

CONTRIBUTION TO THE KNOWLEDGE  
OF THE CRABRONIDAE-FAUNA IN  
EASTERN ASIA. 1 (Hymenoptera)

By Keizô Yasumatsu

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**Crabro (Crabro) iridifrons Kohl**

- 1905 *Crabro iridifrons* Pérez, Bull. Mus. d'Hist. nat. Paris, III, 154, ♀ (Japan).  
1933 *Crabro iridifrons* Iwata, Trans. Kansai Ent. Soc., IV, 8 (Sikoku, Honsyū and Corea).  
1938 *Crabro (Crabro) iridifrons* Iwata, Ins. Mats., XII, 81, (Hokkaidō, Honsyū and Corea).

Specimens examined: 2 ♀♀, 17-23. ix. 1929, Hukuoka, Kyūsyū, K. Yasumatsu leg., 3 ♀♀, 7-10. ix. 1933, Sobosan, Bungo, Kyūsyū, K. Yasumatsu leg.

This species was hitherto recorded from Hokkaidō, Honsyū, Sikoku and Corea. This species is new to the fauna of Kyūsyū.

**Crabro (Crabro) chrysites Kohl**

- 1892 *Crabro chrysites* Kohl, Ann. k. k. naturhist. Hofmus., VI, 197, ♀ (Sikkim?).  
1915 *Crabro (Crabro) chrysites* Kohl, Ann. k. k. naturhist. Hofmus., XXIX, 46, ♀ (Formosa).  
1932 *Crabro (s. str.) chrysites* Gussakovskij, Arkiv för Zoologi, 24A, no. 10, 15 (Formosa and Ussuri).  
1933 *Crabro chrysites* Iwata, Trans. Kansai Ent. Soc., IV, 8 (Corea).

Specimens examined: 1 ♀, 14. vii. 1933, Gusuku, Sumiyō-mura, Amami-Ōsima, Prof. T. Esaki et K. Yasumatsu leg.; 1 ♀, 18. vii. 1933, Yakkati, Sumiyō-mura, Amami-Ōsima, Prof. T. Esaki et K. Yasumatsu leg.

This species was hitherto known from Formosa, Corea and the Ussuri

region. This is the first record of the species from Amami-Ōsima Island.

**Crabro (Crabro) konowii Kohl**

- 1905 *Crabro Konowii* Kohl, Zeitschr. f. Hym. u. Dipt., V, 218, ♂ (Tokyo).  
 1911 *Crabro (Thyreus) sapporensis* Matsumura, Thous. Ins. Jap., Suppl., III, 114, ♂ (Sapporo).  
 1915 *Crabro (Crabro) Konowii* Kohl, Ann. k. k. naturhist. Hofmus., XXIX, 41, ♂♀ (Tokyo, Kōhu and Sapporo).  
 1932 *Crabro* (s. str.) *konowii* Gussakovskij, Arkiv för Zoologi, 24A, no. 10, 15 (Japan, Ussuri and Transbaikal).  
 1933 *Crabro konowii* Iwata, Trans. Kansai Ent. Soc., IV, 7 (Saghalien, Hokkaidō and Honsyū).  
 1938 *Crabro (Crabro) konowii* Iwata, Ins. Mats., XII, 81 (Saghalien, Hokkaidō, Kuriles, Honsyū and Corea).

Specimens examined: 1 ♀, vi. 1940, Kaolintsu, A. S. Loukashkin leg., in the collection of Mr. Asahina; 1 ♀, 28. viii. 1940, Yablonia, Mr. S. Takagi leg.

This species was hitherto recorded from the Transbaikal region, the Ussuri region, Saghalien, Hokkaidō, Kuriles, Honsyū and Corea. This is the first record of the species from Manchuria.

**Crabro (Solenius) laevigatus (Destefani)**

- 1884 *Ectemnius laevigatus* Destefani, Natural. Sicil., III, 220, ♂.  
 1939 *Crabro (Solenius) laevigatus* Yasumatsu, Trans. Kansai Ent. Soc., IX, 15 (Hsinking).

Specimens examined: 1 ♀, 14. vii. 1933, Gusuku, Sumiyō-mura, Amami-Ōsima, Prof. T. Esaki et K. Yasumatsu leg.; 2 ♀♀, 7, 16, viii. 1940, Harbin, Manchuria, Mr. S. Asahina leg., in the collection of Mr. Asahina; 1 ♀, viii. 1937, Onseiri, Kōka Islet, Keiki-dō, Corea, Mr. M. Yamada don.

This species is new to the fauna of Corea and Amami-Ōsima Island. The species was hitherto known from South Europe, North Africa, Asia Minor, Turkestan, Caucasus, Baluchistan, India, Mongolia and North-west China.

**Crabro (Crossocerus) iwatai n. sp.**

♀. Black. Posterior margin of pronotum, humeral angles, anterior half of scutellum, the base of hind tibiae and two basal tarsal segments of all legs greyish-white. The remaining segments of tarsi, the apical portion of first and second tarsal segments and the tibial spurs of all legs brownish or pale brown in colour. Antennae brownish-black. Apex

of mandibles ferruginous black. Wings transparent but comparatively deeply infuscated with brownish-black, with nervures and stigmata brownish-black.

Body very shining. Punctures very fine and dense, those on head and abdomen much finer. Basal triangular area of propodeum impunctate. Pygidial area mat and not shining, with a few irregularly scattered punctures at the base. Pubescence very short and white, those on the horizontal area of front, vertex, mesonotum and second to fourth abdominal tergites mixed with much shorter and denser black ones.

Head, seen in front, slightly wider than long. Head, seen in profile, with temples very much developed and with eyes only slightly broader than temples. Ocelli put in a flattened triangle. Postocellar line very slightly longer than ocellular line. Head, seen from above, with the postocellar line about as long as the distance between posterior ocelli and the posterior margin of head. Minimum width of front about as long as the ocellular line. Antennal scape with a sharp longitudinal ridge in front. Third antennal segment shorter than fourth and about as long as wide, fourth and fifth slightly longer than wide and fourth slightly longer than fifth. Basal triangular area of propodeum not well defined but recognizable by the lack of hairs. Posterior slope of propodeum deeply excavated in the middle and with a longitudinal median furrow. The sides of propodeum well defined by a prominent longitudinal carina on each side from the upper and the posterior surfaces of it. Each carina with a short upward branch at the middle. First abdominal segment long, longer than second and about twice as long as broad at the apex. Second abdominal tergite much broader than long, third about twice as broad as long. Pygidial area divided into two lateral planes by a median longitudinal carina except the base.

Length: Head + thorax 3.5 mm. Abdomen 3.5 mm.

Fore wing 5.0 mm. Hind wing 3.2 mm.

Width: Head 2.0 mm. Thorax 1.8 mm.

Maximum width of abdomen 1.6 mm.

Habitat: Formosa.

Holotype: 1 ♀, 1. V. 1937, Kuaru, S. Formosa, Mr. K. Iwata leg.

This new species has a quite peculiar structure of the pygidial area. I do not know any near relative of the species.

*Crabro* (*Grossocerus*) *pacificus* Gussakovskij

1932 *Crabro* (*Grossocerus*) *pacificus* Gussakovskij, Arkiv för Zoologi, 24A, no. 10, 25, ♂ (Ussuri).

1938 *Crabro (Crossocerus) emarginatus* Iwata (nec Kohl), Ins. Mats., XII, 88 (Saghalien, Kaiba-tō).

Specimen examined: 1 ♂, 23. iv. 1929, Ambō, Yakusima Island, Mr. K. Takeuchi leg., in the collection of the Takeuchi Entomological Laboratory.

This species was hitherto known from the Ussuri region, Kaiba Island and Saghalien and is new to the fauna of Yakusima Island.

***Crabro (Crossocerus) denticrus* (Herrich-Schaeffer)**

1841 *Crossocerus denticrus* Herrich-Schaeffer, Fauna Ins. Germaniae, fasc. 181.

1933 *Crossocerus denticrus* Iwata, Trans. Kansai Ent. Soc., IV, 13 (Kyōto).  
Specimen examined: 1 ♀, 27. vii. 1939, Mozan, Kankyō-hoku-dō, Corea, Mr. T. Hirao leg.

This species was hitherto known from Algeria, Europe, N. Manchuria and Japan proper (Honsyū) and is new to the fauna of Corea.

***Crabro (Entomognathus) argentatus* (Lepeletier)**

1834 *Lindenius argentatus* Lepeletier, Ann. Soc. Ent. France, III, 792 (India).

Specimens examined: 1 ♂ 1 ♀, 25. vii. 1938, Tienmushan, Chekiang, China, Mr. Y. Ouchi leg.

This species was hitherto recorded from India and is new to the fauna of China.

***Crabro (Cuphopterus) flavopictus* Smith**

1856 *Crabro flavo-pictus* Smith, Cat. Hym. Ins. Brit. Mus., IV, 391, ♀ (Northern India).

Specimen examined: 1 ♀, 18. vii. 1938, Tienmushan, Chekiang, China, Mr. Y. Ouchi leg.

This species was hitherto known from Northern India. Tienmushan comes as the easternmost limit of its distribution.

***Crabro (Ceratocolus) quadriceps* Bingham**

1879 *Crabro quadriceps* Bingham, Faun. Brit. India, I, 327, ♀ (North-west India).

1939 *Crabro (Ceratocolus) quadriceps* Yasumatsu, Mushi, XII, 153, ♂ (Palau Islands).

Specimens examined: 1 ♂, 29. vii. 1938, Tienmushan, Chekiang, China, Mr. Y. Ouchi leg.; 1 ♂, 20. vii. 1932, Pianan-anbu-Sikikun, Taihoku-syū, Formosa, Prof. T. Esaki leg.; 1 ♀, 24. x. 1932, Taiheizan, Taihoku-syū, Formosa, Prof. T. Esaki leg.; 1 ♀, 13. x. 1925, Arisan,

Tainan-syū, Formosa, Prof. S. Issiki leg.

The species was hitherto known from North-west India and the Palau Islands. This is the first record of the species from China and Formosa.

*Crabro* (*Ceratocolus*) *esakii* n. sp.

♀. Black. Antennal scape, outer surface of fore tibia, basal half of the outer surface of mid- and hind tibiae, two oval markings on the sides of second and third abdominal tergites and the central portion of fifth tergite yellow. Apical half of mandibles ferruginous. Antennal flagellum brownish-black. Tegulae pale brownish. Tibiae, tibial spurs and tarsi brown to pale brown. Wings transparent, slightly clouded with yellowish-brown, nervures and stigmata brownish.

Pubescence greyish-white and moderately dense. Pubescence on clypeus and on the sides of the lower part of front silvery. Punctures on front anterior to ocelli and vertex dense but very shallow. The sides of vertex and temples almost impunctate. Mesonotum, scutellum and postscutellum with dense, well defined, comparatively small, deep punctures. Mesopleura adorned with much smaller ones. Metapleura, propodeum and abdominal tergites almost impunctate and very shining. The sides of the caudal area of propodeum with some small punctures as well as transverse wrinkles. Sixth abdominal tergite with some strong punctures along the margins of the pygidial area. Second sternite very coarsely and minutely punctured. The postero-lateral portions of third to fifth sternites with very small and dense punctures. Apical half of sixth sternite with very dense small punctures.

Head, seen in front, much wider than long. Postocellar line distinctly shorter than oculocellar line which is as long as the distance between posterior ocelli and the posterior margin of head seen from above. Head, seen in profile, with temples well developed but very much narrower than eyes. Third antennal segment as long as fourth and fifth segments taken together, three times as long as broad at the apex. Fourth and the two following segments are of equal length, and each segment slightly longer than wide. Scutellum about twice as broad as long, about three-times as long as postscutellum. Basal triangular area of propodeum large (its length slightly shorter than the length of the caudal area of propodeum) with a median, longitudinal, transversely costate furrow and well defined or surrounded by a costate furrow throughout. Medio-basal portion of the caudal area of propodeum excavated and with a deeply impressed longitudinal line. First abdomi-

Tainan-syū, Formosa, Prof. S. Issiki leg.

The species was hitherto known from North-west India and the Palau Islands. This is the first record of the species from China and Formosa.

*Crabro* (*Ceratocolus*) *esakii* n. sp.

♀. Black. Antennal scape, outer surface of fore tibia, basal half of the outer surface of mid- and hind tibiae, two oval markings on the sides of second and third abdominal tergites and the central portion of fifth tergite yellow. Apical half of mandibles ferruginous. Antennal flagellum brownish-black. Tegulae pale brownish. Tibiae, tibial spurs and tarsi brown to pale brown. Wings transparent, slightly clouded with yellowish-brown, nervures and stigmata brownish.

Pubescence greyish-white and moderately dense. Pubescence on clypeus and on the sides of the lower part of front silvery. Punctures on front anterior to ocelli and vertex dense but very shallow. The sides of vertex and temples almost impunctate. Mesonotum, scutellum and postscutellum with dense, well defined, comparatively small, deep punctures. Mesopleura adorned with much smaller ones. Metapleura, propodeum and abdominal tergites almost impunctate and very shining. The sides of the caudal area of propodeum with some small punctures as well as transverse wrinkles. Sixth abdominal tergite with some strong punctures along the margins of the pygidial area. Second sternite very coarsely and minutely punctured. The postero-lateral portions of third to fifth sternites with very small and dense punctures. Apical half of sixth sternite with very dense small punctures.

Head, seen in front, much wider than long. Postocellar line distinctly shorter than oculocellar line which is as long as the distance between posterior ocelli and the posterior margin of head seen from above. Head, seen in profile, with temples well developed but very much narrower than eyes. Third antennal segment as long as fourth and fifth segments taken together, three times as long as broad at the apex. Fourth and the two following segments are of equal length, and each segment slightly longer than wide. Scutellum about twice as broad as long, about three-times as long as postscutellum. Basal triangular area of propodeum large (its length slightly shorter than the length of the caudal area of propodeum) with a median, longitudinal, transversely costate furrow and well defined or surrounded by a costate furrow throughout. Medio-basal portion of the caudal area of propodeum excavated and with a deeply impressed longitudinal line. First abdomi-

nal tergite longer than wide at the apex, shorter than second and third tergites taken together. Second and third tergites slightly more than twice as broad as long. Pygidial area very much shining, very narrow, narrowing apically, with a short median longitudinal carina and several scattered punctures at the base.

Length: Head + thorax 5.5 mm. Abdomen 5.1 mm.

Fore wing 7.5 mm. Hind wing 5.6 mm.

Width: Head 3.0 mm. Thorax 2.8 mm.

Maximum width of abdomen 2.4 mm.

Habitat: Japan (Honsyū).

Holotype: 1 ♀, 18. x. 1935, Nagaoka, Etigo, Honsyū, Japan, Prof. T. Esaki leg.

I am unaware of a near relative of this Crabronid.

#### Explanation of Plate 2

Fig. A. *Crabro* (*Ceratocolus*) *esakii* n. sp., ♀.

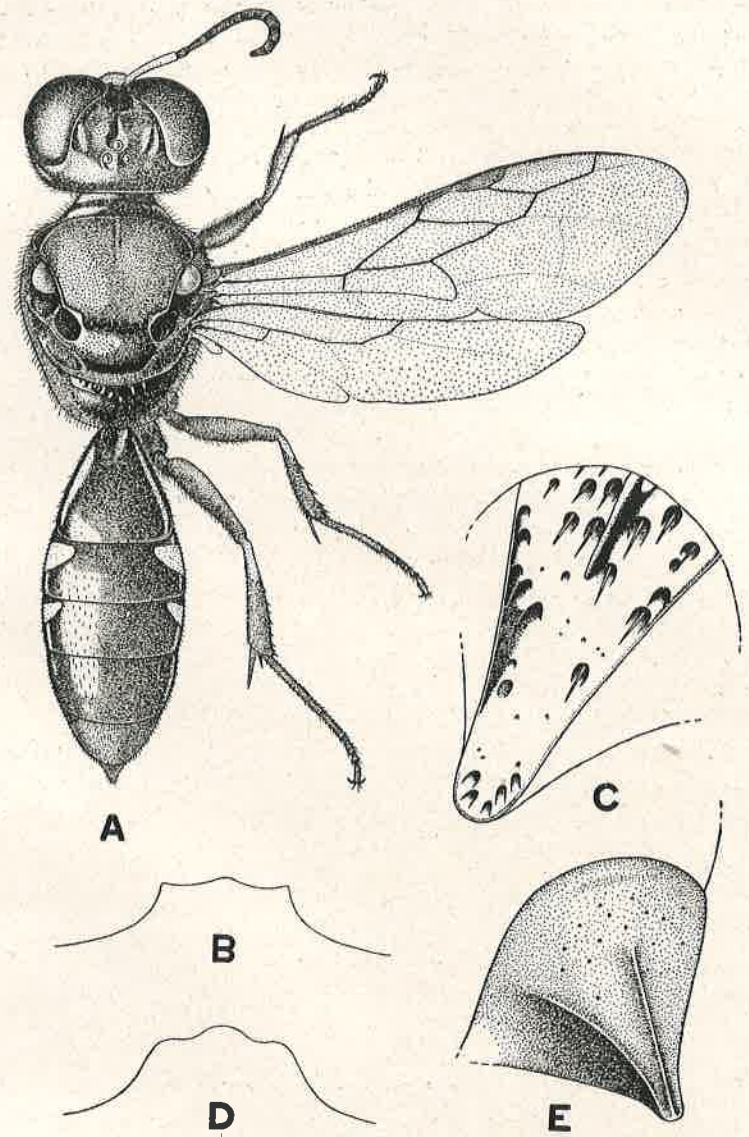
Fig. B. Anterior margin of clypeus of the same species.

Fig. C. Pygidial area of the same species.

Fig. D. Anterior margin of clypeus of *Crabro* (*Crossocerus*) *iwatai* n. sp., ♀.

Fig. E. Pygidial area of the same species.





Crabronidae of Eastern Asia. 1.