

Notes ent. chinoise, X. 1943-46

YASUMATSU

DUPLICATE

NOTES ON SOME EAST ASIATIC SPHECOIDEA
IN THE COLLECTION OF THE MUSEE HEUDE

By

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The Sphecoidea of Eastern Asia have been studied during recent years by many Hymenopterologists. However, it is quite evident that much is yet to be known of the fauna. In the present report I record fourteen new or little known wasps of the Genera, *Mellinus*, *Gorytes*, *Nysson* and *Passaloecus* from Inner Mongolia, China and Indo-China. All the materials are preserved in the collection of the Musée Heude, Shanghai.

I wish to express my hearty gratitude to the Reverend Father Octave Piel and the Reverend Father B. Becquart for the opportunity of studying a very interesting series of Sphecoidea in the collection of the museum mentioned above. My hearty thanks are also due to Professor Teiso Esaki for his kind guidance rendered in the course of the present study.

Genus *MELLINUS* Fabricius

Skript. naturh. Selsk. Kjöbenhavn, I, 226, 1790.

Type: *Crabro sabulosus* Fabricius, 1787.

Mellinus obscurus Handlirsch

1887 *Mellinus obscurus* Handlirsch, Sitzber. Akad. Wiss. Wien, XCVI, 228, ♀.

1897 *Mellinus obscurus* Dalla Torre, Cat. Hym., VIII, 561.

1939 *Mellinus obscurus* Maidl et Klima, Hym. Cat. VIII, 39.

1 ♀, vi. 1931, Hopei, China, François leg.;
1 ♀, 8. vii. 1937, 1 ♂, 12. vii. 1937, 1 ♂, 13. vii. 1937,
Yangkiaping, Chahar, Inner Mongolia, O. Piel leg.

♂ (previously undescribed). Anterior margin of clypeus, lower inner orbits of eyes, a spot at the base of mandibles, antennal scape in front, posterior margin of pronotum (interrupted in the middle), anterior portion of tegulae, a spot at the base of scutellum, a pair of markings on the third abdominal tergite yellowish-white. Antennae not so slender as in the female. Third antennal segment about twice as long as the second, and almost as long as each of the following segments. Fourth to twelfth segments longer than broad, shorter than twice the width of the apex. Length of body about 9 mm. Length of fore wings about 7 mm. Described from a single male specimen mentioned above.

This species was hitherto known only from Korea and is new to the fauna of North China and Inner Mongolia.

When I published my short paper on the Japanese *Mellinus tristis* Pérez, I had before me not a single specimen of *Mellinus obscurus* Handlirsch and could not compare these two species. The present investigation shows that *tristis* may be regarded as a subspecies of *obscurus*. The difference of both the forms is seen in the punctuation on the vertex of the head and on the second abdominal tergite. In *obscurus* the punctures on the vertex are comparatively strong and separated, while they are somewhat weaker and denser in *tristis*. The difference in the punctuation on the second abdominal tergite is given in the following key.

There occur three forms of the Genus *Mellinus* Fabricius in Eastern Asia. They may be distinguished from one another by the following key.

1. Body variegated with yellow or yellowish-white. Third abdominal tergite with a pair of yellow or yellowish-white markings. Antennal flagellum, femora and tibiae almost black.....2.
- Body variegated with yellowish-white and red (or brownish). Second and third abdominal tergites each with a pair of yellowish-white markings.

Fifth (♀) or sixth (♂) abdominal tergites with a yellowish-white band. Antennal flagellum brownish (♂) or reddish (♀). Femora and tibiae almost red. Mongolia.....
Mellinus sabulosus (Fabricius, 1787).

2. Second abdominal tergite distinctly punctured. Inner Mongolia, North China and Korea.....
Mellinus obscurus obscurus Handlirsch, 1887.

— Second abdominal tergite very feebly punctured or almost impunctate. Japan proper.....
Mellinus obscurus tristis Pérez, 1905.

Genus GORYTES Latreille

N. Diet. Hist. nat., XXIV, Tabl. méth., 180, 1804.

Type: *Sphex mystacea* Linné, 1761.

Gorytes (Gorytes) tonkinensis sp. nov.

♀. Black. A pair of markings on clypeus, posterior margin of pronotum, humeral angles, postscutellum, a stripe on fore tibiae, a band along the posterior margin of the tergites 1-4 yellow. Antennae brownish-black. Middle portion of mandibles dark ferruginous. Tibiae and tarsi somewhat brownish. Tibial spurs pale brownish or yellowish-brown. Posterior margin of each tergite somewhat membranous. Tegulae ferruginous. Wings transparent, very slightly clouded, upper part of cubital cells and radial cell of fore wings brownish. Nervures brownish-black. Stigmata reddish-brown.

Pubescence very short, those on head and the sides of thorax silvery, those on the dorsum of thorax and abdomen somewhat yellowish-brown.

Head as long as broad. Inner margins of eyes slightly converging below. Clypeus much broader than long, very slightly convex, with the anterior free portion very short and narrowly truncate at the middle of the margin. Head, seen

in profile, with temples slightly narrower than eyes, very well developed. Head, seen from above, slightly narrower than thorax, temples very much swollen. Vertex very wide. Ocelli situated in a flattened triangle. Postocellar line very slightly longer than oculo-ocellar line. Postocellar line shorter than the distance between posterior ocelli and the posterior margin of vertex. Vertex with a transverse, narrowly depressed line behind the postocellar line. Third antennal segment as long as scape, more than twice as long as second segment, about twice as long as broad at the apex. Fourth and the following segments almost of the same length and much longer than wide. Mesonotum short, about twice as broad as long, as long as head or scutellum, postscutellum and propodeum taken together. Thorax, seen from above, as long as broad, widest at mesothorax. The sides of mesonotum strikingly depressed. Scutellum about twice as broad as long, about three-times as long as postscutellum. Propodeum short, with a very short basal oblique area and a very large vertical or caudal area, and with the sides rounded. First abdominal tergite, seen from above, cup-shaped, much broader than long, very slightly narrower than head. Second tergite the widest, about twice as broad as long, its sides gently diverging posteriorly. The base of second sternite very much produced as usual in many of the *Gorytes*-species. Pygidial area narrow and long, tongue-shaped.

Clypeus and mesonotum very densely and irregularly punctured, and the punctures are so confluent that the surface is somewhat rugose and not shining. Vertex and scutellum slightly coarsely punctured, but the diameter of a puncture is larger than the distance between two punctures. Scutellum with an excavated spot at the middle portion along the posterior margin. Scutellomesonotal suture well pronounced especially at the sides and longitudinally costate. Propodeum largely reticulate, caudal area with many striae which are running unto the medio-apical portion of pro-

podium, the sides of propodeum with some longitudinal striae. Mesopleura densely and largely punctured, with some longitudinal striae. First abdominal tergite minutely but densely and distinctly punctured. Second sternite bipunctate, large punctures are very coarsely and irregularly scattered. Third and the following sternites also bipunctate, the posterior margin with a row of large punctures. Pygidial area and hypopygium with a row of large and somewhat confluent punctures along the margin.

Measurements

- Length: Head 2 mm. Thorax 4 mm.
 Abdominal segments (I+II) 3.5 mm.
 Fore wing 8.5 mm. Hind wing 6.5 mm.
- Width: Head 2.9 mm. Thorax 3.3 mm.
 2nd abdominal tergite 3.1 mm.
- Holotype: 1, ♀ Hoa-Sinh, Tonkin, Indo-China, A. de Cooman leg.
- Habitat: Indo-China.

I am unaware of a near relative of the species in the Palaearctic and Oriental fauna.

Subg. AMMATOMUS Costa

Fauna Regn. Napoli Nyssonid., 36, 1859.

Type: *Hoplisus coarctatus* Spinola, 1808.

Gorytes (Ammatomus) rogenhoferi Handlirsch

- 1888 *Gorytes Rogenhoferi* Handlirsch, Sitzber. Akad. Wiss. Wien, XCVII, 338, 544, 548,
- 1895 *Gorytes Rogenhoferi* Handlirsch, Sitzber. Akad. Wiss. Wien, CIV, 851, 1019.
- 1897 *Gorytes rogenhoferi* Dalla Torre, Cat. Hym., VIII, 553.
- 1921 *Gorytes rogenhoferi* Maidl, Ann. Mus. Wien, XXXIV, 71.
- 1939 *Gorytes (Ammatomus) rogenhoferi* Maidl et Klima, Hym. Cat., VIII, 63.

1♂, 6. viii. 1933, Ihing, Kiangsu, China, O. Piel leg.

I give some noteworthy characters for the species in the following lines.

♂. Eyes very much developed. Temples very narrow or short. Postocellar line about twice as long as oculo-ocellar line, the latter as long as the distance between fore ocellus and the posterior ocelli. Postocellar line slightly longer than the minimum width of front. Antennae clavate. Third segment very long and slender, almost as long as scape. Each of the flagellar segments (seventh to eleventh) wider than long. Pronotum depressed below the level of mesonotum and almost invisible from above. Propodeum rounded, sculptures and the basal triangular area entirely absent. Hind tarsi very long. Relative length of the segments of hind legs—femur: tibia: first tarsal segment: 2nd: 3rd: 4th: 5th = 47: 38: 25: 17: 14: 10: 11.

This species was hitherto known from Greece, Asia Minor, Caucasus, Armenia, Albania and Astrakhan. The occurrence of the present species in the Far East is of extreme interest.

Gorytes (Ammatomus) sinensis sp. nov.

♂. Black and shining. Lower inner margins of eyes, supratylopeal area, clypeus, base of mandibles, antennal scape in front, posterior margin of pronotum, humeral angles, the sides of mesonotum, a band on the posterior margin of scutellum, a band on the posterior margin of first and second abdominal tergites (somewhat constricted or narrowed at the middle) yellow or somewhat orange-yellow. Antennal flagellum and legs brownish-black. Tegulae brownish. Spines, spurs and claws of all legs yellowish-grey. Wings transparent, slightly clouded with pale brownish-orange-yellow. Anterior margin of fore wings slightly darker. Stigmata orange-yellow, nervures brown to orange-brown.

Pubescence yellowish-grey, rich and comparatively long, those on clypeus mixed with silvery ones, those on abdomen somewhat brownish. The pubescence on the posterior margin of the posterior abdominal segments somewhat fringe-like.

Head, seen in front, much wider than long, eyes very large, about as wide as front. Inner margins of eyes distinctly converging below. Clypeus very slightly swollen, much wider than long, less than twice as broad as long, with the anterior margin somewhat straight except the sides. Front with a short median longitudinal carina just above the insertions of antennae. Head, seen in profile, with eyes about twice as broad as temple. Head, seen from above, slightly narrower than twice the length, with temples steeply converging posteriorly. Ocelli put in a flattened triangle, postocellar line very slightly longer than oculo-ocellar line or about as long as the distance between posterior ocelli and the posterior margin of vertex. Vertex distinctly and transversely depressed just behind the posterior ocelli. Relative length of the segments of antenna—I: II: III: IV: V: VI: VII: VIII: IX: X: XI: XII: XIII = 11: 3: 12: 10: 8: 7: 7: 6: 6: 6: 5: 5: 6:. Scape about twice as long as broad. Second segment about as long as broad. Third about four-times as long as broad, fourth more than three-times as long as broad, fifth to seventh more than twice as long as broad, eighth to twelfth longer than wide, thirteenth about twice as long as broad at the base. Tenth to thirteenth segments somewhat excavated on one side. The excavation of tenth segment very prominent. Mesonotum wider than long, about as long as first abdominal tergite, with two pairs of longitudinal impressed lines on the anterior margin, and its sides distinctly depressed. Scutello-mesonotal suture distinct but feebly costate. Scutellum about twice as broad as long, about twice as long as postscutellum. Propodeum rounded, with the basal area very large. Median longitudinal line on the vertical or caudal surface of propodeum very distinct.

First abdominal tergite shorter than second tergite, with the sides straight and distinctly diverging posteriorly, its apex about three-times as broad as its base. Second to fifth tergites slightly but distinctly constricted at the basal portion. Second tergite much wider than long.

Punctures very fine and coarse. Metapleura and the basal half of third to fifth abdominal tergites almost impunctate. Punctures on second abdominal sternite coarse but very strong and large. Third to sixth sternites dull and with fine punctures only at the sides of the posterior portion. Basal area of propodeum with many distinct longitudinal carinae. Some median carinae not arriving at the apex of the area.

Measurements

Length: Head 1.2 mm. Thorax 3.2 mm.
Abdominal segments (I + II) 3.5 mm.
Fore wing 9 mm. Hind wing 6 mm.

Width: Head 2.2 mm. Thorax 2.7 mm.
1st abdominal tergite 1 mm.
2nd abdominal tergite 2.4 mm.

♀. Antennae, clypeus, tegulae, the sides of first abdominal tergite, posterior margin (very narrow) of third to fifth segments, sixth segment except the base ferruginous. Legs variegated with ferruginous or bright brown.

Inner margins of eyes almost parallel or very slightly converging below. Clypeus more than twice as broad as long. Head, seen in profile, with eyes much broader than temples, but less than twice the width of temples. Relative length of the segments of antenna — I: II: III: IV: V: VI: VII: VIII: IX: X: XI: XII: = 18: 4: 20: 13: 13: 12: 10: 9: 8: 8: 6: 8. Scape about three-times as long as broad. Second segment about as long as broad, third more than six-times as long as broad, fourth and fifth about four-times as long as broad, sixth more than twice as long as broad, seventh to eleventh about twice as long as broad, twelfth

about three-times as long as broad. Mesonotum much shorter than first abdominal tergite. Scutellum less than twice as long as postscutellum. Pygidial area long and tongue-shaped. Basitarsus of fore legs with three outer spines which are about as long as the width of basitarsus.

Mesonotum almost impunctate seen in certain aspect or very minutely and densely punctured. Pygidial area with somewhat dense punctures and short irregular longitudinal striae. Posterior margin of third to fourth sternites and almost entire surface of fifth sternite with dense, strong, large punctures.

Measurements

- Length: Head 1.6 mm. Thorax 4.5 mm.
Abdominal segments (I + II) 4.6 mm.
Fore wing 11.8 mm. Hind wing 8.2 mm.
- Width: Head 3 mm. Thorax 3.5 mm.
1st abdominal tergite 2 mm.
2nd abdominal tergite 3 mm.
- Holotype: 1♂, 3. viii. 1935, Kuling, Kiangsi, China, O. Piel leg.
- Allotype: 1♀, 18. ix. 1934, Kuling, Kiangsi, China, O. Piel leg.
- Paratypes: 1♀, 29. vii. 1918, 1♀, 6. vii. 1935, 1♂, 24. vii. 1935, 2♂♂ 1♀, 3. viii. 1935, 1♂, 10. viii. 1935, 1♀, 13. viii. 1935, 1♀ 1♂ 16. ix. 1934, 1♂ 2♀♀, 18. ix. 1934, Kuling, Kiangsi, China, O. Piel leg., 1♀, 26. vi. 1936, Chusan Islands, Chekiang, China, O. Piel leg.; 1♀, 23. vi. 1936, Tienmushan, Chekiang, China, O. Piel leg.
- Habitat: E. China.

I am unaware of a near relative of the present species in the Palaearctic and Oriental fauna. A specimen from the Chusan Islands has a pair of yellow markings on the sides of propodeum (along the basal area) and a yellow band on the posterior margin of the fourth abdominal tergite.

Subg. LESTIPHORUS Lepeletier

Ann. Sc. ent. France, I, 56, 68, 1832.

Type: *Crabro bicinctus* Rossi, 1792.*Gorytes (Lestiphorus) peregrinus* sp. nov.

♂. Black and shining. Labrum yellowish-grey. Apex of antennal scape in front and the base of the third antennal segment somewhat yellowish-brown. Inner margin of eyes very narrowly yellowish. Apical half of mandibles ferruginous. Tegulae brownish. Legs somewhat brownish-black. Second abdominal tergite with a pair of small yellowish markings along the posterior margin. Wings transparent, slightly clouded, radial and the three basal cubital cells of fore wings strongly clouded with brown as shown in the figure. Nervures brownish or brownish-black, stigmata yellowish-brown.

Pubescence very short, silvery, very feebly pronounced on abdomen.

Head, seen in front, slightly wider than long. Inner margins of eyes almost parallel to each other or very slightly converging below. Front slightly less than twice the width of an eye. Clypeus much wider than long, very slightly convex and its anterior margin rounded. Head, seen in profile, with eyes less than twice as broad as temples. Head, seen from above, slightly narrower than thorax, about twice as broad as long. Temples not swollen. Ocelli situated in a flattened triangle, postocellar line very slightly longer than oculo-ocellar line. Postocellar line as long as the distance between posterior ocelli and the posterior margin of vertex. Relative length of the segments of antenna—I: II: III: IV: V: VI: VII: VIII: IX: X: XI: XII: XIII: = 10: 3: 12: 11: 11: 10: 10: 8: 7: 7: 5: 5: 7. Second segment slightly wider than long, third about three-times as long as broad at the apex, fourth to sixth less than twice as long as broad at the apex, seventh to ninth about twice as long as broad at the apex, tenth to twelfth longer than broad, apical

segment slender, gradually narrowing apically, about three-times as long as broad at the base. Mesonotum wider than long, with the sides depressed narrowly, with four distinct carinae at the anterior portion and two short carinae along the sides. Scutellum twice as broad as long, slightly more than twice the length of postscutellum. Propodeum, seen from above, about as long as scutellum and postscutellum taken together. Surface of propodeum gently rounded. First abdominal segment very long, slender and clavate, about as long as hind femora, slightly shorter than the width of head, about three-times as long as broad at the base and shorter than twice the width at the sides gently diverging posteriorly. First segment, seen in profile, with the dorsum very much swollen and the ventral surface slightly excavated. Second abdominal tergite slightly longer than wide, with the base very much constricted and narrower than the apex of first tergite. Second sternite gently convex.

Almost impunctate. Clypeus with very coarse and weak punctures. Front with some very coarsely scattered and minute granules. Mesonotum with distinct carinae. Scutello-mesonotal suture well pronounced and longitudinally costate. Posterior half of scutellum and postscutellum with longitudinal carinae. Propodeum with many distinct longitudinal carinae and some transverse carinae. The sides and the posterior slope of propodeum reticulate. Mesopleura with some longitudinal carinae. Second and the following abdominal sternites with some very coarse punctures.

Measurements

- Length: Head 1.5 mm. Thorax 4 mm.
Abdominal segments (I + II) 4.6 mm.
Fore wing 9.0 mm. Hind wing 7.0 mm.
- Width: Head 2.9 mm. Thorax 3.1 mm.
1st abdominal tergite 1.5 mm.
2nd abdominal tergite 2.9 mm.

♀. Posterior margin of pronotum and a posterior band on the second abdominal tergite yellow. Basal portion of mandibles greyish-yellow (the base brownish-black). Apical portion of mandibles ferruginous. Antennal scape, underside of the second to fourth antennal segments, the sides of mesonotum (depressed portion), tegulae, fore and mid-legs bright ferruginous. Upper margin of humeral angles ferruginous black. Antennae somewhat brownish-black. Coxae and trochanters of all legs, basal part of fore and mid-femora, upper surface of fore and mid-tibiae and tarsi, apical tarsal segment brownish-black. Hind tibiae and tarsi almost black. Spines, spurs and claws of all legs brownish.

Head, seen in profile, with temples slightly narrower than eyes. Relative length of the segments of antenna: I: II: III: IV: V: VI: VII: VIII: IX: X: XI: XII = 15: 4: 20: 15: 13: 11: 19: 8: 7: 7: 7: 8. Third segment very long, slender, about five-times as long as broad at the apex, fourth about four-times as long as broad at apex. Pygidial area triangular with the apex rounded, and with scattered punctures. Outer margin of fore metatarsi with four spines which are larger than the width of metatarsus.

Mesonotum much more densely carinate. Carinae on mesopleura much denser.

Measurements

Length: Head 1.6 mm. Thorax 4.6 mm.
Abdominal segments (I + II) 4.6 mm.
Fore wing 10.6 mm. Hind wing 8 mm.

Width: Head 3.1 mm. Thorax 3.6 mm.
1st abdominal tergite 1.5 mm.
2nd abdominal tergite 3.1 mm.

Holotype: 1♂, 27. viii. 1936, Peking, N. China, O. Piel leg.

Allotype: ♀, 28. viii. 1936, the same as above.

Habitat: N. China.

I am unaware of a near relative of this peculiar species in the Palaearctic region.

Gorytes (Lestiphorus) becquarti sp. nov.

♂. Black and shining. Antennal scape in front, lower inner margins of eyes yellow. Posterior margin of pronotum, a pair of small markings on the postero-lateral angles of first abdominal tergite and a broad posterior band on second tergite orange-yellow. Antennae brownish with the upper surface much more darkened. Apical half of mandibles and humeral angles ferruginous. Legs brownish-black variegated with orange-brown. Coxae, trochanters and hind tarsi black. Posterior margin of first and second abdominal sternites pale brownish. Wings transparent and clouded. Anterior half of fore wings distinctly clouded with pale brown. Nervures brownish-black, costal cell and stigmata orange-brown.

Pubescence short, pale yellowish, not extremely dense.

Head, seen in front, much wider than long. Inner margins of eyes almost parallel to each other. Front very lightly excavated, with a distinct, short, median, longitudinal carina just above the insertions of antennae. Clypeus moderately convex with the anterior margin gently rounded, slightly less than twice as broad as long. Head, seen in profile, with eyes very much broader than temples. Head, seen from above, with temples straight and steeply narrowing posteriorly, about twice as broad as long. Ocelli put in a rectangular triangle, postocellar line slightly longer than oculo-ocellar line. Postocellar line much shorter than the distance between posterior ocelli and the posterior margin of head. Relating length of the segments of antenna—I: II: III: IV: V: VI: VII: VIII: IX: X: XI: XII: XIII: = 12: 3: 18: 15: 14: 11: 9: 9: 8: 7: 7: 6; 7. First segment very much longer than wide, but shorter than twice the width. Second segment slightly broader than long. Third about five-times as long as broad, fourth almost four-times as long as broad, fifth almost three-times

as long as broad, sixth about twice as long as broad, seventh to twelfth longer than broad, thirteenth about twice as long as broad. Five to ninth segments each with a rudiment of a tubercle on the inferior margin. Anterior margin of mesonotum gently rounded, less than twice as broad as long, with the sides not distinctly depressed and a pair of short longitudinal carinae on the anterior margin. Scutellum about twice as broad as long, about twice as long as post-scutellum. Scutello-mesonotal suture distinct and costate. Propodeum gently rounded. First abdominal tergite slightly longer than mesonotum with the sides gradually diverging posteriorly, the postero-lateral angles rounded, apex about twice as broad as the base, about as long as second, third and fourth tarsal segments of hind legs taken together. Second tergite cup-shaped with the base very much constricted, slightly broader than long. Apex of eighth sternite with two long, very sharply pointed prolongations.

Head somewhat shallowly and coarsely punctured. Temples and occiput almost impunctate. Mesonotum with dense, irregularly shaped punctures. Scutellum and postscutellum with several punctures and some longitudinal striae. Mesopleura with well separated large punctures and some longitudinal wrinkles. Propodeum with very dense large punctures or somewhat reticulated, with the basal triangular area longitudinally carinate. Central portion of the surface of propodeum excavated. Abdomen with very much coarsely scattered small punctures.

Measurements

Length:	Head 1.5 mm. Thorax 4 mm. Abdominal segments (I + II) 4.5 mm. Fore wing 9 mm. Hind wing 7 mm.
Width:	Head 2.9 mm. Thorax 3.0 mm. 1st abdominal tergite 1.4 mm. 2nd abdominal tergite 2.6 mm.

Holotype: 1♂, 20. vii. 1934, Kuling, Kiangsi, China,
O. Piel leg.

Habitat: E. China.

I am not aware of a near relative of the present species
in the Palaearctic region.

Subg. HOPLISUS Lepeletier

Ann. Soc. ent. France, I, 56, 61, 1832.

Type: *Mellinus quinquecinctus* Fabricius, 1793.

Gorytes (Hoplisus) pيلي sp. nov.

♀. Black with the following portions yellow or orange-yellow: clypeus, inner margins of eyes, lower part of front, mandibles antennae except the brownish upper surface of the flagellar segments, posterior margin of pronotum, humeral angles, the sides of mesonotum, a pair of small markings on the sides of propodeum, all legs (coxae, trochanters and femora variegated with black), a band along the posterior margin of the abdominal tergites I-V pygidial area, the postero-lateral angles of second to fourth sternites, apex of sixth sternite. Tegulae and the narrowly depressed sides of mesonotum membranous and pale brownish. Wings transparent, pale orange-yellowish, with nervures and stigmata yellowish-orange or yellowish-brown.

Pubescence silvery but not well developed.

Head, seen in front, slightly wider than long. Inner margins of eyes very much convergent below. Clypeus about twice as broad as long, moderately swollen with the anterior margin almost straight. Front with a distinct median longitudinal furrow except the posterior portion. Head, seen in profile, with eyes slightly broader than temples. Head, seen from above, about twice as broad as long, with temples slightly swollen. Ocelli situated in a flattened triangle, postocellar line about as long as oculo-ocellar line or the distance between posterior ocelli and the posterior margin of vertex. Relative length of the segments of

antenna—I: II: III: IV: V: VI: VII: VIII: IX: X: XI: XII = 11: 3: 12: 9: 9: 7: 7: 7: 6: 5: 5: 7. Third segment three to four-times as long as broad at the apex, fourth and fifth about twice as long as broad, sixth to ninth as well as twelfth longer than broad, tenth and eleventh about as long as broad. Mesonotum slightly wider than long, distinctly shorter than scutellum, postscutellum and propodeum put together. Scutellum as broad as long, more than twice as long as postscutellum. Propodeum gently rounded. Outer margin of fore metatarsus with two long spines which are slightly longer than the width of metatarsus. Apical spines of the tarsal segments of all the legs very long, more than or as long as second and third segments taken together. First abdominal segment, seen from above, with the sides straight and very diverging posteriorly, with the base slightly narrower than the length of mid-metatarsus, with the apex about as broad as the base of propodeum. Posterior margin of the same segment gently rounded. Second tergite about as long as first tergite, broader than long, almost as broad as head. Pygidial area acutely triangular, with the apex somewhat pointed.

Punctures very feebly recognizable. Clypeus with some very indefinite punctures and a distinct small hole just anterior to the central portion. Punctures on front very minute and coarsely scattered, those on mesonotum and scutellum very much scattered, but each puncture is much larger. Postscutellum, meso- and metapleura impunctate. Propodeum reticulate with the basal triangular area longitudinally carinate. Abdomen almost impunctate. Punctures on pygidial area very coarse.

Measurements

Length: Head 1.6 mm. Thorax 4 mm.
Abdominal segments (I + II) 3.5 mm.
Fore wing 8.2 mm. Hind wing 6.5 mm.

Width: Head 2.9 mm. Thorax 3 mm.
1st abdominal tergite 1.9 mm.
2nd abdominal tergite 2.9 mm.

Holotype: 1 ♀, 12. vii. 1937, Yangkiaping, Chahar,
Inner Mongolia, O. Piel leg.

Habitat: Inner Mongolia.

This new species is closely related to *Gorytes* (*Hoplisus*) *quinquecinctus* (Fabricius, 1793), but the latter has the pygidial area very minutely and longitudinally striated. The present species is also allied to *Gorytes* (*Hoplisus*) *maculicornis* (Morawitz, 1889), but the latter has the sides of the propodeum without any sculpture.

Gorytes (*Hoplisus*) *kulingensis* sp. nov.

♀. Very similar to *Gorytes* (*Hoplisus*) *pielii* m., but differs in the following points.

Supraclypeal area black. Posterior half of scutellum orange-yellow. Sixth tergite brownish-black with the base pale brownish. Sixth sternite ferruginous. Tibiae and tarsi of all legs variegated with brownish-black.

Pubescence much more developed, greyish-yellow, those on propodeum long. Clypeus covered with some long hairs.

Front with a median longitudinal furrow. Relative length of the segments of antenna—I: II: III: IV: V: VI: VII: VIII: IX: X: XI; XII = 15: 4: 15: 14: 12: 11; 10: 10: 10: 9: 10. Third segment about three-times as long as broad at the apex, fourth slightly shorter than three-times the width, fifth slightly longer than twice the width, sixth about twice as long as broad, seventh to eleventh much longer than broad, twelfth longer than twice as long as broad at the base. Anterior margin of mesonotum with four parallel, longitudinal, short furrows or impressed lines. First abdominal tergite shorter than the second.

Clypeus coarsely punctured. Punctures on front and mesonotum slightly denser than those on clypeus. Mesopleura very coarsely but distinctly punctured. Punctures

on scutellum somewhat weak and very coarsely scattered, those on postscutellum comparatively dense. Abdomen distinctly and somewhat densely punctured. Basal half of third to fifth sternites impunctate. Pygidial area somewhat densely punctured, some of the punctures are confluent to one another.

Measurements

- Length: Head 1.9 mm. Thorax 4.8 mm.
Abdominal segments (I + II) 4.5 mm.
Fore wing 11 mm. Hind wing 8.6 mm.
- Width: Head 3.5 mm. Thorax 4.0 mm.
1st abdominal tergite 2 mm.
2nd abdominal tergite 3.5 mm.
- Holotype: 1 ♀, 18. vii. 1935, Kuling, Kiangsi, C. China, O. Piel leg.
- Habitat: E. China.

Subg. *HARPACTUS* Shuckard

Ess. indig. foss. Hym., 221, 1837.

Type: *Mutilla laevis* Latreille, 1792.

Gorytes (Harpactus) distinguendus Yasumatsu.

1939 *Gorytes (Harpactus) distinguendus* Yasumatsu,
Trans. Kansai Ent. Soc. IX, 12, .

1 ♀, 21. vii. 1937, Yangkiaping, Chahar, Inner Mongolia, O. Piel leg.; 1 ♂, 22. v. 1931, 1 ♂, 24. vi. 1931, 1 ♀, 3. vii. 1931, Chusan Islands, Chekiang, China, O. Piel leg.

♂ (previously undescribed). Differs from the female only in the following points. Marking on fore wings not so dark as in the female. Clypeus yellow except the anterior margin. Upper surface of mid- (segments 3-5) and hind (segments 2-5) tarsal segments dark brownish. The shape of the antenna is as shown in the text-figure. Posterolateral portion of the second tarsal segment of mid-legs strongly produced into a long process as shown in the text-figure.

Body slightly smaller than in the female. Described from two specimens mentioned above.

This species was originally described from a single specimen collected at Hsinking, Manchuria, and is new to the fauna of Inner Mongolia and Eastern China.

Gorytes densipunctatus sp. nov.

♀. Black and dull. Abdomen shining. Inner margins of eyes, anterior portion of front, clypeus, scape in front, underside of antennal flagellum except for two apical segments, posterior margin of pronotum, humeral angles, tegulae, apical half of second abdominal tergite orange-yellow. Antennae dark brown. Legs variegated with dark brown or orange-yellow. Preapical band of first abdominal tergite, posterior margin of third to fifth tergites as well as second to fifth sternites and the entire sixth abdominal segment ferruginous. Wings transparent, slightly clouded with pale orange-brown, stigmata orange-yellow. Fore wings with a longitudinal darkening as shown in the text-figure.

Pubescence rich but short, greyish-yellow.

Head, seen in front, subcircular in outline. Inner margins of eyes straight and very slightly diverging below. The insertions of antennae very close to clypeus. Clypeus about three-times as broad as long, with the anterior margin almost straight. Front slightly less than twice the width of an eye. Head, with temples (well developed) seen in profile, as long as eyes. Head, seen from above, much wider than long, about twice as broad as long, with temples gradually narrowing posteriorly. Ocelli put in a rectangular triangle, postocellar line slightly longer than oculo-ocellar line or shorter than the distance between posterior ocelli and the posterior margin of vertex. Front without a carina. Relative length of the segments of antenna—I: II: III: IV: V: VI: VII: VIII: IX: X: XI: XII = 15: 5: 21: 18: 16: 14: 12: 10: 10: 9: 7: 10. Scape more than twice as long as broad. Second segment as long as broad, third more than

five-times as long as broad, fourth shorter than five-times the width, fifth about four-times as long as broad, seventh to eleventh about three-times as long as broad, twelfth about four-times as long as broad. Mesonotum wider than long, with the sides narrowly depressed, about as long as first abdominal segment. Mesonotum with two pairs of rudimentary, longitudinal, impressed lines on the anterior margin of mesonotum. Scutello-mesonotal suture distinct and costate. Scutellum twice as broad as long, about twice as postscutellum. Basal triangular area of propodeum about as long as scutellum and postscutellum put together. Longitudinal carina on mesopleura absent. First abdominal segment clavate, with a preapical constriction, sides straight and postero-lateral angles rounded. The maximum width of the same segment about twice as broad as the base. Second abdominal tergite cup-shaped, very much wider than long. Pygidial area triangular with the apex narrowly rounded. Basitarsus of fore legs with three outer spines which are as long as the width of basitarsus.

Punctures very minute, dense and deep, those on two basal abdominal tergites and second sternite slightly larger but coarser. Median longitudinal narrow portion of first and second abdominal tergites almost impunctate. Pygidial area impunctate and dull. Basal area of propodeum with a median, longitudinal, conspicuous furrow. The furrow is transversely costate, and with many longitudinal striae which are becoming feeble on the posterior portion where many fine punctures are recognizable.

Measurements

Length: Head 1.6 mm. Thorax 5 mm.
Abdominal segments (I + II) 4.5 mm.
Fore wing 11 mm. Hind wing 8 mm.

Width: Head 3.1 mm. Thorax 3.5 mm.
1st abdominal tergite 1.8 mm.
2nd abdominal tergite 3.2 mm.

Holotype: 1 ♀, 7. ix. 1935, Kuling, Kiangsi, China.
O. Piel leg.

Habitat: E. China.

I am, at present, not able to decide the accurate subgeneric position of this peculiar species. This species has some intermediate characters between the subgenera *Ammatomus* and *Lestiphorus*.

Genus NYSSON Latreille

Préc. Caract. gén. Ins., 125, 1796.

Type: *Sphex spinosus* Forster, 1771.

Nysson (Nysson) niger Chevrier

1868 *Nysson niger* Chevrier, Mitth. Schweiz. ent. Ges., II, 383.

1887 *Nysson niger* Handlirsch, Sitzber. Akad. Wiss. Wien, XCV, 373, 412, 414.

1895 *Nysson niger* Handlirsch, Sitzber. Akad. Wiss. Wien, CIV, 815, 1014,

1931 *Nysson niger* Pulkkinen, An. Fenn. I Hymen. acul., I, Sphecid., 68, 70.

1939 *Nysson (Nysson) niger* Maidl et Klima, Hym. Cat., VIII, 126.

1 ♂, 26. vii. 1937, Yangkiaping, Chahar, Inner Mongolia,
O. Piel leg.

This species was hitherto known from Central Europe, Finland and Russia. The occurrence of the species in Eastern Asia is of extreme interest. Inner Mongolia is now the easternmost record of the distribution of the species.

Subg. BRACHYSTEGUS Costa

Fauna Regn. Napoli Nysson, 24, 1859.

Type: *Nysson dufouri* Dahlbom, 1845.

Nysson (Brachystegus) pieli sp. nov.

♀. Black. Middle portion of mandibles pale ferruginous. Apex of the dorsal posterior tubercles on

propodeum and abdomen red. Sixth abdominal segment brownish. Three or four apical tarsal segments brownish-red or red, tibial spurs black. Wings transparent, somewhat deeply clouded with violaceous-brown, violaceously reflecting in certain aspect, with nervures brownish-black.

Head, thorax except the dorsum, basal half of first tergite and the underside of abdomen very densely pubescent. Pubescence on thorax especially long and somewhat appressed. Pubescence dirty yellowish.

Head, seen in front, very much broader than long. Inner margins of eyes moderately sinuate inwardly, very converging below and slightly so upwardly. Front with a very short, longitudinal carina just above the insertions of antennae. Head, seen in profile, with eyes about twice as broad as temples. Head, seen from above, about twice as broad as long, with temples moderately swollen. Ocelli put in a flattened triangle. Postocellar line distinctly shorter than oculo-ocellar line, or about as long as the distance between posterior ocelli and the posterior margin of vertex. Distance between posterior ocelli about three-times the same between anterior and posterior ocelli. Clypeus about twice as broad as long, the anterior margin gently rounded, with a pair of strong, projecting, acute teeth medio-apically. Antennal scape slightly longer than third segment. Third segment shorter than fourth. Each flagellar segment about twice as long as broad. Twelfth segment almost as long as scape, about three-times as long as broad at the base. Pronotum rounded anteriorly and transversely carinate laterally. Mesonotum wider than long, with the anterior margin rounded and with a fine impressed, median, longitudinal line on the anterior portion. Scutellum flat, wider than long, narrower than twice the length, without reflexed rims laterally. Postscutellum slightly raised. Mesopleura with a distinct epicnemium anteriorly and a trace of a depressed elongate tubercle just below tegulae. Dorso-caudo-lateral angles of propodeum distinctly dentate

or tuberculate, the tubercles long and stout. First abdominal tergite, seen from above, very much wider than long, but less than twice the length, with the sides gently rounded and the basal lateral angles rounded. Second tergite, seen from above, almost as long as first tergite, slightly broader than first tergite with the sides gently converging both anteriorly and posteriorly. Second to fifth tergites and sternites double-margined and very finely fimbriate apically. Pygidium tongue-shaped, about twice as long as broad. Fore tarsi lacking a tarsal comb. Hind femora armed infero-apically with a truncate tooth. Hind tibiae serrulate.

Clypeus with some strong, coarse punctures except the anterior, narrow, impunctate margin. Front, vertex and thorax somewhat irregularly areolated, the areolets are finer on head and larger on thorax, especially on propodeum. Medio-dorsal portion of propodeum with two longitudinal, divergent carinulae. Basal half of first abdominal tergite with many longitudinal carinae. Posterior margin of first tergite and the entire surface of the following tergites densely bipunctate. The larger punctures are becoming smaller posteriorly. Large punctures on second sternite more or less regularly scattered. Fifth tergite without large punctures. Pygidial area very minutely rugose.

Measurements

Length: Head 1.6 mm. Thorax 4.5 mm.
Abdominal segments (I + II) 4 mm.
Fore wing 10 mm. Hind wing 8 mm.

Holotype: 1 ♀, 17. vii. 1920, Yuewan Kiai, Anhwei,

Width: Head 3.0 mm. Thorax 3.7 mm.
2nd abdominal tergite 3.6 mm.

China, O. Piel leg.

I am unaware of a near relative of the present species in the Palaearctic and Oriental fauna.

Gen. PASSALOECUS Shuckard

Fossorial Hymen., 188, 1873.

Type: *Pemphredon insignis* Van der Linden, 1829.*Passaloecus monilicornis* Dahlbom1842 *Passaloecus monilicornis* Dahlbom, Dispos. method. Hymen., I. 12.1932 *Passaloecus monilicornis* Gussakovsky, Arkiv för Zoologi, XXIV A, no. 10, 9.

5 ♂♂ 1 ♀, Zikawei, Shanghai, China, O. Piel leg.

This species was hitherto recorded from Europe, Ussuri region, Korea and Japan proper, and is new to the fauna of China.

Passaloecus sumatrensis Maidl.1925 *Passaloecus sumatrensis* Maidl, Entom, Mitt., XIV, 379, ♀.1934 *Passaloecus sumatrensis* Yasumatsu, Mushi, VII, 113, ♀. 29 ♂♂ 6 ♀♀, Zikawei, Shanghai and the Chusan Islands, Chekiang, China, O. Piel leg.

female. Clypeus and front between eyes and clypeus with dense and silver pubescence. All legs except coxae pale brown or variegated with pale black. Head, seen in front, almost circular in outline. The sides of the anterior margin of clypeus slightly produced anteriorly but not so prominent as in the female. Anterior margin of clypeus except the lateral portions straight.

This species was hitherto recorded from Sumatra and Formosa, and is new to the fauna of China.



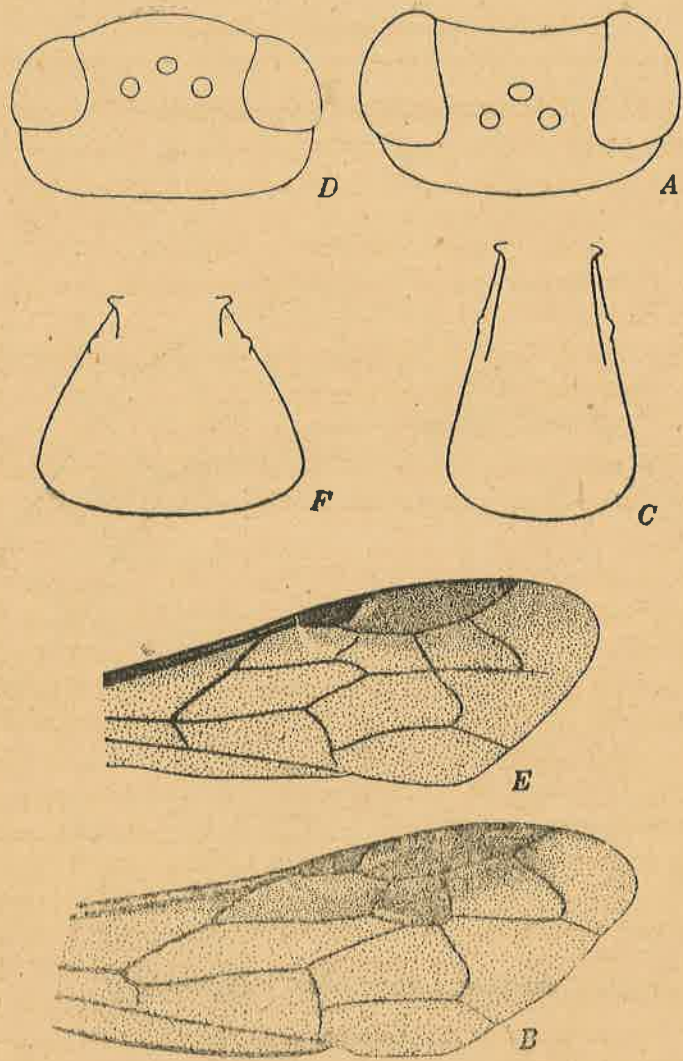


Fig. 1 **Gorytes peregrinus** sp. nov., ♀ and **Gorytes tonkinensis** sp. nov., ♀

- A: Head of **peregrinus** seen from above.
- B: Apical part of fore wing of **peregrinus**.
- C: First abdominal segment of **peregrinus** seen from above.
- D: Head of **tonkinensis** seen from above.
- E: Apical part of fore wing of **tonkinensis**.
- F: First abdominal segment of **tonkinensis** seen from above.

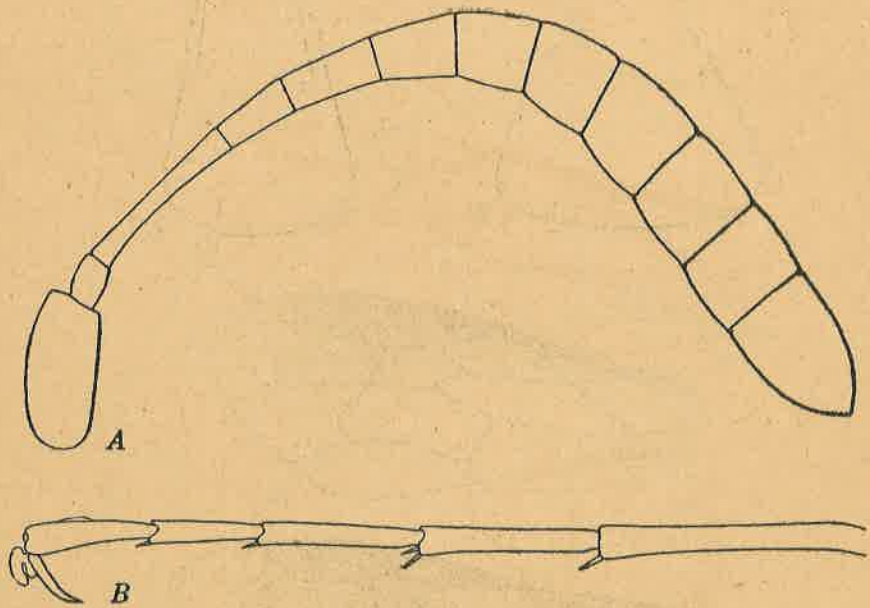


Fig. 2 *Gorytes rogenhoferi* Handlirsch, ♂

A: Antenna.

B: Hind tarsus.

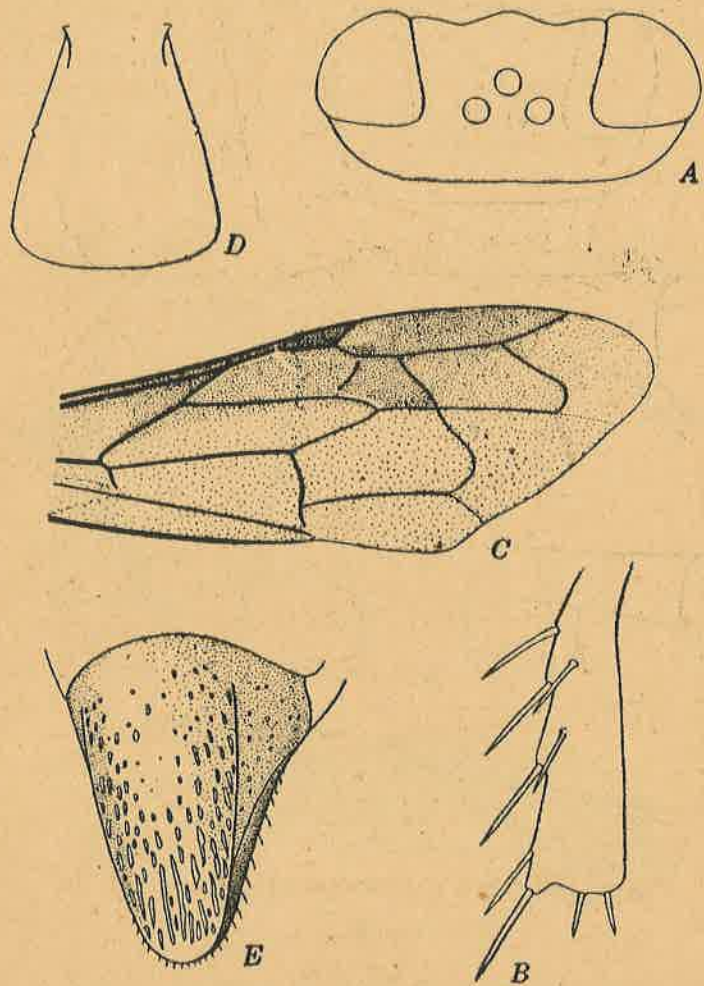


Fig. 3 *Gorytes sinensis* sp. nov., ♀

- A: Head seen from above.
- B: Fore meta-tarsus.
- C: Apical part of fore wing.
- D: First abdominal segment seen from above.
- E: Pygidial area.

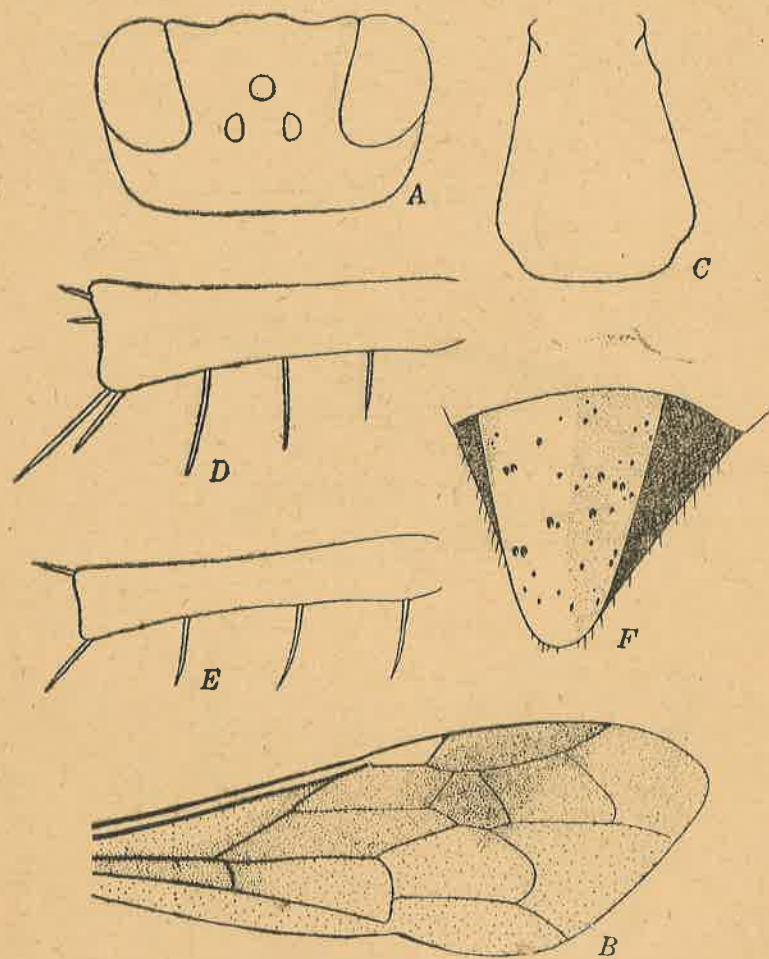


Fig. 4 **Gorytes densipunctatus** sp. nov., ♀ and **Gorytes peregrinus** sp. nov., ♀

- A: Head of **densipunctatus** seen from above.
- B: Apical part of fore wing of **densipunctatus**.
- C: First abdominal segment of **densipunctatus** seen from above.
- D: Fore meta-tarsus of **densipunctatus**.
- E: Fore meta-tarsus of **peregrinus**.
- F: Pygidial area of **peregrinus**.

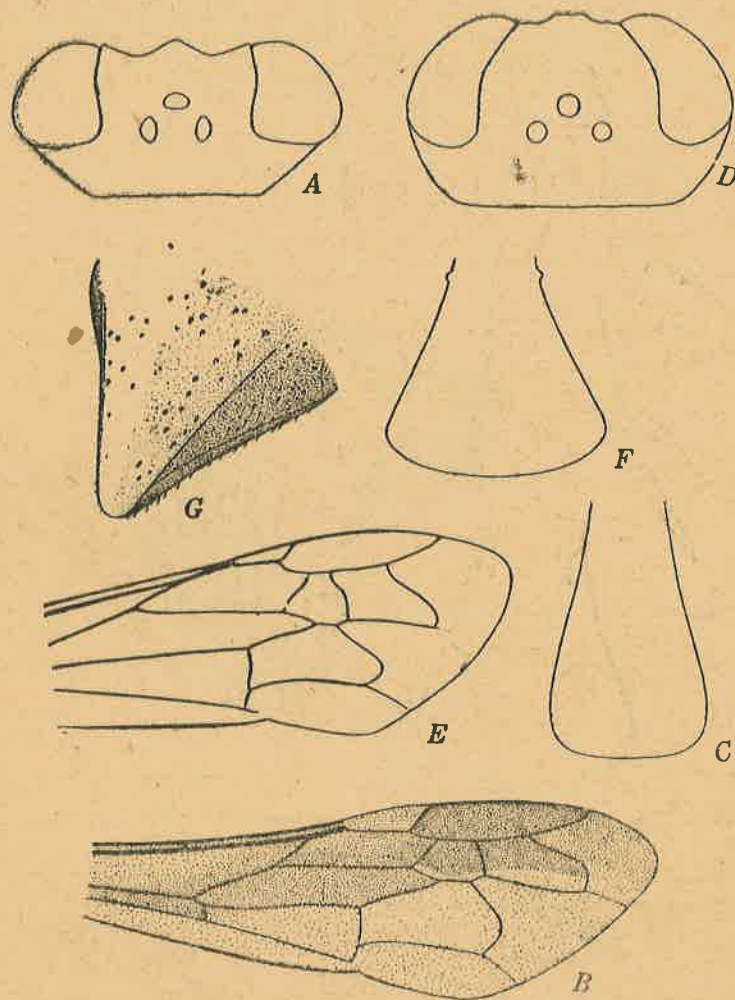


Fig. 5 **Gorytes becquarti** sp. nov., ♂ and **Gorytes pieli** sp. nov., ♀

- A: Head of **becquarti** seen from above.
- B: Apical part of fore wing of **becquarti**.
- C: First abdominal segment of **becquarti** seen from above.
- D: Head of **pieli** seen from above.
- E: Apical part of fore wing of **pieli**.
- F: First abdominal segment of **pieli** seen from above.
- G: Pygidial area of **pieli**.

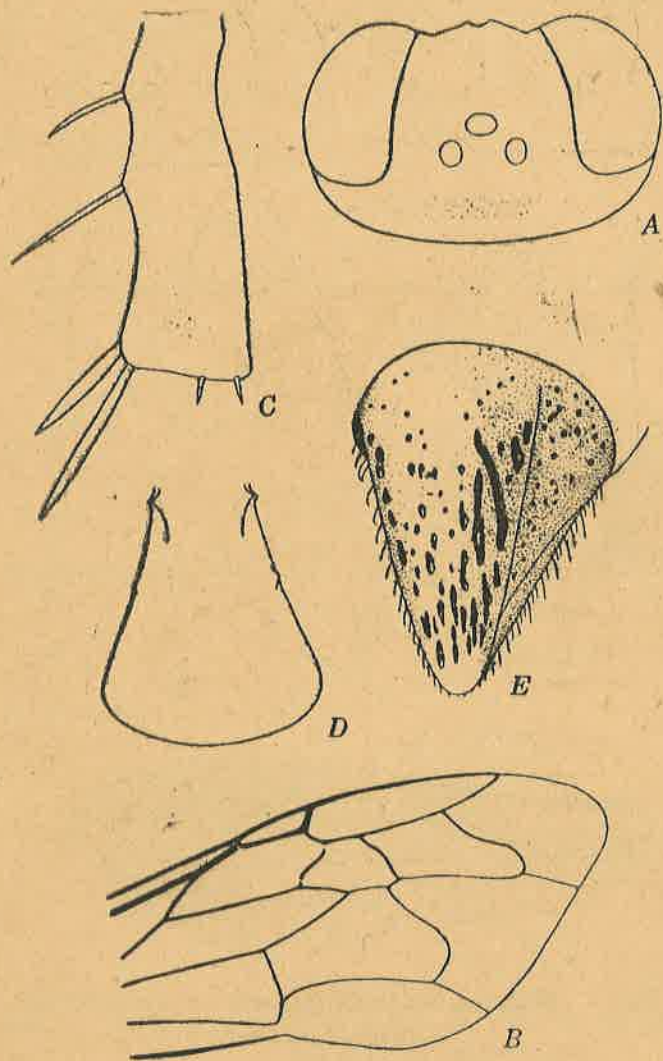


Fig. 6 *Gorytes kulingensis* sp. nov., ♀

- A: Head seen from above.
- B: Apical part of fore wing.
- C: Fore meta-tarsus.
- D: First abdominal segment seen from above.
- E: Pygidial area.



Fig. 7 **Gorytes distinguendus** Yasumatsu, ♂
Gorytes tonkinensis n. sp., ♀

- A: Antenna of **distinguendus**.
- B: Fore meta-tarsus of **distinguendus**.
- C: Mid-tarsus of **distinguendus**.
- D: Pygidial area of **tonkinensis**.

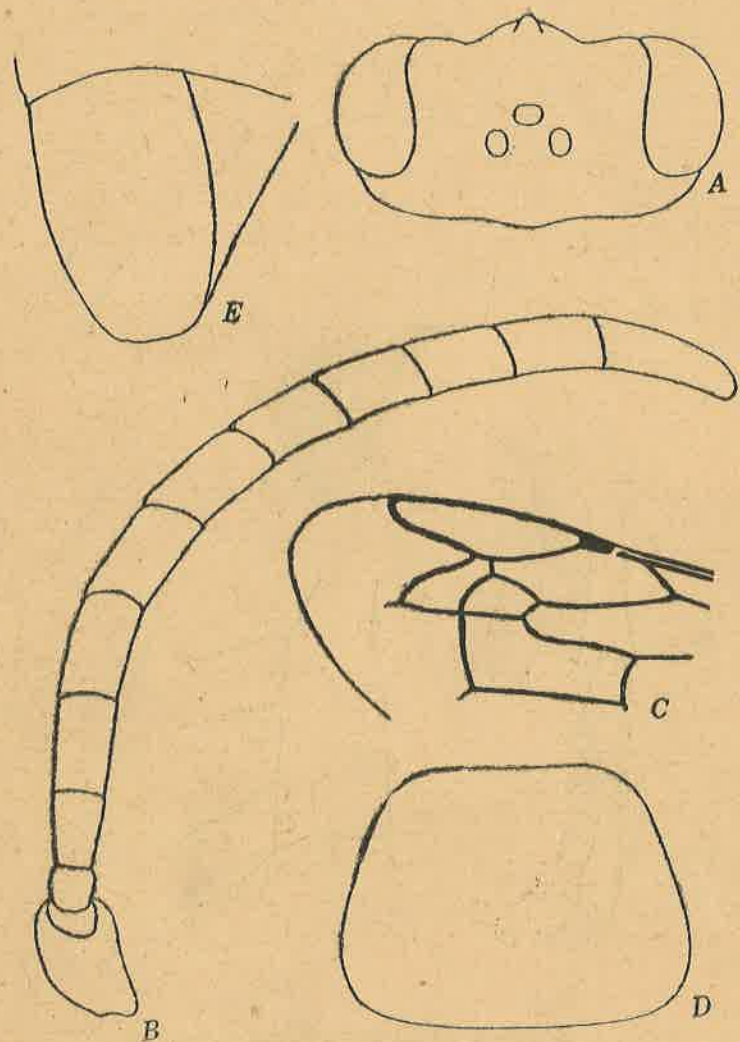


Fig. 8 *Nysson pieli* n. sp., ♀

- A: Head seen from above.
- B: Antenna.
- C: Apical part of fore wing.
- D: First abdominal segment seen from above.
- E: Pygidial area.