennae short, 3rd segment a little curved and slightly longer than the two followings united together; the five apical segments strongly dilated, rather closely articulated to each other and 7th one subtriangular but the rest strongly transverse. Pronotum transverse, narrowed anteriorly, rather closely punctured, the sides rounded and narrowly margined. Scutellum turnip-shaped, with some very fine punctures. Elytra elongate, distinctly punctate-striate, with their intervals extremely finely but not closely punctured. Body beneath strongly and closely punctured and pubescent.

Length—4.0~4.5 mm.

Cotype—15 Exs., Kosenpo, Formosa, 7. XII. 1911 (Coll. H. SAUTER).

The present new species resembles *S. diaperina* GORHAM from Burma and Tenasserim, but differs from the latter in the ground colour of the body much lighter, the subapical maculation of elytra much shorter, the third antennal segment distinctly shorter than the three followings united together, and the body beneath more strongly punctured.

Genus *DACTYLOTRITOMA* ARROW

Dactylotritoma inornata sp. nov.

(Fig. 4)

Oblong, moderately convex, smooth and shining. Deep yellowish brown; eyes black, antennae (the basal segment excepted) and femora pitchy black, tibiae and tarsi pitchy brown.

Head strongly and rather closely punctured, with a light impression on each side of the anterior end of frons, clypeus not limited from frons and the anterior margin emarginate. Antennae hardly reached to the base of pronotum when turned them back, 3rd segment longer than each of 2nd or 4th, 7th somewhat dilated, the apical three segments forming the club transverse and closely articulated to each other. Pronotum transverse, narrowed anteriorly, sides rounded and narrowly ridged, anterior angles produced forwardly and thickened, basal margin trisinuate and very narrowly ridged, strongly and rather closely punctured, with a distinct pore on each anterior corner Scutellum subtriangular with sides feebly rounded, finely but very sparingly punctured. Elytra elongate, punctate-striate, the interstices finely but not closely punctured. Body beneath rather closely punctured and pubescent, the punctuation closer and stronger on the sides than on the centre.

Length—5.5 mm.

Type—1 Ex., Mt. Hikosan, Kûsyû, Japan, 12. VII. 1935 (Coll. A. UMENO).

This new species is easily distinguished from the allied species—*D. atricapilla* LEWIS from Japan—by the body narrower, uniformly coloured above and the closer punctuations on the head and pronotum.

Genus *TRITOMA* FABRICIUS

Tritoma bicolorata sp. nov.

(Fig. 5)

Oval, convex, smooth and shining. Black, with head, prothorax and legs deep yellowish brown.

Head moderately convex, rather closely punctured, and anterior margin of clypeus

emarginate. Antennae short and slender, 3rd segment nearly equal to or slightly longer than 4th; clubate segments loosely articulated to each other, of its two basal segments transverse, but the last one rounded with a pointed tip. Pronotum transverse, narrowed anteriorly, moderately transversely convex, rather closely punctured, side margins rounded and narrowly ridged. Scutellum nearly triangular, but its sides distinctly rounded, with some fine punctures. Elytra elongate, convex, punctate-striate, the interstices finely but not closely punctured. Body beneath punctured and pubescent.

Length—3.7 mm.

Type—1 Ex., Takao, Formosa, IX. 1924 (Coll. T. SHIRAKI).

The present species is somewhat allied to *T. taiwana* CHÛJÔ from Formosa, but may easily be distinguished from the latter by the body much larger, the head not black and the pronotum without black marking.

Tritoma fasciata sp. nov.

(Fig. 6)

Oval, convex, smooth and shining. Dark reddish brown to piceous; antennae, mouth-parts and legs always lighter; head lighter than pronotum, sides of the latter lighter than its centre, elytra most dark and nearly black, with two yellowish transverse fasciae on each elytron, the first one of them being situated near the base, more approaching to the lateral margin than the sutural side, with its anterior margin produced into a lobe from the middle and closely approached to the basal margin of elytra, and its posterior margin not straight and produced into a short lobe at its inner hind angle; the second fascia being situated between the middle and apex of elytron, and subequally distant from both sides.

Head slightly convex, with a light depression on each side of frons, closely punctured, the punctures becoming finer forewardly, anterior margin of clypeus feebly emarginate. Antennae short, 3rd segment nearly equal in length to the three followings combined together; clubate segments closely articulated to each other, of its first two transverse and last one oval. Pronotum transverse, narrowed anteriorly, rather remotely punctured, the side margins rounded and narrowly bordered. Scutellum small, turnip-shaped and impunctate. Elytra elongate, strongly punctate-striate and their interstices very minutely punctured. Body beneath punctured and finely pubescent.

Length—3.0~3.5 mm.

Cotype—2 Exs., Kosenpo, Formosa, 7. VII. 1911 (Coll. H. SAUTER).

This species is so much characteristic in the maculation of elytra; the author could not find the allied species.

Tritoma horni sp. nov.

(Fig. 7)

Oblong, slightly convex, smooth and rather shining. Yellowish brown; eyes, scutellum and elytra black; antennae (except the two basal segments) piceous; tarsi pitchy brown.

Head slightly convex, distinctly punctured, clypeus not limited from frons and its anterior margin nearly straight. Antennae nearly equal in length to head and pronotum united together, 3rd segment much longer than each of 2nd and 4th; clubate segments loosely articulated to each other, 1st one of them slightly longer than wide, 2nd transverse and last nearly oval. Pronotum wider than long, slightly narrowed anteriorly transversely convex, distinctly punctured, the punctuation stronger on both sides than on their centre, the side margins narrowly ridged. Scutellum turnip-shaped, very finely but sparingly punctured. Elytra elongate, distinctly punctate-striate, and each interstice with a rather regular row of fine punctures. Body beneath and legs closely clothed with yellowish pubescence.

Length—3.5 mm.

Type—1 Ex., Kosenpo, Formosa, 7. XII. 1911 (Coll. H. SAUTER).

This new species colsely resembles *T. japonica* CROTCH from Japan, but differs from the latter by the body smaller, the meso- and metathorax not black, and the punctuation of body above not so strong.

The present new specific name is dedicated to the late Dr. Walther HORN who had so kindly offered many facilities and supportances to the author in the past years.

Tritoma karahutonis sp. nov.

(Fig. 8)

Oval, moderately convex, smooth and shining. Black, antennae (clubate segments infuscated), mouth-parts, sides of prothorax, prosternum (often a little infuscated), abdomen and legs yellowish brown.

Head rather closely and strongly punctured, with a light depression on each side of the base of clypeus, the latter with its anterior margin a little emarginate. Antennae short, 3rd segment nearly equal in length to the two followings combined together; clubate segments rather loosely articulated to each other, of the 1st one subtriangular, the median one transverse and the last one irregularly rounded. Pronotum transverse, narrowed anteriorly, rather closely and strongly punctured, the side margins rounded and narrowly ridged. Scutellum turnip-shaped, with a few fine punctures. Elytra elongate, strongly punctate-striate, the interstices rather strongly and irregularly punctured. Body beneath rather closely punctate and pubescent, the punctures stronger on the sides than on the centre.

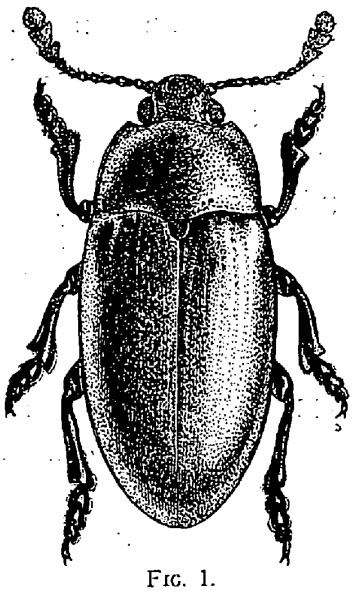
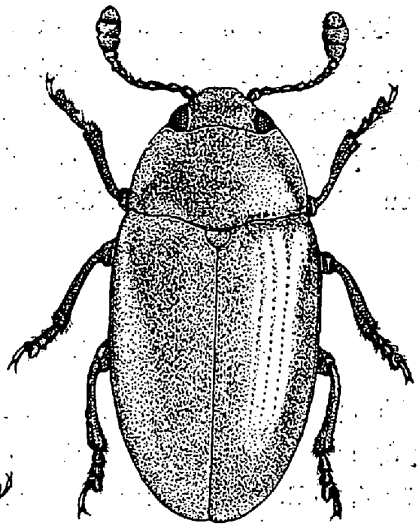


FIG. 1.



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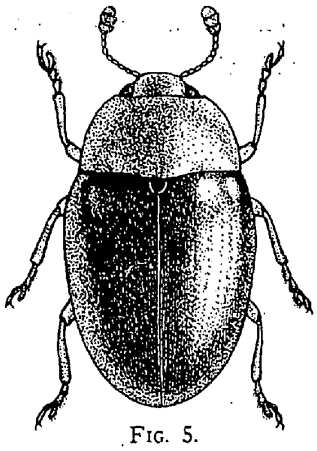

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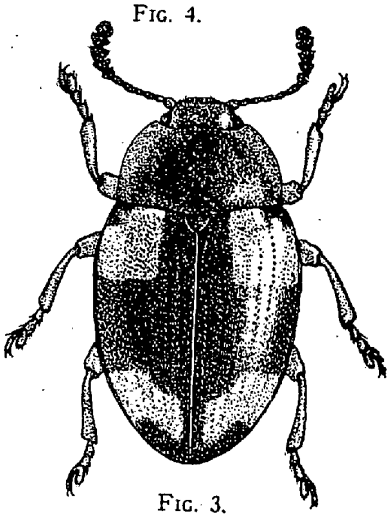

FIG. 3.

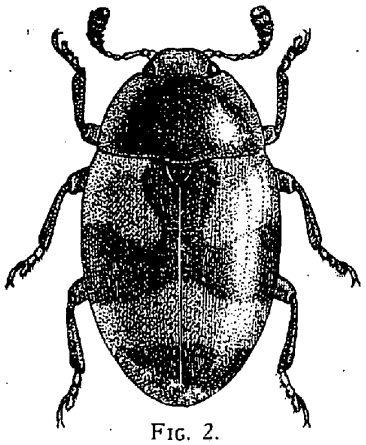

FIG. 2.

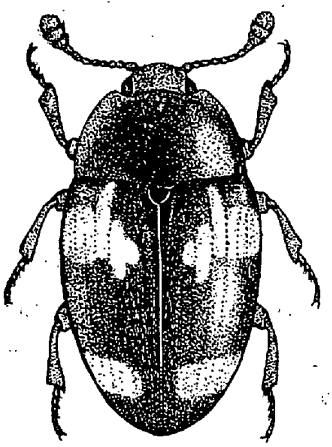

FIG. 6.

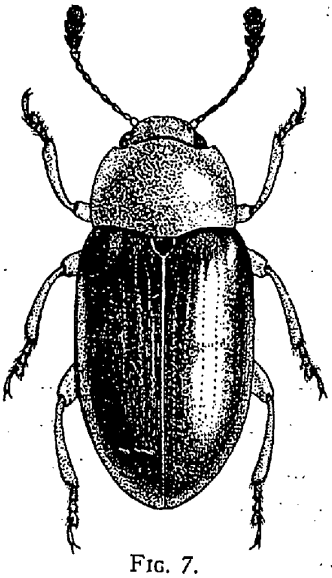

FIG. 7.

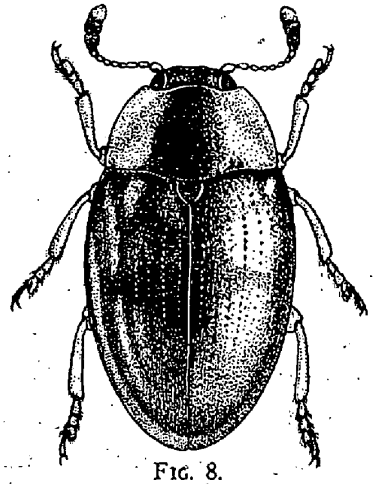

FIG. 8.

Length—2.5~2.7 mm.

Cotype—3 Exs., Konuma, South Saghalien, 4. VII. 1933 (Coll. K. TAMANUKI).

The present species is somewhat allied to *T. ainonia* LEWIS from Japan, and also to *T. gracilenta* SOLSKY from Siberia and Japan, but may be distinguished from these two species by the punctuation (especially on the elytra) much stronger and coarser, the pronotum black except the sides, and the abdomen light yellowish brown.

Tritoma niponensis (LEWIS)

Ent. Monthl. Mag., XI, p. 78 (*Cyrtotriplax*) (1874).

This species is hitherto known from Japan-proper (Hokkaidô, Honsyû, Sikoku and Kyûsyû) and Siberia. The author examined a specimen from Saghalien (Konuma, 27. VII. 1935, Coll. K. TAMANUKI) in this time.

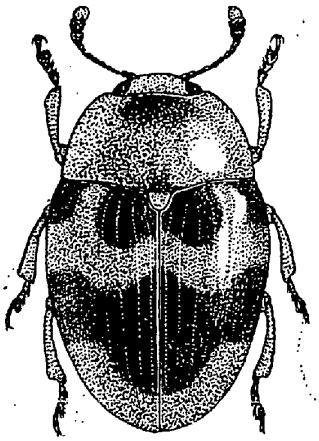

FIG. 9.

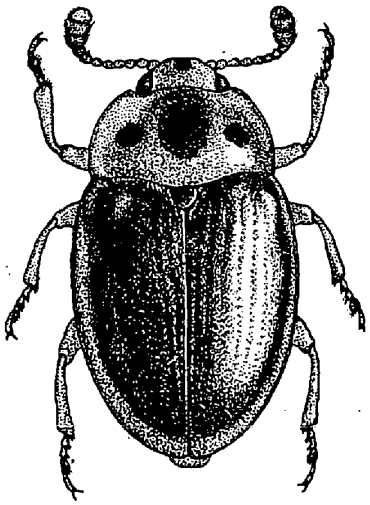

FIG. 10.

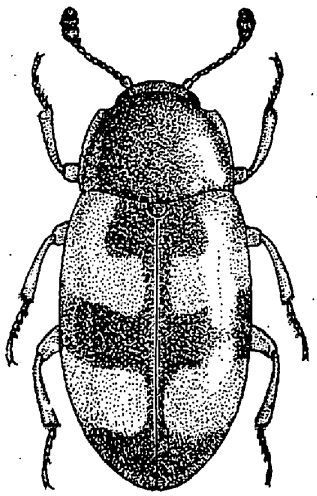

FIG. 11.

Tritoma takasagona sp. nov.

(Fig. 9)

Oval, moderately convex, smooth and shining. Yellowish brown; eyes, nineth and tenth antennal segments, and base of the eleventh antennal segment black; pronotum with a large black patch at the middle of the anterior margin, and a small one at the middle of the base; each elytron with two black spots at the base, and a black transverse band just behind the middle.

Head evenly and feebly convex, rather closely punctured, and anterior margin of clypeus lightly emarginate. Antennae short, 3rd segment nearly equal in length to the

three followings combined together; clubate segments rather loosely articulated to each other, of the 1st segment nearly semicircular, the median one strongly transverse, and the last one subtriangular with both sides slightly rounded. Pronotum transverse, more than twice as broad as long, narrowed a little anteriorly, transversely and not strongly convex, rather closely and evenly punctured, the side margins rounded and very narrowly ridged. Scutellum triangular with the sides rounded, impunctate and smooth. Elytra elongate, moderately convex, distinctly and regularly punctate-striate, the interstices finely but not closely punctuate. Body beneath finely punctured on the middle and coarsely so on sides. Legs rather slender, and tarsi feebly widened from base of the 1st segment to apex of the 3rd.

Length—3.3 mm.

Type—1 Ex., Mt. Sôzan, Taihoku, Formosa, 17. IX. 1939 (Coll. K. ENDO).

The present new species is somewhat related to *T. pantherina* LEWIS from Japan, but may be separated from the latter by the body much smaller, the positions of the black markings on the pronotum and elytra not quite identical, the head and pronotum not shagreened, the punctations much feebler, and the scutellum impunctate.

Tritoma trimaculata sp. nov.

(Fig. 10)

Oval, convex, smooth and shining. Deep yellowish brown; eyes, scutellum, elytra and thoracic sterna black; antennal club slightly infuscated, frons with a black spot on its centre; pronotum with three black spots transversely, of the median one very large and reached to the anterior margin.

Head convex, coarsely punctured, and anterior margin of clypeus straight. Antennae short, rather stout, 3rd segment slightly longer than 4th; clubate segments loosely articulated to each other, of the 1st segment subtriangular, the median one strongly transverse and the last one oval. Pronotum transverse, somewhat narrowed anteriorly, transversely convex, rather sparsely punctured, the punctures being smaller than those on vertex, the side margins rounded and narrowly ridged. Scutellum turnip-shaped, and very finely but sparingly punctured. Elytra elongate, convex, punctate-striate, the interstices finely but not closely punctured. Body beneath punctured and pubescent.

Length—3.5 mm.

Type—1 Ex., Kosenpo, Formosa, 7. VII. 1911 (Coll. H. SAUTER).

This new species is nearest to *T. devia* LEWIS from Japan in the general structure, but may be distinguished from the latter by the existence of the very characteristic maculations on the head and pronotum, the abdomen and legs not black and the punctuation on the head and pronotum much more sparse.

Subfamily DACNINAE

Genus *DACNE* LATREILLE

Dacne minor sp. nov.

(Fig. 11)

Elongate, subcylindrical and rather shining. Dark yellowish brown; antennae (clubate segments infuscated), mouth-parts, pronotum (median portion somewhat infuscated) and legs light yellowish brown; each elytron with two yellowish markings, of the 1st longitudinal one situated at the base, completely occupied the humerus but not reached to the lateral margin, and turned inwardly from a little behind the humerus but distinctly distant from the sutural margin, the second transverse one being situated behind the middle and reached to the lateral margin but a little distant from the sutural margin.

Head strongly punctured; clypeus distinctly limited from frons, pubescent, with the anterior margin widely emarginate. Antennae hardly reached to the base of pronotum when turned them back, 3rd segment a little longer than 4th, 7th a little thickened and dilate, the three terminal clubate ones strongly thickened and dilated. Pronotum transverse, a little narrowed anteriorly, anterior margin nearly straight, anterior angles produced angularly, side margins feebly rounded and narrowly ridged, basal margin trisinuate; uppersurface transversely convex, with a light depression on the middle of base, and strongly punctured. Scutellum transverse, with a few fine punctures. Elytra elongate, punctate-striate, with the interstices rather strongly punctured. Body beneath closely and strongly punctured and pubescent.

Length—2.5 mm.

Type—1 Ex., Sapporo, Hokkaidô, Japan, 1. VIII. 1937 (Coll. K. NAKAMURA).

The present new species is most allied to *D. picta* CROTCH from Japan, but may easily be distinguished from the latter by the body smaller, the coloration lighter, and the elytral maculation.

JAPANESE NAMES of NEW SUBFAMILY, GENUS and SPECIES

Subfamily RENANIINAE CHÛJÔ nov. ..... Hirata-Ôkinokomusi-Aka.
Genus *Hornerotylus* CHÛJÔ nov. ..... Horun-Ôkinokomusi-Zoku.
Hornerotylus sauteri CHÛJÔ sp. nov. ..... Kuro-Horun-Ôkinokomusi.
Spondotriplax flavofasciata CHÛJÔ sp. nov. ..... Kiobi-Yotumon-Ôkinokomusi.
Spondotriplax flavomaculata CHÛJÔ sp. nov. ..... Kibosi-Yotumon-Ôkinokomusi.
Dactylotritoma inornata CHÛJÔ sp. nov. ..... Mumon-Siriguro-Ôkinokomusi.
Tritoma bicolorata CHÛJÔ sp. nov. ..... Hutairo-Tibi-Ôkinokomusi.

Tritoma fasciata CHÛJÔ sp. nov. .....Kiobi-Tibi-Ôkinokomusi.
Tritoma horni CHÛJÔ sp. nov. .....Horun-Tibi-Ôkinokomusi.
Tritoma karahutonis CHÛJÔ sp. nov. .....Karahuto-Tibi-Ôkinokomusi.
Tritoma takasagona CHÛJÔ sp. nov.....Takasago-Tibi-Ôkinokomusi.
Tritoma trimaculata CHÛJÔ sp. nov.....Mitûmon-Tibi-Ôkinokomusi.
Dacne minor CHÛJÔ sp. nov.....Hime-Hosogata-Ôkinokomusi.

EXPLANATIONS OF FIGURES

Fig. 1. *Hornerotylus sauteri* CHÛJÔ sp. nov.
Fig. 2. *Spondotriplax flavofasciata* CHÛJÔ sp. nov.
Fig. 3. *Spondotriplax flavomaculata* CHÛJÔ sp. nov.
Fig. 4. *Dactylotritoma inornata* CHÛJÔ sp. nov.
Fig. 5. *Tritoma bicolorata* CHÛJÔ sp. nov.
Fig. 6. *Tritoma fasciata* CHÛJÔ sp. nov.
Fig. 7. *Tritoma horni* CHÛJÔ sp. nov.
Fig. 8. *Tritoma karahutonis* CHÛJÔ sp. nov.
Fig. 9. *Tritoma takasagona* CHÛJÔ sp. nov.
Fig. 10. *Tritoma trimaculata* CHÛJÔ sp. nov.
Fig. 11. *Dacne minor* CHÛJÔ sp. nov.