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Title	Supplementary Notes on "THE PLATYPODIDAE OF FORMOSA."
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Citation	Journal of the College of Agriculture, Hokkaido Imperial University, Sapporo, Japan, 15(4), 229-236
Issue Date	1925-06-20
Doc URL	https://hdl.handle.net/2115/12582
Type	departmental bulletin paper
File Information	15(4)_p229-236.pdf

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Supplementary Notes on "The *Platypodidae* of Formosa."

By

Jozo Murayama

In the study of the *Platypodidae* of Formosa, I was greatly assisted by the use of Prof. Niijima's collection, which contains many undetermined specimens belonging to *Crossotarsus* and *Platypus*. Three of the *Crossotarsus* specimens closely resembled the *Crossotarsus flavomaculatus* Strohmeyer and in the others the special character on the prothorax of the female is distinct. I postponed the identification in the anticipation of new species. By minute investigation, I recognized that the latter species has many characters beyond each of the Chapuis's groups. The two species are to be determined as new species. The *Platypus* specimens consisted of *Platypus calamus* Blandford, of which the female has been hitherto undescribed, and of a female of unknown species from Sapporo. Here I wish to describe these species.

Crossotarsus quercivorus Murayama sp. n.

Ferruginous brown, the head and the apex of elytra darker, underside yellowish brown.

♀. Head with front flat, covered with an irregular rugose reticulation, a short depressed median line between the bases of the antennae; vertex rather abruptly separated from the front, with a narrow black median line, sparse rugose punctures, and long aureous hair.

Prothorax subquadrate, shining, sprinkled with fine punctures rather denser and larger towards the borders, the anterior border with sparse aureous hair; median sulcus short, wider towards anterior, not reaching the posterior border.

Elytra elongate, with sides parallel in the anterior two thirds and gradually diminished about one third of the breadth towards the apex; upper surface with a slight declivity in the posterior third, with the apex abruptly truncated, with punctured striae which are wider and deeper towards the bases and apices where the punctures are larger and more irregular, the 1st and 2nd, 3rd and 4th striae being conjoined at the bases; interstices slightly convex, with scattered punctures, higher and broader towards anterior, pointed towards pos-

terior, the 1st and 4th narrowed towards posterior, the 2nd strongly produced behind, the 3rd the shortest and dual, the others united at the posterior ends and form an outer semicircular fence at the apical plane, the declivity and the apical plane sparsely ciliated with long aureous hair.

Underside with scanty long yellow hair and large porelike punctures, abdominal segments convex, the 7th with a large transversal shallow oval depression.

♀. Front and vertex the same as in the male.

Prothorax subquadrate, shining, with fine punctures and median sulcus, as in the male, on each side of the sulcus with 3–5 large round touched depressions in two rows, each depression being surrounded by a black bar.

Elytra as in the male, excepting in the more gently rounded sides and declivity, striae and interstices a little weaker than in the male and these continued throughout the apical plane, the border of which is without dentation.

Underside a little paler than in the male, with stronger convexity on each abdominal segment.

	♂	♀
Length	4.46 mm	4.54 mm
Length of prothorax	1.29 „	1.33 „
Breadth of prothorax	1.15 „	1.08 „
Length of elytra	2.38 „	2.42 „
Breadth of elytra (at the base)	1.15 „	1.15 „

The collection consists of the specimens from several trees and places, as shown in the following table:—

Trees attacked	Habitat	Date	Number of specimens
Quercus glauca Thunb.	Ayakita (Miyazaki Prov., Kyushiu)	Oct. 22. 1921	10 (♂) 2 (♀)
Quecus gilva Bl.	„	„	3 („)
Lithocarpus edulis Kudo	„	„	4 („) 2 (♀)
Unknown	Echigo	1921	2 („)
„	Unknown	unknown	1 („) 2 (♀)

The apical shape of the elytra of this species resembles that of the group *C. angulati* of Chapuis,[1] but the situation of the antenna, the shape of the scape, the front of the male, the elytral punctuation, and

(1) Chapuis, Monographie des Platypides, p. 71 (1865).

the elevation of the 3rd interstice, are quite different.

In the classifying table of Strohmeyer[1] I was unable to find any group resembling this species. I also could trace no form resembling it in the reports of Blandford, Stebbing, Perkins and the other students of the *Platypodidae*. This species can be easily identified by the characteristic dentation of the elytra of the male and the groups of large round depressions along the median sulcus of prothorax of the female.

Crossotarsus simplex Murayama sp. n.

Head and the posterior third of elytra, dark brown, prothorax ferruginous brown, elytra pale yellow in the middle part of the upper surface which gradually darkens into brown towards the borders, underside is brown.

♂. Head with front almost flat, densely covered with fine punctures and irregularly with a large reticulose punctuation, with a short depressed median line, sparsely ciliated; vertex densely covered with fine punctures, a broad elevated longitudinal vitta on each side of the median line.

Prothorax subquadrate, with anterior corners almost at right angles, posterior corners blunt, lateral emarginations feeble; the surface with very fine dense groundwork of punctures, sprinkled with few large punctures before the lateral emarginations; median sulcus short, not reaching the posterior border, broader towards anterior. Elytra elongate, subcylindrical, the posterior quarter narrowed and declivous; striae with large longitudinal elliptical punctures, the 1st one impressed throughout, the remainder at the bases only, very wide and deep on the declivity; interstices flat, pointed at the beginning of the declivity and changing into carinae with a row of long aureous bristles, densely covered with very fine punctures, sprinkled with few large punctures at the bases and with mediocre punctures on the posterior narrowing. The 1st abdominal segment with a long thick spine straightly produced behind, the others convex, covered with large round depressions, without ciliation.

♀. Front slightly concave, punctured more sparsely than in the male, bare, vertex without elevated vittae.

Prothorax the same as in the male excepting the strong lateral emargination and the congregation of a few large porelike punctures along the middle of each emargination.

(1) Strohmeyer, Platypodidae (in Genera Insectorum), pp. 32–33 (1914).

Elytra similar to those of the male, but the declivity and the lateral contraction are more gentle, apex truncated, interstices keep the breadth longer than in the male, the 3rd with an irregular longitudinal row of tubercles at the base.

The 1st abdominal segment with a spine thicker than that of the male and the spine curved upwards; the other segments convex, sparsely ciliated, rugose.

	♂	♀
Length	3.58 mm	3.95 mm
Length of prothorax	1.05 „	1.16 „
Breadth of prothorax	0.92 „	0.96 „
Length of elytra	2.05 „	2.16 „
Breadth of elytra (at the base)	0.92 „	1.00 „
„ „ „ (before the declivity)	1.04 „	1.05 „

Habitat — Ayakita (Miyazaki Prov., Kyushiu).
Date — Oct. 22. 1921.
Trees attacked — *Quercus glauca* Thunb.
Quercus gilva Bl.

This species belongs to the group *C. subdepressi* Chapuis.[1] The elytra remarkably resemble those of *C. flavomaculatus* Strohmeyer;[2] but in the male, the prothorax is provided with angular anterior, round posterior corners, and large punctures before the lateral emarginations, the elytra with some large punctures at the base of the 3rd interstice instead of tubercles. In the female, the front is without ciliation and the prothorax without the heart-shaped punctured patch.

These characters prove clearly the differentia from *C. flavomaculatus*.

In comparison with *C. flavomaculatus*, the general shape is a little more robust in the male and more slender in the female.

Platypus calamus Blandford fem. n.

♀. Elongate, shorter and paler than in the male.

Head with front subconcave, without strong scattered punctures; vertex covered with irregular strong punctures, median line as in the male.

Prothorax as in the male, excepting that the groups of punctures along the sulcus are broader and cordated, each consisting of 8 or 9

(1) Chapuis, Monographie des Platypides. pp. 78–79 (1865).
(2) Strohmeyer, H. Sauter's Formosa-Ausbeute. Ent. Mitteil. I. No. 2. pp. 40–41 (1921).

irregular rows of punctures, the remaining surface being feebly punctured.

Elytra with punctured line weaker than in the male, the 1st and 2nd, 3rd and 4th, conjoined at the bases; interstices with very fine punctures, 1st and 5th elevated at the bases, being provided with 1 or 2 common arched carinae, and rugose punctures; apex with a shallow small terminal impressed surface, which is ciliated with long aureous hair, the upper border neither elevated nor everted as in the male, but keeps the trace of edges and the angles formed with the suture, the terminal impression very minute but traceable, with feeble external angles. Abdominal segments convex, without spine.

	♀	♂
Length	3.50 mm	(3.67 mm)
Length of prothorax	1.09 „	(0.96 „)
Breadth of prothorax	0.71 „	(0.71 „)
Length of elytra	2.09 „	(2.25 „)
Breadth of elytra (at the base)	0.83 „	(0.79 „)
„ „ „ (before the apical impression)	0.83 „	(1.04 „)

Habitat — Ayakita (Miyazaki Prov., Kyushiu.)

Date — Oct. 22. 1921.

Trees attacked — *Quercus gilva* Bl.

Six examples of the female together with nine males, which exactly coincide with Blandford's description[1] of female (in a conventional meaning).

This female can be easily separated from others by the weak but distinct terminal impression slightly resembling that of the male.

N. B. Besides the foregoing specimens, Prof. Niijima has the male examples of the same date and place, namely the 6 specimens which were collected on the *Quercus acuta* Thunb. and one on the *Eurya ochnacea* Szysz..

Platypus tenuis Murayama sp. n.

♀. Elongate, ferruginous-testaceous, head and the apex of elytra, darker. Head with front subconcave, slightly foveorated in the middle, finely

(1) Blandford, The Rhynchophorous Coleoptera of Japan, Trans. Ent. Soc. Lond. pp. 137–138 (1894).

reticulated, uneven, with some shallow rugose depressions; vertex with a fine elevated median line, with the same reticulation and depression as on the front.

Prothorax oblong, median sulcus wider and deeper towards anterior, with a group of uniform punctures on either side, each group consisting of from 7 to 8 rows of punctures, which form altogether an ellipse, being truncated at the front; the remainder of surface with irregular punctures of two sizes, at the anterior and posterior borders being finely reticulated.

Elytra with some lines of punctures, the 1st one impressed throughout, the others at the bases only, the 1st and 2nd, 3rd and 5th, conjoined at the bases; interstices irregularly sprinkled with punctures, the 1st, 3rd, and 5th elevated towards the bases, of which the 3rd is most developed and covered with some arched transverse carinae, which are longer towards the anterior border, and the two or three at the foremost part cover the bases of 5 interstices; terminal depression vertical, weakly emarginated below, with the external angles feebly produced downwards and backwards, the surface almost flat, but with the upper part of both sides of the suture slightly elevated, ciliated with aureous hair, and being provided with some punctured lines which continue from the upper surface.

Underside bare, abdominal segments convex, without spine.

Length	4.13	mm
Length of prothorax	1.54	,,
Breadth of prothorax	0.83	,,
Length of elytra	2.25	,,
Breadth of elytra (at the base)	0.83	,,
,, ,, ,, (before the terminal depression)	0.83	,,

Habitat—Sapporo, Hokkaido. (one specimen only).

This species closely resembles the female of *Platypus caliculus* Chapuis,[1] but the truncated elliptical boundary of the groups of punctures on both sides of the sulcus of prothorax and the carinae in the 3rd interstice of elytra, distinctly separate it from the latter.

This species may be the female of *Platypus hamatus* Blandford,[2] but owing to the insufficient references as to time, place, and trees attacked

(1) Chapuis, Monographie des Platypides, pp. 280–281 (1865).

(2) Blandford described the male sex only in his "The Rhynchophorous Coleoptera of Japan," Trans. Ent. Soc. Lond. pp. 138–139 (1894).

by this insect it was impossible for me to distinguish it with certainty.

Although the above descriptions do not cover the species hitherto recorded and collected, I wish to give the following list and distribution table of the *Platypodidae* of Japan for the convenience of all future studies.

In this table the 6 species with asterisks were originally recorded from Japan, but these specimens are not yet identified by me.

No.	Species	Saghalien	Japan proper: Hokkaido	Japan proper: Honshiu	Japan proper: Kyushiu	Japan proper: Shikoku	Corea	Oriental region: Kiukiu	Oriental region: Formosa	Oriental region: South-China	Oriental region: Philippines	Oriental region: French Indo-China & Siam	Oriental region: British India, Ceylon & Burma	Oriental region: Malay Archipel. (western part of the Wallace line)	Malay Archipel. (eastern part of the Wallace line)	Other localities
1.	*Platypus lewisi* Blandfd.			×	×				×							
2.	*P. modestus* Blandfd.			×												
3.	*P. severini* Blandfd.		×	×					×							
4.	*P. formosanus* Niij. et. Muray.								×							
5.	*P. solidus* Walk.								×		×		×		×	
6.	*P. calamus* Blandfd.			×	×											
7.	**P. caliculus* Chap.			Japan						×		×		×		
8.	**P. hamatus* Blandfd.			×	×											
9.	*P. lepidus* Chap.								×		×			×	×	
9 a.	*P. lepidus* Chap. *formosanus* Niij. et. Muray.								×							
10.	*P. tenuis* Muray.		×													
11.	*Crossotarsus piceus* Chap.								×						×	
12.	*C. wallacei* Chap.								×					×		
13.	**C. concinnus* Blandfd.				×											
14.	**C. contaminatus* Blandfd.				×											
15.	*C. externe-dentatus* Chap.			Japan					×							Tahiti, Fuji, Hawaii.
16.	**C. flavomaculatus* Strohm.								×		×					
17.	*C. formosanus* Strohm.								×							
18.	*C. simplex* Muray.				×											
19.	*C. niponicus* Blandfd.		×	×	×				×							
20.	**C. sauteri* Strohm.								×							
21.	*C. quercivorus* Muray.			×	×											
22.	*C. rengetensis* Niij. et. Muray.								×							
23.	*Diapus aculeatus* Blandfd.				×											
24.	*D. formosanus* Niij. et. Muray.								×							
25.	*D. quinque-spinatus* Chap.								×				×	×	×	
	Total	0	3	9	11	0	0	0	15 a	1	3	1	2	4	4	1

Nos. 7, 15. 16, and 20 were recorded by Strohmeyer, but the habitats of 7 and 15 are not given.

Nos. 8, 13, and 14 were deseribed by Blandford.

N. B. Besides these 25 species Prof. C. Sasaki [1] recorded one species from Honshiu which attacked the trunk of *Ostrya japonica* Sarg.. This seems to belong to *Crossotarsus*, but I could not determine this species by his description.

From this distribution table the following 5 groups of the *Platypodidae* of Japan may be obtained:—

i) Species exclusively distributed in the Palaearctic region..... 9
ii) Species distributed in the Palaearctic region and Formosa..... 4
iii) Species exclusively distributed in Formosa 6
iv) Species distributed in Formosa and the Oriental region..... 5
v) Species distributed in Formosa, the Oriental region, and the Australian region (do.) 4

These results show us the interesting fact that Formosa stands as a connecting link to the Palaearctic- Oriental- and Australian regions concerning the distribution of *Platypodidae*.

(1) C. Sasaki, Injurious Insects of Japanese Trees. Vol. III, pp. 54–55 (1902).

ERRATA

Page	Line	
197	19–20	Niiima read Niijima
198	7	Malay an read Malayan
199	16	does read do
200	24	campho tree.r read camphor tree
201	9 & 26	*Platypodarinae* read *Platypodinae*
,,	10 & 29	*Tesserocarinae* read *Tesserocerinae*
202	15	singura read singula
204	1	fig. 9–12 read figs 9, 12
,,	21	Sharp read Perkins
209	8	posteriorl ateral read posterior latera
,,	37	*concinus* read *concinnus*
210	3–4	differ ences read differences
212	40	belimited read be limited
213	33	after Java add Sumatra
217	29	before Celebes add Java,
223	13	New Guinca read New Guinea
218	13	3. read p.
235	11, 18, 31 & 33	Niij. et. Muray. read Niij. et Muray.