

TAXONOMIC NOTES ON SOME JAPANESE SPECIES
OF ACULEATE HYMENOPTERA, WITH THE
DESCRIPTION OF A NEW SPECIES OF
THE GENUS *TRYPOXYLON*

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1) **The status of *Bembecinus japonicus* and *hirstus***

Recently W. J. Pulawski of the University of Wroclaw, Poland, pointed out that the species known as *Bembecinus japonicus* Sonan is nothing but a synonym of *B. hungaricus* (Frivalzky, 1876), one of the common species of the genus in Europe. I have fortunately had a chance of examining the specimens (3♀♀ 3♂♂) of the latter species and found that morphologically as pointed out by him there is no noteworthy difference of characters including those of the antennae and genital organ of the male, but that in colour there can be admitted a certain constant difference in abdominal maculation. The specimens collected in Japan lack maculation, as a rule, on abdominal tergites 3 and 5, while in the specimens examined of *austriacus* tergites 1-5 are always adorned with maculation. Moreover, according to Handlirsch (1891, p. 17) this seems constantly true, although he alluded to the fact that maculae on tergite 3 is sometimes very indistinct.

Such a difference as mentioned is, indeed, very slight, but it is distinctly connected with the range of distribution. To me it seems proper, therefore, to call the Japanese form as *Bembecinus hungaricus japonicus* (Sonan, 1934).

In connection with the above, *B. hirstus* (Sonan) was also investigated. To my regret, the type is at present unaccessible. According to the original description, however, the species is considered to be allocated within the category of the above-mentioned species.

2) **The status of *Pemphredon mandibularis* Tsuneki, 1951**

Recently Dr. Krombein of the United States National Museum kindly called my attention to the fact that *Pemphredon mandibularis* had been preoccupied by *P. mandibularis* Cresson, 1865, a species now placed in *Passaloecus*. The dead name had made me commit an error. Now I would replace the name of the above mentioned Japanese species with *Pemphredon krombeini* nom. nov. in memory of his kindness.

3) **The Japanese representative of *Ectemnius* (*Hypocrabro*) *rubicola* (Dufour et Perris) is a subspecies**

Since my contact with the Crabronine wasps it has come into notice that the Japanese representative of *rubicola* (= *larvatus* Wesm.) differs somewhat from that of the European race. Now, I have a sufficient number of materials from various localities of this country to confirm their distributional variation and to

compare them generally with those of the nominate race. The conclusion arrived at is as above given, the new subspecies being called *Ectemnius (Hypocrabro) rubicola nipponis* subsp. nov.

The chief character of the subspecies lies in that the punctures on the 1st abdominal tergite are fairly distinct, sometimes also defined on the 2nd. Moreover, the anterior lateral corners of the pronotum are less pointed. In the biological aspect, too, this subspecies has some characteristics. The wasp makes its nest in the stems of various living herbs, such as *Sophora flavescens*, *Macleya cordata*, *Gladiolus gandavensis*, *Artemisia vulgaris*, *Aster* spp., etc. instead of dead stems and branches of *Rubus*, *Sambucus*, *Synantherea*, etc.

In this subspecies the sculpture on the mesonotum markedly varies with the individual, but apparently with no connection with locality. While the sculpture on the upper front and the punctuation on the 1st abdominal tergite seem to have a close connection with the locality. The specimens from Hokkaido are closest to the nominate race, having the upper front finely, closely and longitudinally striate in general and the punctures on the 1st tergite sparse and rather feeble (♀ ♂). Sometimes, however, in the female specimens upper front closely punctate-striate or densely granulate, with a more or less appearance of longitudinal striation. In the specimens from Kyushu and Shikoku upper front closely punctured in general, in females finely and densely granulate, while in males somewhat more coarsely so. Punctures on the 1st tergite stronger in general as compared with those in the Hokkaido specimens, though varied in density and the rate of specimens bearing punctures on the 2nd tergite highly increases. The specimens captured in the intermediate region, that is to say, the middle and the northern parts of Japan proper, are represented by both the southern and the northern type, instead of the intermediate type. Generally speaking, the northern type occurs in high altitude. But not a less exception is admitted as to the rule. Thus, a male specimen from Tokushima Pref., Shikoku, has the upper front finely and closely punctate-striated. One of the two females emerged from the same nest at Ohtawara, Tochigi Pref., belongs to the northern type, while the other (larger) specimen to the southern type. Specimens from Fukui, Nagano, Tochigi, Akita and Aomori Prefs. can mostly be classified to the southern type, mixing, however, the ones less strikingly representing the northern type. The sole exception to the general rule concerning the subspecific rank is exemplified by a male specimen from Sasayama, Hyogo Pref. This is a very small specimen and the sculpture on the upper front is consistent with that of the northern type, a type closest to the nominate race. Besides, in this specimen the 1st tergite is without puncture, only bearing very delicate hair pits as in the nominate race. But the occurrence of such an individual will not be a serious question to the general rule of our representative being a subspecies.

Specimens examined: 11 ♀♀ 35 ♂♂, Hokkaido; 3 ♀♀ 10 ♂♂, Kyushu; 4 ♀♀ 5 ♂♂, Shikoku; 23 ♀♀ 35 ♂♂, Japan proper (Aomori, Akita, Niigata, Toyama, Ishikawa, Fukui, Tochigi, Saitama, Tokyo, Mie, Kyoto and Hyogo Prefs.).

4) The occurrence of *Ectemnius furuichii* Iwata in Formosa and its taxonomic position

In the collection of the Takeuchi Entomological Laboratory in Kyoto is preserved a specimen of the above described species collected in Formosa.

1 ♀, Arisan, Formosa, 9. V. 1922, S. Mori leg.

The specimen is immaculate on the mandibles and the legs, but has a medianly interrupted yellow band on the pronotum. The scapes of the antennae in front and a spot on each side of the 2nd, 3rd and 4th tergites are also yellow. The maculation is somewhat different from that of the most usual example of the species captured in Japan (36 ♀♀ 9 ♂♂) and Korea (1♀), but is considered falling within the same specific category. On the other hand, the frontal median groove and its extension between the postocelli are strikingly deep and the constriction between the abdominal segments is markedly strong.

Judging from such characters being connected with the different range of distribution, the specimen seems better to be dealt with as representing a subspecies; *Ectemnius (Iwataia) furuichii formosanus* subsp. nov.

5) A newspecies of the genus *Trypoxylon* (Trypoxyloninae)

Trypoxylon (s. str.) *sapporoense* sp. nov.

The underdescribed species is very close in its external appearance to *Trypoxylon attenuatum* Smith (1851) occurring commonly in Europe, but can be separable from it by the difference in the form of the clypeus and by the thicker antennae. In the structure of the male genital organ, however, it is decidedly apart from *attenuatum* (Fig. 2, cf. Fig. 1). The sagitta (penis) and the basal plates (tenette or chitin tongue) of the species are rather similar to those of *T. figulus* L., but in the structure of the paramere (volcella) it is very characteristic. It is not bifid, but has near its base the other lobe, which is broad and short, folded over nearly at a right angle to the longitudinal axis of the paramere on its inside and adorned with a fringe of long curved hairs (Fig. 2). I examined the genitalia with three specimens and could confirm the same strange structure on all of them.

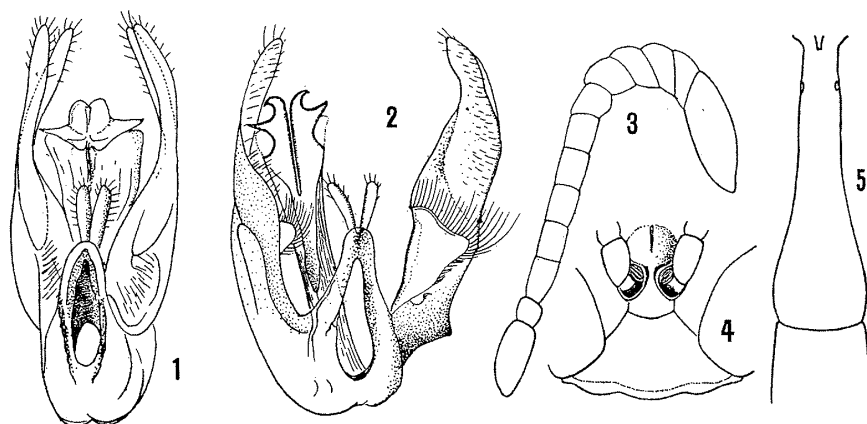


Fig. 1. Male genitalia of *Trypoxylon attenuatum* Smith.

Figs. 2-5. *Trypoxylon sapporoense* sp. nov. 2, Genitalia of the male. 3, Antenna. 4, Lower parts of the face. 5, The first abdominal tergite.

♂. Length 7.5–8.0 mm. Black and opaque, abdomen more or less shining, tibial spurs and tarsi somewhat brownish. Head from above with ocelli located in an equilateral triangle, slightly wider at base, anterior ocellus usually somewhat smaller than the others, OOD:POD = 3:4, OOD as large as diameter of post-ocellus, ratio of interocular distance at vertex and at base of clypeus = 3:2. Head in front with supra-antennal tubercle gently convex, with a feeble carina in middle, clypeus and supra-clypeal area: Fig. 4, antenna: Fig. 3, with terminal joint weakly curved near apex and in length nearly equal to 4 preceding joints united. Propleural process almost none, posterior margin of pronotum normal, not membranous, area cordata on propodeum not enclosed by carina, but defined by the elevation of the area and medianly longitudinally, gently depressed, posterior inclination with a deeper median furrow, dorsal and lateral aspects of the segment well separated by a fine carina. The 1st segment of abdomen slightly less than as long as two following segments combined (ratio about 6:5), 3.5 times as long as wide at apex (Fig. 5) and longer than hind tibia (=trochanter+femur), venation of fore wing as in *attenuatum* or *figulus* in general, but posterior apical angle of cubital cell not angulated as in these, much wider, about 130°. Sculpture on head and mesonotum as in the compared species, on area cordata as a rule anteriorly longitudinally, posteriorly transversely striate, on intermediate portion the striae run obliquely. Genitalia: Fig. 2.

♀. Unknown.

Holotype: ♂. Sapporo, Hokkaido, 6. VII. 1958, K. Kamijo leg.

Paratypes: 1♂, Sapporo, 16. VI. 1952, T. Tomioka leg.; 2 ♂♂, Sapporo, 28. VI. 1957, 6. VII. 1958, K. Kamijo leg.

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要記. 本種をサツポロジガバチモドキと呼ぶことにする. 本種は次の特徴により他の邦産種から区別できる. 第1腹節は長柄状でない. 前脛節黒色. 触角末端節は前4節の和に等しい. 触角上隆起は低くこぶ状(常木, 1956のKey参照).

6) Emendation of specific trivial names of two species of Chrysididae

The following emendation was made basing upon the recent work of Linsenmaier on Eurasian Chrysididae.

(A) イワタセイボウの学名

この種は初め *Chrysis (Holochrysis) austriaca* Fabricius として紹介された歯なし青蜂亜属のものであるが, その後これがカタツムリの空殻に営巣するツツハナバチ *Osmia orientalis* Benoist の巣に寄生することが渋谷寿夫氏によつて調べられた時, 標本が欧州に送られ, これが *austriaca* と全く異なる種であることが確かめられ (E. Enslin による), 同氏はこれを *Chrysis (Holochrysis)* sp. として扱っている (Mushi, XII (1), p. 41, 1936). その後これは新種として取扱われるようになり初め *iwata* Tosawa 後に *iwatai* Tosawa となつた. ところが私はこの青蜂が朝鮮・北支山西にも産し, その特徴が熱河から記載さ

れた *Chrysis davidi* Buysson, 1897 に一致することを知り、この学名を採用して今日に至った次第である。ところが極く最近スイスの Linsenmaier 氏は *davidi* を古くから欧州に知られている（しかし稀）*hirsta* Gerstäcker, 1869 の synonym とした (Mitt. Schweiz. Ent. Ges., XXXII (1), p. 79, 1959). 同氏は日本の標本も持っているはずであるから、直接の比較から結論したに違いなく、従つてわれわれは今後イワタセイボウに *Chrysis* (*Chrysura*) *hirsta* Gerstäcker, 1869 を用うべきであろう。

なお同氏は亜属名に *Chrysogona* Förster, 1853 を用いているが、これは Bischoff の Gen. Ins., 1913 の註から考えても賛成しがたいので、亜属名には *Chrysura* Dahlbom (= *Holochrysis*) を用いておくこととした。

(B) ホソセイボウの学名

ホソセイボウの synonymic relation は次のようであつた。

Chrysis (*Tetrachrysis*) *daphne* Uchida, 1927 (nec Smith).

Chrysis (*Tetrachrysis*) *rubrifasciata* Tsuneki, 1950.

Chrysis (*Chrysis*) *rubrifasciata* Tsuneki, 1957.

Chrysis rubrifasciata の記載の時に、私はこの種は *Chrysis galloisi* Buysson, 1908 の synonym ではないかと考え、synonym list の末尾に疑問符をつけて掲出したが、原著の文面からは明らかに違いがあるので、一応新種とし両者の区別点を列記しておいた。ところが Linsenmaier 氏は前記の論文の中で両者をはつきり synonym としておる。何もくわしいことは書いてないが、同氏が日本の *rubrifasciata* の標本をもっており、また同氏が常にやることから Museum de Paris の *galloisi* の標本と比較したことは想像に難くない。それで今後ホソセイボウについては *Chrysis* (*Chrysis*) *galloisi* Buysson, 1908 を使用すべきことになつた。

なお当初本種と誤られた *daphne* Smith が実は本邦に普通なムツバセイボウであることは私が推論し、かつ朝比奈正二郎氏に氏の滞英中特にタイプを検して確認して頂いてある (Tsuneki, 1954) ので、ここに付記しておく。

日本よりクロバエ科 2 種の発見

堀 克重・倉橋 弘

1. *Paradichosia scutellata* Senior-White (新称ケハラアカクロバエ)

後高山 (石川県) 1 ♂, 15, VIII. 1956; 笹ガ峯, 1 ♂, 24, VII. 1957; 最明寺山 (愛知県西尾市), 1 ♂, 9, V. 1957. 本種の type-locality はインドで、インド以外ではマラヤから知られている。

2. *Xanthotryxus mongol* Aldrich (新称クモトラフバエ)

段戸山 (愛知県) 2 ♂♂, 30, VII. 1958; 1 ♂, 29, VII. 1960; 1 ♀, 30, VII. 1960.

本種は 1930 年中国より新種として記載された。段戸山ではコガクの類 (ユキノシタ科) の花上で採集した。静止時の翅のたたみかたは *Strongyloneura* の類とは異り *Calliphora* 型である。