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SUPPLEMENTARY NOTES
ON THE *PLATYPODIDAE* OF FORMOSA II

By

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Since the publication of "The *Platypodidae* of Formosa" and supplementary notes thereon in May, 1925, the writer has received many specimens of *Platypodidae* from Japan and Formosa, among which are some new species with habitats scientifically noticeable. The following descriptions are based upon this new material. The writer is greatly indebted to Mr. Y. SAITO, Assist.-Prof. of Hokkaido Imp. Univ., Mr. E. GALLOIS, Consul-General of France to Keijo, Dr. G. YAMADA, Director of Tottori Agricultural College, and Mr. M. YANO, Government Entomologist of the Forestry Experimental Station, Tokyo, for their kindness in sending to him many valuable specimens, and to the late Lt. Col. W. SAMPSON of the British Museum, Dr. C. F. C. BEESON, Director of the Forestry Experiment Station, Dehra Dun, India, and to Prof. Y. NIJIMA and Prof. S. MATSUMURA of the Hokkaido Imp. University for their kind advice and assistance.

1. *Platypus modestus* BLANDFORD

Trans. Ent. Soc. Lond. p. 133 (1894); NIJIMA, Trans. Sapporo Nat. Hist. Soc., p. 15 (1910).

This species was previously recorded from Nikko, Shimidsu-Toge (by BLANDFORD) and Kumanotaira (by NIJIMA), and many specimens (14 ♂♂, 16 ♀♀) were later collected by E. GALLOIS from Chuzenji (Nikko) between the 16th of July, 1925 and the 20th of Sept., 1916, while two specimens (♂♂) were collected by M. YANO at Chugushi (Nikko) on the 31st of Aug., 1927.

N.B. The specimens collected by E. GALLOIS are now preserved in the museum of Hokkaido Imp. University.

2. *Platypus severini* BLANDFORD

Trans. Ent. Soc. Lond. p. 136 (1894); NIJIMA, Jour. Coll. Agr. Tohoku Imp. Univ. Sapporo, p. 171 (1909); Trans. Sapporo Nat.

Hist. Soc. p. 5 (1913); Forest Ins. p. 162 (1913); MURAYAMA,
 Jour. Coll. Agr. Hokkaido Imp. Univ. Sapporo, p. 212 (1925).

This species is recorded from Chuzenji, Hokkaido (BLANDFORD), Sapporo (NIJIMA) and Formosa (MURAYAMA). E. GALLOIS collected specimens from several districts as shown in the following table:

Habitats	Date	Number of Samples
Koyadaira (Shikoku)	Aug. 8. 1913	1 (♀)
Tokyo	May 12. 1914	1 (♀)
Chuzenji	July 31. 1914	5 (♂♂) 1 (♀)
"	July 29. 1915	2 (♂♂)
"	July 30. 1915	1 (♂)
"	Aug. 14. 1915	2 (sex unknown)
"	Aug. 25. 1915	3 (♂♂)
"	Aug. 28. 1915	2 (♂♂)
"	Sept. 2. 1915	1 (♂)
"	July 11. 1916	3 (♂♂)
"	July 23. 1916	1 (♂)
"	Aug. 7. 1916	1 (♂)

3. *Platypus horishensis* MURAYAMA n. sp.

Subelongate, cylindrical, piceous, shiny, with very fine groundwork of shallow depressions, underside and legs brown.

♂. *Front* subquadrate, concave, rugose, with large shallow piliferous punctures irregularly distributed, two slightly elevated narrow nude areas, the one connecting the bases of antennae, with a large round pit in the middle, from which the other is separated rectangularly and obsoletely towards vertex. *Prothorax* quadrangular, anterior surface covered irregularly with large piliferous punctures mixed with minute ones; lateral sides sprinkled irregularly with smaller punctures. Median sulcus black and shallow, not reaching the base, each side accompanied by slope and few punctures, dichotomous in the anterior short distance, in front of which is a transverse narrow depression reaching the lateral sides of prothorax, the slopes continued beyond the transverse depression. *Elytra*, one half longer than wide, slightly dilated caudad, truncated posteriorly; weakly sulcate, sulci with two or three irregular rows of punctures; sutural striae with confluent piliferous shallow punctures; interstices slightly convex on the dorsal and basal portions, the first five distinct, granulose basally, with irregular series of punctures which are larger caudad and laterad, the others very weak

and gradually replaced by series of tubercles and hairs, the third dilated at base; truncation forming an angle of 120° with the upper surface of elytra, the fundus being circular, surrounded by sharply elevated margins, slightly convex, opaque, with six inconspicuous shallow longitudinal impressed lines, interstices with rows of long hairs, the third, fifth and seventh making thin ridge-like elevations, gently curving and becoming obsolete towards the apical point of suture, the apical sixth of fundus plain, the margins of truncation ciliated, the upper part especially compactly fringed with strong aureous hairs. The first abdominal segment with a short spine; undersides of femora of the forelegs extended into strong ridges.

The following is probably the female of this species, having been taken in the same hole of the trunk of injured tree at the same time and place.

♀. *Front* oblong, deeply concave, laterally forming strong curved ridges, entirely nude, median sulcus black, continuing to the vertex from the middle point between the bases of antennae. *Prothorax* quadrangular, sparsely set with piliferous weak punctures in the anterior and lateral positions; median sulcus as in the male but very strong, anterior end dichotomous and expanded laterally as recurved lines enveloping impressed areas and forming a cordate shape with the elevated areas along the sulcus, behind each recurved line in the impression two large round pits transversely arranged, each pit covered by a membrane and surrounded by a black bar. *Elytra* one half longer than those of male, with parallel sides and gently narrowed declivity, bisinuate at base; regularly sulcate, sulci deep and narrow, with a row of punctures, interstices convex, widened at the beginning of declivity, with punctures and tubercles as in the male, second, fourth and sixth broad and low, posterior part of the two former and the entire length of the latter separated into two by a row of confluent punctures, the third extremely dilated towards base, all the interstices conjoined at base, covered by two or three arched carinae; declivity gently rounded postad and laterad, with long aureous hairs, here the interstices are narrowed and curved, excepting the fourth, and conjoined at the apex of the latter, marked by a small tubercle, leaving a triangular area mensal postad. Underside brown, the first abdominal segment without spine.

	*	*
	♂	♀
Length	5.79 mm	7.57 mm
Length of prothorax	1.86	1.79
Breadth of prothorax	1.86	1.79

	♂	♀
Length of elytra	3.00 mm	4.50 mm
Breadth of elytra (at base)	1.86	1.93
„ „ (before declivity)	2.07	2.00

* The sexes were determined by dissection.

Habitat—Formosa: Horisha.

Type in writer's collection.

The elytral construction of the male somewhat resembles those given of *Platypus abruptus* SAMPSON⁽¹⁾ from Malawi and Jansuar (India), but the characteristics of the surfaces of the front, prothorax and elytral truncation differ considerably. Some characteristics of the male are extremely expanded in the female, e. g. frontal concavity, prothoracic depression and elytral sulcation, and these separate the species from *abruptus*.

None of CHAPUIS' groups coincides exactly with this species.

The elytral sulcation of the male is too weak to put it into *Platypi sulcati* while that of the female has the characteristics of *Platypi bisulcati* CHAPUIS. As one of its anatomical peculiarities the female has the eighth abdominal segment with the base triangularly produced (Fig. 1 b), and this has been taken by STROHMEYER⁽²⁾ as a characteristic of the male of the Genus *Stenoplatypus* under the name "Unpaare median Zapfen". As NUSSLIN⁽³⁾ mentioned, the classification of the basal characteristics of the eighth abdominal segment should be based on the female sex, so this species might naturally be considered as to belong to *Stenoplatypus*, but many other characteristics clearly separate it from this genus (Figs. 2-7).

These characteristics with the elytral declivity, as SAMPSON⁽⁴⁾ suggested, show some affinity to *Ipidae*.

This species was collected from several species of trees in various districts of Taichu Province, Formosa, as shown in the table:—

Trees attacked	Date	Number of Samples	Collector
<i>Lithocarpus rhombocarpus</i> HAYATA	May 25, 1925	6(♂♂) 2(♀♀)	Y. SAITO
<i>L. brevicaudata</i> HAYATA	— „ —	2(♂♂) 2(♀♀)	„
<i>Castanopsis Kawakamii</i> HAYATA	— „ —	12(♂♂) 5(♀♀)	„

- (1) SAMPSON, Ann. Mag. Nat. Hist. Lond. Ser. 9, Vol. XI, p. 285 (1923). SAMPSON described the one sex only, probably the male.
- (2) STROHMEYER, Archiv f. Naturgesch. p. 40 (1918), and *Platypodidae* (in Genera Insectorum) pp. 31 & 36 (1914).
- (3) NUSSLIN, Zeit. f. Wiss. Insektenbiol. p. 48 (1911).
- (4) SAMPSON, Ann. Mag. Nat. Hist. Lond. Ser. 9, p. 286 (1923).

4. *Platypus caliculus* CHAPUIS

Mon. d. Platyp. p. 280, 1865; BLANDFORD, Contribution à la Faune indo-chinoise, p. 22; STROHMEYER, Ent. Bl. VII, p. 204 (1911).

This species was mentioned as a Japanese species by STROHMEYER in his *Platypodidae* (Genera Insectorum), but he omitted this district in his *Platypodidae* (Coleopterorum Catalogus Pars, 44). The other authors treated this species as one belonging exclusively to oriental region. As this species has very distinctly the characteristics of the insects of oriental region, he has reason for not giving Japan proper as one of its habitats.

5. *Crossotarsus quercivorus* MURAYAMA

Jour. Coll. Agr. Hokkaido Imp. Univ. Sapporo, p. 229, (1925.)

The author has recorded Ayakita (Kyushu) and Echigo as the habitats of this species and was enabled to examine a specimen (♀) from the district of Higashikubiki (in Echigo) by the kindness of M. YANO.

6. *Crossotarsus niponicus* BLANDFORD

Trans. Ent. Soc. Lond. p. 130 (1894); NIIJIMA, Jour. Coll. Agr. Tohoku Imp. Univ. p. 171 (1909); Forest Ins. p. 161, 1913; Forest Protection, p. 318 (1924); MURAYAMA, Jour. Coll. Agr. Hokkaido Imp. Univ. p. 207 (1925).

This species was reported from Sapporo, Hakodate, Miyanoshita, Yuyama, Kyushu (BLANDFORD) and Sapporo, Hakodate, Mikawa (NIIJIMA) and Formosa (MURAYAMA). The author himself has examined samples from the following districts.

Habitat	Date	Number of Samples	Collector
Chuzenji	July 16. 1916	6 (♂♂)	E. GALLOIS
”	July 23. 1916	1 (♂)	”
Naidaijinyama (Kyushu)	Aug. 3. 1917	1 (♂)	M. YANO
Kuma, Ehime Prov. (Shikoku)	June —. 1928	8 (♀♀)	—
Okinoyama (Tottori)	Aug. 3. 1927	1 (♂) 6 (♀♀)	K. HARA

N. B. The last samples in this table were obtained from the trunks of beech-trees.

7. *Crossotarsus formosanus* STROHMEYER

Ent. Mitteil. Berlin, p. 41 (1912); MURAYAMA, Jour. Coll. Agr.

Hokkaido Imp. Univ. p. 206 (1925).

This species was perviously recorded from South Formosa by STROHMEYER and the writer. Y. SAITO has taken many individuals from Horisha and Baibara, Taichu Province, Formosa, by the same method the writer used in collecting other species of *Platypodidae* in Rengeti of the same Province. The number of specimens collected and the species of trees attacked are as shown in the following table:—

Trees attacked	Place	Date	Number of samples	Remarks
<i>Wendlandia paniculata</i> D.C.	Horisha	May 1925	15(♂♂), 9(♀♀)	with two individuals of <i>Crossotarsus terminatus</i> .
<i>Styrax suberifolium</i> HOOK. et ARN.	Do.	May 25. 1925	4(♂♂), 4(♀♀)	
<i>Eugenia formosana</i> HAYATA	Baibara	Sept. 5. 1926	6(♂♂), 7(♀♀)	with many individuals of <i>Xyleborus amorphus</i> & other <i>Xylebori</i> .
<i>Glochidion hongkongense</i> MUELL.-ARG.	Horisha	May 23-25. 1925	41(♂♂), 36(♀♀)	with one individual of <i>Crossotarsus terminatus</i> .
<i>Mallotus paniculatus</i> MUELL.-ARG.	Do.	May 23. 1925	18(♂♂), 9(♀♀)	Do.
<i>M. philippinensis</i> MUELL.-ARG.	Baibara	Sept. 5. 1926	73(♂♂), 9(♀♀)	
<i>Beilschmiedia erythrophloia</i> HAYATA	Do.	Sept. 5. 1926	32(♂♂), 10(♀♀)	with one individual of <i>Xyleborus</i> sp.
<i>Tetradenia Konishii</i> HAYATA	Do.	Aug. 6. 1926	14(♂♂), 8(♀♀)	with two larvae of this species & two imagines of <i>Xyleborus amorphus</i> ; etc.
<i>Ficus gibbosa</i> BULME	Horisha	May 24. 1926	6(♂♂), 4(♀♀)	with many individuals of <i>Scolytoplatus nikado</i> , <i>Scolytopl.</i> sp. & <i>Xyleborus amorphus</i> .
	Baibara	Aug. 6. 1926	31(♂♂), 24(♀♀)	

The males of these sample are slightly longer than the measurements given by STROHMEYER and their elytra with each a small tooth in the middle of the apical margin. The latter characteristic is not clearly mentioned in his description, while the writer has also found the intermediate type between dentated and non-dentated. The females coincide exactly with his description except being shorter in length. The writer considers these slight differences do not hinder the identification of these samples as *C. formosanus*.

8. *Crossotarsus terminatus* CHAPUIS

Mon. d. Platyp. p. 83 (1865).

Few samples of this species were found mixed among the specimens of the foregoing species. The number and trees attacked are shown in the table:—

Trees attacked	Date	Number of samples	Habitat	Collector
<i>Grochidion hongkongense</i> MUELL.-ARG.	May 23-24. 1925	1 (♂)	Horisha, Formosa	Y. SATTO
<i>Ma'lorus paniculatus</i> MUELL.-ARG.	May 23. 1925	1 (♂)	Do.	Do.
<i>Wendlandia paniculata</i> D. C.	May —. 1925	2 (♂♂)	Do.	Do.

These specimens are slightly longer than those from Singapore and are reddish brown in colour, though the typical one is described as "fulvus"; other characteristics exactly coincide with those of the species as first described.

As the special anatomical characteristic of this species the labial palpi are one-jointed notwithstanding STROHMEYER⁽¹⁾ inserted it in the group of two-jointed species, but other characteristics clearly show that these samples belong to *Crossotarsus abdepressi* of CHAPUIS.

9. *Crossotarsus simplex* MURAYAMA

Jour. Coll. Agr. Hokkaido Imp. Univ. Sapporo, p. 231 (1925.)

This species was previously recorded from Kyushu and recently numerous specimens of it (4 ♂♂, 5 ♂♂) have been collected by the writer in Quelpart Island of Corea. This is the first species of *Platypodidae* found in Corea. These specimens are slightly longer than those from Kyushu as shown in the following table, and darker in colour, but the minute characteristics exactly coincide with those of the type specimens.

	♂ from		♀ from	
	Quelpart	Kyushu	Quelpart	Kyushu
Length	3.71 mm	3.58 mm	4.36 mm	3.95 mm
Length of prothorax	1.07	1.05	1.07	1.16
Breadth of prothorax	1.00	0.92	1.00	0.96
Length of elytra	2.14	2.05	2.50	2.16
Breadth of elytra (at base)	0.93	0.92	1.00	1.00
„ „ (before declivity)	1.07	1.04	1.07	1.05

Habitat—Jokori (U-men) in Quelpart Island, Corea.

(1) STROHMEYER, *Platypodidae* (in *Genera insectorum*) p. 33 (1914).

Date—March 8, 1928.

Tree attacked—*Lindera thunbergii* MAKINO

This species was cohabitated with *Scolytoplatypus mikado* BLANDFORD, *Scolytopl. tycon* BLANDFORD and some species of *Xyleborus*.

N. B. Besides these new specimens the writer has a small number of specimens sent to him by Y. SAITO, which have some intermediate characteristics between *C. formosanus* STROHMEYER and *C. terminatus* CHAPUIS. The determination of these species is postponed until he has obtained more samples.

In the above descriptions an interesting point is the collecting method of the specimens in Horisha. There, Y. SAITO used the same method the writer used in Rengeti in gathering specimens, namely, trees cut down in a natural forest, which were stacked in and out of the forest and tested after the lapse of several months. The writer expected to take the same species of insect from the same species of tree, because the places were only 3 miles distant from each other though separated by a low mountain, but the result was quite the opposite, and the fact seems to show that the distribution of *Platypodidae* in Formosa is strictly limited.

Explanation of Plate XI

- Fig. 1. *Platypus horishensis* n. sp., Eighth ventral segment of Abdomen, a) ♂, b) ♀. × 40
- Fig. 2. Do. Eighth dorsal segment of abdomen, ♂. × 40
- Fig. 3. Do. Labium, a) ♂ b) ♀. × 40
- Fig. 4. Do. Metaphragma (partial). × 40
- Fig. 5. Do. Maxilla, a) ♂, b) ♀. × 40
- Fig. 6. Do. Proventriculus, a) ♂, b) ♀. × 40
- Fig. 7. Do. Penis, ♂. × 40
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