

Taxonomical Notes on Some Species of the Japanese *Rhopalum*  
(Hymenoptera, Sphecidae, Crabroninae)

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1. *Rhopalum (Rhopalum) kuwayamai nikkoense* subsp. nov.

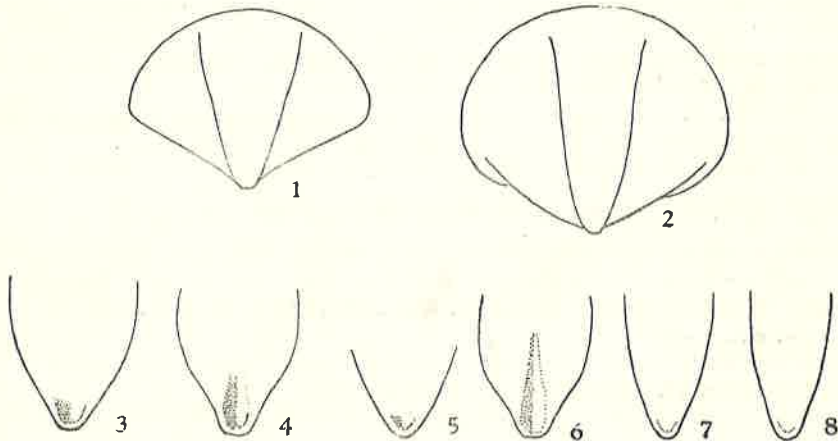
*Rhopalum (Rhopalum) kuwayamai* Tsuneki et Tanaka, Kontyu, XXIII, 1, p. 25, 1955

Upon the careful reexamination of the specimens collected in Nikko it has become believed that they should be separated as a distinct subspecies of the nominate race occurring in the Kuriles. The differences from the typical species are as follows:

- 1) Pygidial area (Fig. 1) much wider than in the nominate race (Fig. 2).
- 2) Median groove on area cordata more distinctly runs up to the apical portion.
- 3) Most of the specimens (3 out of 4) have the abdominal petiole transparent brown or transparent white in colour on anterior half. 4) Frontal median furrow somewhat shallower than in the typical species.

Specimens examined: Holotype, 1 ♀, Shobugahama, Nikko, 6. IX. 1953 (E. Tanaka leg.); Paratypes, 1 ♀, Shobugahama, 13. VII. 1952 (E. Tanaka leg.), 1 ♀, Shobugahama, 6. IX. 1953 (E. Tanaka leg.), 1 ♀, Chuzendzi, 9. VIII. 1955 (K. Tsuneki leg.)

*Remarks.* The present subspecies is also closely related to *R. venustum* Tsuneki (1955), but is much larger, with the facial width at the base of the clypeus



Figs. 1-8, pygidial areas. 1, *kuwayamai nikkoense*; 2, *kuwayamai* s. str.; 3-8, *clavipes jessonicum*.

常木勝次：邦産ホソギングチバチ属数種に関する分類雑記。

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distinctly more than as long as the antennal scape, with the pygidial area narrower and longer. It has, moreover, the clypeus more deeply incised in the middle of the anterior produced portion and the area cordata more distinctly and thoroughly grooved in the middle.

## 2. Differences between *R. succineicollare*<sup>2)</sup> and *R. kuwayamai nikkoense* having the abdominal petiole of the similar coloration

In the form of the clypeus, in the colour of the abdominal petiole, both the forms above described are similar to each other. Superficially they seem to represent an identical species having a somewhat different coloration on the pronotum and the axillae of the scutellum. Closer reexamination, however, shows that they are, without doubt, a good species respectively. The differences between them are as follows :

1) Between eye and socket of antenna there is a little space in *succineicollare*, whereas in *nikkoense* the space linear, rather none. Hence lower front (face) more strongly narrowed toward clypeus in *nikkoense* than in *succineicollare*. 2) Medio-anterior depression on mesonotum deeper in *succineicollare* than in *nikkoense*; in the latter the area is sometimes without depression. 3) Pygidial area in *succineicollare* much narrower than in *nikkoense*, as narrow as in its nominate species, but in *succineicollare* the area somewhat convergent toward base (in *kuwayamai* s. str. rather slightly divergent). 4) Medial canal on area cordata more distinct and stronger in *succineicollare*. 5) As compared in detail, *succineicollare* has clypeus comparatively shorter in the middle and with sinus between teeth on medio-anterior border deeper and more distinctly outlined than in *nikkoense*. As colorific distinctions : 6) Clypeus anteriorly ambur-coloured in *succineicollare*, while in *nikkoense* wholly black. 7) In *succineicollare* pronotum wholly ambur, or moreover, anteriorly in middle transversely yellow, in *nikkoense* posterior margin alone decolorated and appears dark testaceous. 8) Axillae of scutellum always yellow in *succineicollare*, while in *nikkoense* black.

*Remarks.* *R. succineicollare* is a very rare species. Only one female specimen has been collected since the type specimen was capture in Sapporo :

1 ♀, Koike, Fukui Pref., 5. VIII. 1954 (K. Tsuneki leg.).

## 3. *R.* (s. str.) *clavipes jessonicum* Bischoff, 1921 (Conj. nov.)

*Crabro* (*Rhopalum*) *jessonicus* Bischoff, Arch. Naturg., Abt. A, 87, Heft 10, S.7. 1921;—Tsuneki, Jour. Fac. Sci. Hokkaido Univ., Ser. VI, Zool., IX, 4, p.429. *Crabro* (*Rhopalum*) *clavipes* Iwata, Ins. Mats., XII, 2/3, p. 88;—Tsuneki loc. cit., p. 429.

*Rhopalum* (*Rhopalum* sect. *Rhopalum*) *jessonicum* Tsuneki, Jour. Fac. Sci. Hokkaido Univ., Ser. VI, Zool., XI, 1. p. 112, 115 and 119.

As some additional specimens of *R. clavipes* Linné from Europe have become available to the writer and a great number of examples of *R. jessonicum* Bischoff (103 ♀ ♂) have been collected in Honshu, detailed reexamination and comparison of the specimens have recently been carried out, since there has been some question as to the validity of the latter species. The result convinced him that

2) Emended from *succineicollarum* Tsuneki (1952)

*jessonicum* should be sunk to a subspecies of *clavipes*, as he previously (1952) pointed out. The differences between them can be summarized as follows :

1) Structure: a) It can generally be said that pygidial area in female comparatively longer and somewhat narrower and with lateral carinae more distinctly curved towards sides in *jessonicum*, although the form of the area is fairly broadly varied in the specimens (Figs. 3-8) including sometimes the typical form in *clavipes*. b) In general, frontal furrow in front of median ocellus slightly deeper in *clavipes*. c) Clypeus in male somewhat narrower in the median produced portion in *jessonicum*, always with a small incision in middle (always absent in *clavipes*. so far as the examined specimens concerned.

Table 1. Measurements of some bodily parts in *R. clavipes clavipes* and *R. c. jessonicum*. (Relative values)

Locality of Specimen		Width		Length of Hind leg					
		Head	Petiole	Trochanter	Femur	Tibia	1st t. j.*	2nd t. j.	
Japan	Hokkaido	Sōunkyō	44	36	11	29	36	19	10
		Sapporo	42	31	10	26	33	17	7.5
	Honshu	Nikkō	44	35	10	30	36	20	9
		Nikkō	45	36	10	30	36	19	9
		Koike	43	34	10	28	35	18	8
		Koike**	37	28	10	24	30	15	7
Europe		Belgium	47	34	11	28	35	17	8
		Holland	42	32	10	26	32	15	7
		Holland	42	32	10	26	32	15	7
		Holland	43	33	10	27	32	15	7
		Holland	42	31	10	25	31	15	7

\* tarsal joint, \*\* selected small individual.

2) Coloration: a) Generally, *clavipes* has the abdomen more broadly adorned with testaceous red. b) In *jessonicum* antennal joints 2-5 brownish, 6-8 yellow and from 8 apically black. The change is abruptly and striking, while in *clavipes* joints 2-8 brown or yellowish brown, from 9 apically black, but the change is rather gradual.

On the other hand, the difference in the general impression of the ocellar region and of the oculocellar line is not so marked as was given in the original description, when a number of specimens are examined. Similarly, the differences in the pilosity and general feature of the body are also not always the case.

According to the above described differences, it seems better to allocate *jessonicum* within the specific range of *clavipes* Linné, because the differences between them are rather slight and not considered sufficient to separate them at the specific rank.