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**Psammocharidae from the Solomon Islands, Prince of  
Wales Island, and New Caledonia**

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INTRODUCTION

The spider-wasps sent by Elwood C. Zimmerman from Bernice P. Bishop Museum for study were collected in the Solomons and Prince of Wales Island by J. A. Kusche, those from New Caledonia by W. H. Ford. In the Museum of Comparative Zoology are several specimens taken in the Solomon Islands about 1915 by W. M. Mann, and also a collection from Prince of Wales Island made in December 1938 and early in 1939 by R. G. Wind, collecting for the Australian Papuan Expedition.

In 1910, R. E. Turner published a short article on the Hymenoptera of the Solomons, in which he described four species, *Cryptochilus solomonis*, *C. woodfordi*, *Episyron froggatti*, and *Pseudagenia numeria* subspecies *mendana*. Since then nothing has been reported from there. In this list are records of twelve species, including but two of the Turner list. Several of these species also occur in Prince of Wales Island, and eight are here listed from there. I recall no previous records from there, but several of the species described by Fabricius came from near there. Two species are described from New Caledonia; five have been recorded from there.

With such a small proportion of the actual fauna known, it is useless to make generalizations. Conforming with what is known of other groups, this fauna shows much affinity with that of southern Papua, and most of the species do not occur in southern Australia. It

has been necessary to make several new genera, but a great many more in the Australian fauna await description.

The types of the species described from the material sent from Bishop Museum are deposited in that museum, the others are in the Museum of Comparative Zoology.

## KEY TO SUBFAMILIES

1. Hind femora with minute spines or spine-pits above; third discoidal cell with a distinct pocket in lower basal corner; no transverse groove on second ventral segment; if spines below last joint of hind tarsus they are not lateral; female often with a tarsal comb, but without a row of teeth above on hind tibia.....**Psammocharinae.**  
Hind femora without minute spines or spine-pits near tip of mid and hind femora; no distinct pocket in corner of third discoidal cell, often a transverse groove or furrow on second ventral segment; if spines below last joint of tarsi, they are not medial; spines on hind tibia when present in a close row, often with a row of teeth above in female, never a tarsal comb in female..... 2
2. Hind tibia of female with a row of teeth or a carina above; last joint of tarsi with lateral spines; mesosternum not widened near tip, and the front coxae usually reach its tip.....**Cryptochilinae.**  
Hind tibia of female with only very short spines above, sometimes wholly lacking; mesosternum from below somewhat broadened toward tip, front coxae rarely reach its tip.....**Macromerinae.**

## CRYPTOCHILINAE

1. Base of marginal cell nearly truncate; stigma elongate, sides parallel, base of second submarginal very oblique, extending back before stigma; first recurrent vein ends at or very close to end of second submarginal cell; claws with one or two teeth.....**Hemipepsis.**  
Base of marginal cell very oblique; stigma shorter, or lower side convex; first recurrent ends further from tip of second submarginal; base of second submarginal not nearly so oblique; third submarginal often longer than second..... 2
2. Propodeum (seen from side) at first nearly flat, ending in a more prominent ridge, behind which it falls suddenly to the end; claws of female toothed .....**Derochorses.**  
Propodeum (seen from side) slopes back in a nearly even curve..... 3
3. Claws in both sexes bifid; front of pronotum nearly vertical, seen from side, not an even curve; hind tibia of female with teeth above.....**Cyphononyx**  
Claws of female at least toothed; pronotum, from side, nearly evenly curved in front down to collar..... 4
4. Pronotum with a median linear impression behind; claws of male bifid; lobe of metanotum (postscutellum) well separated from scutellum, sometimes more elevated.....**Monodontonyx** (fig. 1, *d*).  
Pronotum without such impression; front claws of male often bifid, hind claws often broadened at base, lobe of metanotum not well separated from scutellum, nor elevated.....**Heterodontonyx.**

**Cyphononyx parvulus**, new species.

Male black; face and antennae rufous to golden; vertex black, but a narrow rufous streak back of each eye. Abdomen with second segment rufous except a narrow basal and a broader apical band, black; third and other segments rufous; venter with three segments black, beyond rufous; coxae, trochanters, and extreme base of femora black, rest of legs yellowish, except the apical part of the last tarsal joint and the claws which are black. Wings golden, tip and extreme base black; hindwings pale, yellowish.

Front with short, erect hairs, still shorter ones on pronotum; scutellum with some long hairs behind; propodeum and pleura with longer hair; front femora with a few short hairs above. Clypeus broad, convex, truncate below; ocelli in a moderately low triangle, laterals plainly nearer to each other than to eyes; third joint of antennae scarcely longer than the fourth. Pronotum short, broadly concave behind; propodeum with a median furrow, surface plainly transversely ridged; mid and hind tibiae with short, stout spines above, inner spur of hind tibia about one half of basitarsus, claws bifid as in *C. vitiensis*.

In forewing the marginal cell is slender, with nearly parallel sides; second submarginal cell with an oblique base, third much longer and wider at tip; first recurrent vein ends near apical fourth of second submarginal cell, second recurrent (nearly evenly curved) ends about at middle of third submarginal; in hind wing the anal ends before the fork. Ventral plate flat, quadrangular, a little broader than long, the median area faintly elevated, apical margin with a dense row of short, stiff bristles. Length of forewing, 10 to 13 mm.

Three specimens from Houailou, New Caledonia, Oct. 28, 1925, Ford.

This is not *C. caledonicus* Vachal, which is said to have a red spot on mesonotum and also on scutellum.

**Cyphononyx vitiensis** Turner.

A female from Wainoni, Solomons, Mann, also one from Sogav-rasa, Viti Levu, Fiji, from which it was described. It has been recorded from New Caledonia.

**Heterodontonyx solomonis** Turner.

The clypeus is truncate; ocelli in a nearly equilateral triangle, a line from anterior ocellus to the antennae, which is rather slender, third joint fully one half longer than fourth, second joint plus third equal width of vertex; lobe of meta-notum much lower than scutellum; inner spur of hind tibia not one third of basi-tarsus; last tarsal joint with a complete row of spines each side as in *H. guerini*.

Five specimens from Guadalcanar Island, Solomons, Dec. 1920, Jan. 1921, Kutsche. This large dark-winged species should go with *H. guerini*, although the front claws of male have the tooth practically erect, not sloping.

**Heterodontonyx guerini**, new species.

Female black; head yellow in front and behind eyes, a more or less distinct dark band on vertex from eye to eye enclosing the ocelli; antennae, tibiae, tarsi, and apical parts of femora yellow; second segment of abdomen with a large yellowish spot above, but black band on front and hind margin, the latter extending part way on third segment, beyond yellowish, apical half of venter also; wings yellowish, tinged with reddish sometimes toward the base, tips narrowly black.

Clypeus about three times as broad as long, below almost truncate, face broader below than high, above antennae with long pale hairs; ocelli in a low triangle, laterals almost as near to the eyes as to each other; antennae slender, the third joint longer than vertex-width; pronotum with rather long black hair, arcuate behind; mesonotum with two or three erect bristles on each side; propodeum fully as broad as long, closely striate, densely clothed with long black hairs, from side the outline is an almost even curve, a distinct tubercle below the spiracle.

Abdomen moderately short, first segment with long black hair, towards apex with yellow hair, very dense on last segment where there is also appressed yellow scale-like hairs; venter hairy. Legs moderately slender, femora with long hairs, tibiae and tarsi thickly spined, hind tibia above with a row of about sixteen oblique scale-ridges, each with a short spine, outside at base a short row of five or six smaller teeth; inner spur of hind tibia about one third of basitarsus.

In forewing the stigma is moderately short, the marginal cell almost four times as long as broad, pointed at base, the oblique end curved in toward tip; second submarginal cell twice as long as broad, receiving the first recurrent vein at about apical fourth; the third submarginal little longer but much broader toward tip, receiving the second recurrent (slightly curved) plainly before middle; in hind wings the anal vein ends at the fork. The male is similar, scarcely more slender, the antennae rather slender, but the second plus third joint not nearly equal to vertex-width; the propodeum more coarsely ridged; genital plate broad, with rounded outer corners, the tip nearly truncate and fringed, surface punctate, the segment in front is strongly angularly emarginate on hind edge. Length of forewing, 20 to 22 mm.

Females from Thursday Island, Cape York, Sept. 1920, Kusche; one from Guadalcanar Island, Solomons, Jan. 1921, Kusche; various males and females from Coen, Cape York, Australia, in June, Darlington; and one from Palm Island to Cooktown, Queensland, April-May, A. G. Mayer.

This is what Haupt (*Revue Suisse Zool.* 42: 309, 1935) identifies as *P. australis* Guerin, and puts in a new genus, *Heterodontonyx*. A comparison with Guerin's description, particularly that part comparing his species with *P. bicolor* Fabricius, shows that it is a very different insect (no tubercles on propodeum, no black on abdomen above except on first segment, no dark vertex band, smaller, and so forth). As Haupt has misidentified *H. australis*, it is best to take as genotype of *Heterodontonyx*, *H. basalis* Haupt. Kohl (*Ent. Nachr.*

11: 162, 1885) has placed *Pompilus aurifrons* Smith as a variety of *P. australis*. The description of *P. aurifrons* says that the basal segment and the basal half of second segment are black, apical half of second segment and rest of abdomen yellow; *H. guerini* has black band across tip of second segment and extending on basal part of third; *P. australis* has only the basal segment black; *P. aurifrons* is said to have first recurrent end at one third from apex of second submarginal cell, in *H. guerini* it is much nearer tip; the metathorax (propodeum) of *P. aurifrons* is said to be short and truncate; it certainly is not truncate in *H. guerini*.

I have from Botany Bay, New South Wales, a female that fits the description of *P. aurifrons* except that the second segment is black almost to tip. This species has a black head covered with golden pubescence, and the same golden pubescence on the yellow of abdomen. It is a very different insect from *H. guerini* and from *P. australis* and belongs to an undescribed genus.

#### Genus **DEROCHORSES**, new genus

Belongs to the Cryptochilinae, last tarsal joint with lateral spines, mesosternum short, not widened behind, claws in female toothed; antennae rather short; propodeum in two parts, the basal nearly level, coarsely striate, and the posterior part falling steeply from the ridge that limits it above; hind tibia of female with teeth, not as broad, nor as oblique as many related forms; marginal cell pointed at each end, base of second submarginal cell only moderately oblique, not extending as far back as base of stigma, in hind wing the anal ends further beyond the fork than in many related species; seen from obliquely above the propodeum shows a tubercle near spiracle, another at end of the dividing ridge, and one at end of the terminal ridge.

#### **Derochorses seminiger**, new species (fig. 1, *c*, *g*).

Thorax, propodeum, first and second segments of abdomen, coxae, and femora black; rest of legs, rest of abdomen above and below, and the antennae yellow; the clypeus and face with appressed golden pubescence, also most of the occiput, wings yellowish, tips black.

Clypeus short, almost four times as broad as long, lower margin slightly rounded, upper margin deeply notched each side; face as broad below as high; ocelli in a low triangle, the laterals a little nearer eyes than to each other, antennae moderately short, but not incrassate, the third joint is four times as long as broad at tip, but the second joint plus third is not nearly equal to vertex-width; pronotum broadly rounded behind, above with extremely short hair; metanotal lobe with erect hairs, and some on the scutellum; metanotum striate each side; propodeum much broader than long, first part nearly flat, with coarse but sometimes indistinct ridges, posterior part with a rounded crest above, surface smooth, no hair on propodeum.

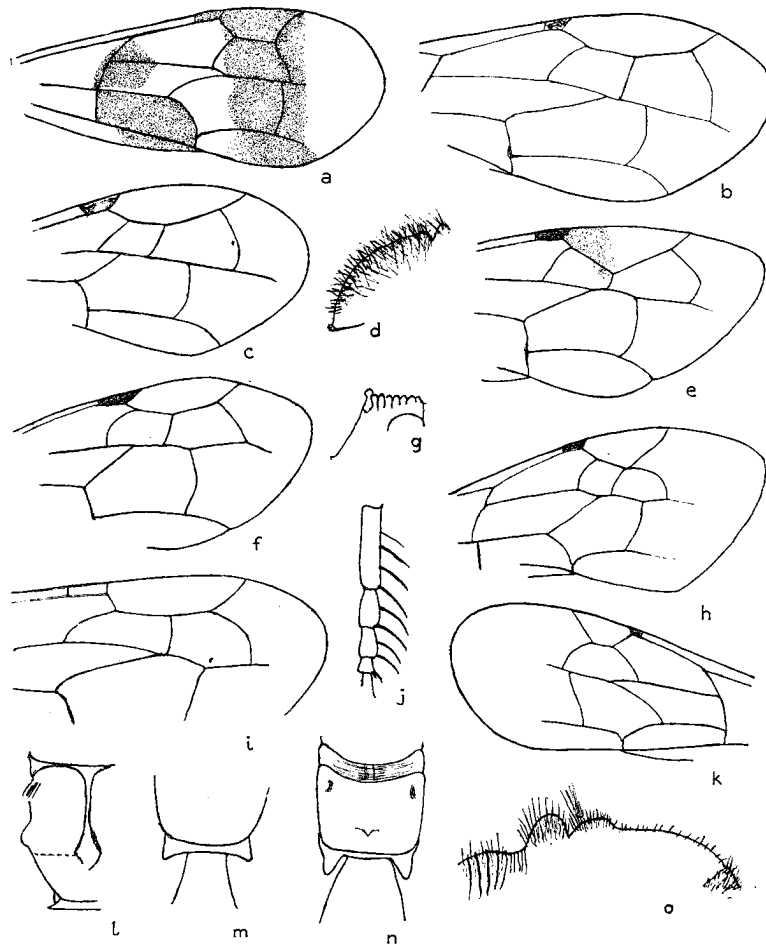


FIGURE 1.—a, *Aglochares vachali*, forewing; b, *Monodontonyx parvana*, forewing; c, *Derochorses seminiger*, forewing; d, *Monodontonyx*, side view of propodeum; e, *Pseudagenia clavata*, forewing; f, *Ageniella leucippe*, forewing; g, *Derochorses seminiger*, side view of propodeum; h, *Anoplinellus minor*, forewing; i, *Hemipepsis thione*, forewing; j, *Ctenostegus ornatus*, tarsal comb; k, *Ctenostegus ornatus*, forewing; l, *Turneromyia ahrimanes*, propodeum above; m, *Hemipepsis angusta*, tip of propodeum; n, *Hemipepsis thione*, propodeum and base of abdomen; o, *Monodontonyx woodfordi*, side view of thorax.

Abdomen moderately short, last segment with many erect, curving hairs and more appressed yellow hairs; venter with few hairs on each segment; legs moderately slender, hind femora but little longer than breadth of abdomen; tibiae and tarsi heavily spined, femora with some hairs; hind tibia above with a row of about ten teeth; somewhat scale-like, but not broad as in many *Cryptochilus*, on outer side are a few more teeth, inner spur scarcely two fifths of basitarsus.

In forewings the stigma is nearly four times as long as broad, the marginal cell is also about four times as long as broad, pointed at each end, the second submarginal cell is rather small, oblique, but a little longer than high, receiving the first recurrent at middle; the third submarginal fully twice as long, and much broader, receiving the second recurrent (evenly curved) a little before the middle; in hindwings the anal vein ends quite a distance beyond the fork. Length of forewing, 15 to 17 mm.

From Prince of Wales Island, Cape York, Australia, Feb. 18, 1939, Wind.

***Monodontonyx pawana***, new species (fig. 1, *b*).

Head, antennae, palpi, legs (except coxae) prothorax, mesonotum, scutellum, and metanotal lobe yellow; pleura and propodeum dark brown, propodeum usually shows faintly two rufous spots above; hind part of mesopleura with some golden pubescence; abdomen deep black; wings yellowish, outer margin of forewing and tip of hindwing narrowly brown, veins yellowish.

Face slightly narrowed above, clypeus broadly convex below, but little more than twice as broad as long in the middle; above antennae with a broad depression with a line to anterior ocellus, lateral ocelli much nearer to each other than to eyes (but not twice as near); antennae slender, third joint (by itself) fully equal to vertex width; pronotum short, broadly excavate behind, in middle with a distinct impressed groove or line; scutellum flat, hardly higher than mesonotum, the metanotal lobe well separated high and rounded, but not much above scutellum; metanotum with a broad median furrow, short striae each side.

Propodeum with a prominent smooth hump each side below the spiracle; seen from the side, the top of the propodeum slopes gently behind, the anterior part with about six very strong transverse ridges, and a broad median groove, posterior part scarcely striate, terminal ridge only very slightly elevated at each end.

Abdomen moderately broad, first segment about as long as broad behind, much of surface shining. Legs rather long, tibiae and tarsi strongly spined, hind tibiae with a row of low teeth or rather a series of short carinae forming a line, at base is the beginning of another line; rows of spines each side; inner spur of hind tibia not one third of basitarsus.

Head with long hairs or bristles on lower part of clypeus, long hair on vertex and occiput; pronotum with shorter hair, that on mesonotum very short, longer hairs at tip of scutellum, on the metanotal lobe, and on the propodeum; basal segment of abdomen somewhat hairy on base; last segment very hairy, and some on the two segments before it, venter hairy all along.

Forewings with a short stigma, the marginal cell very long, pointed at each end, first abscissa of radius equal to fourth, the second about as long as third, both twice as long as first; second submarginal not quite twice as long as broad, base quite oblique, receiving the first recurrent vein about one fifth before tip;

third submarginal a little longer than second, and very much broader, receiving the second recurrent (slightly curved) at basal third; in hindwings the veins beyond the cross-vein are more or less evanescent.

The male is more slender, otherwise similar; the metanotal lobe is much higher; the basal abdominal segment rather longer than broad behind; the genital plate as long as broad, the tip broadly rounded and fringed, the segment before it is densely covered with moderately long, erect, black hair. Length of forewing: female, 20 mm.; male, 16 mm.

Solomon Islands: two females from Pawa, Ugi, Mann, one from Guadalcanar, Jan. 1921, Kusche, one male from Waiwai, and one from San Cristobal, both Mann.

*Salius insularis* Cameron from New Britain is closely related; *S. basimacula* Cameron from same locality is probably the male; the difference in height of postscutellum is that normally present in several species. Both sexes are said to have more rufous on thorax, and the male a black line above on hind femora and basal segment partly yellow; the statements about ocelli and some venational points differ from *M. pawana*.

*Cryptochilus commixtus* is also evidently a *Monodontonyx* and related; the tip of abdomen is ferruginous, and venational points differ somewhat, also ocelli.

**Monodontonyx woodfordi** Turner (fig. 1, *o*).

Several males from Florida, Tulagi, Solomons, and Malaita, Auki, Solomons, Mann. Described from the Solomons.

**Hemipepsis vanuana**, new species.

Head, pronotum (except anterior slope and spot on each lateral lobe), mesonotum, scutellum, lobe of metanotum, yellowish with appressed golden pubescence; pleura and propodeum brown to black, a reddish spot each side above on the propodeum; abdomen jet black, polished; antennae, legs (except coxae) yellowish; wings yellowish with a reddish tint, no distinct scar, outer margin of forewing and outer and posterior margin of hindwing brown, veins yellowish.

Face plainly narrowed above, groove from anterior ocellus to antennae, lateral ocelli a little nearer to each other than to eyes; clypeus fully 2.5 times as broad as long, lower margin nearly truncate; antennae moderately short, the second joint plus third about equal to vertex width; pronotum short; scutellum rather broad, not narrowed behind, even with mesonotum, metanotum with short striae each side of median groove; propodeum with parallel sides, anterior part nearly flat, crossed by about twelve strong ridges, and ending in a much stronger ridge, beyond which it drops suddenly to the short terminal ridge, anterior part with median furrow; abdomen moderately broad in middle, first segment hardly as long as broad behind; hind tibia above with a low median carina, and close to it a row of short spines, on outer side another row of spines, inner spur of hind tibia plainly less than one third of basitarsus.



In forewing the marginal cell has nearly parallel sides, about five times as long as broad; second submarginal cell slender, base very oblique, receiving the first recurrent at tip; third submarginal nearly twice as wide as second, tip nearly truncate, receiving the second recurrent (sinuous) at about two fifths from the base; in hindwing the anal ends only a little beyond the fork. Length of forewing, 20 mm.

One from Tulagi, Florida, Solomon Islands, Mann.

***Hemipepsis angusta***, new species (fig. 1, *m*).

Male: head and thorax mostly dull rufous, mesonotum with a dark streak each side, propodeum rather more brown, especially on sides, abdomen jet black, antennae and legs yellowish, clypeus more yellow than rest of head, wings uniform brown, scar faintly pale, veins dark brown, in some views wings are iridescent purple. Body, especially the thorax, more slender than in many species; the face moderately narrow, a deep line from anterior ocellus to antennae, lateral ocelli only a little closer to each other than to eyes, the antennae below show each joint only faintly swollen in middle.

Pronotum about evenly curved down in front, with many short, erect, yellow hairs, scutellum a little elevated, flat, the metanotal lobe no higher than scutellum, flat on top, with erect black hairs; metanotum with a broad median furrow, very faintly striate; propodeum low, but little curved toward tip, not plainly striate, with erect short hairs above, sides parallel until near tip, the terminal ridge with only a moderate lobe on each side.

Abdomen very narrow at base, the first segment about one and a half times as long as broad behind, the sides at first slightly concave; genital plate is almost truncate at tip, hairy and with a median longitudinal groove, strongest near base.

Venation similar to *H. thione*, but the marginal cell is a little shorter, and the second abscissa of radius is not longer than the third. Length of forewing 15 mm.

Solomon Islands: two males from Guadalcanar Islands, Jan. 1921, Kusche; Tulagi, Florida, Mann.

***Hemipepsis thione*** Smith (fig. 1, *i, n*).

Head, thorax, and coxae black, abdomen rufous, legs and antennae yellowish, lower part of clypeus and lip ferruginous, tips of coxae with somewhat ferruginous pubescence; wings uniform dark brown, strongly iridescent purple, veins black, the scar often shows a pale spot. Vertex as wide as clypeus, lateral ocelli very much nearer to each other than to eyes; antennae undulate beneath, each joint swollen in middle below; third joint about 1.5 times as long as basal joint; pronotum drops rather suddenly in front, with many short, black hairs, scutellum moderately elevated and narrowed behind, metanotal lobe roundedly elevated, but little higher than scutellum, very hairy above; propodeum with parallel sides, scarcely striate, basal part but little sloping, higher along middle and ending at beginning of the hind part in a blunt tooth, terminal ridge ends each side in a very large tooth, the basal part has some very short hair; abdomen is rather broad at base, the sides of the first segment plainly convex.

Legs slender, with small spines; long spur of hind tibia about 0.5 of basitarsus; the genital plate is small, rounded and hairy, the plate in front is shining,

depressed in middle, with an elevated part each side, tapering to the nearly pointed tip. Length of forewing, 15 to 16 mm.

Five males from Guadalcanar Island, Solomons, Jan. 1921, Dec. 1920, and Feb. 1921, J. A. Kutsche. These agree with the short description of *thione*, which is only of color. They will agree with nothing else.

**Hemipepsis australasiae** Smith.

A female, Prince of Wales Island, Cape York, Australia, July 1920, Kutsche. Occurs in North Queensland.

MACROMERINAE

- |  |                     |
|--|---------------------|
| 1. Last joint of tarsi with spines below.....  | 2                   |
| Last joint of tarsi without spines below.....  | 3                   |
| 2. A distinct malar space.....   | <b>Fabriogenia.</b> |
| No distinct malar space.....   | <b>Phanagenia.</b>  |
| 3. Propodeum without hair, and rather flat; often, when viewed from<br>side, showing a lateral ridge above the spiracle..... | <b>Ageniella.</b>   |
| Propodeum hairy above, and arched; no such lateral ridge....   | <b>Pseudagenia.</b> |

**Pseudagenia clavata** Smith (fig. 1, *e*).

A female from Guadalcanar Island, Solomons, Feb. 1921, Kutsche. Readily known by mark in base of marginal cell. It was described from the island of Waigiou.

Genus **FABRIOGENIA**, new genus

Thorax rather long; mesosternum but little if any broadened behind, but the front coxae do not nearly reach to tip; the last joint of all tarsi has some lateral spines; the hind tibiae in the female have only very short spines, no trace of teeth; it thus agrees in general with *Phanagenia*, from which it differs in having a very distinct malar space, and the legs are rather more slender. Genotype: *Fabriogenia incompta*, new species.

This new genus will include *Sphex morio* Fabricius, a deep black species having the basal and ring joints of antennae bright ferruginous, and a few other Australian species.

**Fabriogenia incompta**, new species.

Black; clypeus and face almost up to ocelli, sericeous; antennae yellow on first six joints, rest black; pro- and mesonotum with a dull rather yellowish appressed pubescence, a patch of silvery on hind lower lobe of pronotum, one each side of scutellum; propodeum with a silvery spot on each side behind, and in front with a silvery reflection; front coxae wholly silvery in front, mid and hind coxae partly silvery on sides and above; abdomen with a silvery bloom.

Wings hyaline; a narrow dark band over basal vein, and another somewhat wider behind base of marginal cell, not occupying all of second submarginal cell, and only one third of marginal; no dark spot at tip.

Clothed with much fine, white hair on head in front and behind, front coxae, scutellum, postscutellum, propodeum, and basal segment of abdomen, that on vertex and hind part of pronotum a little darker. Head broad; face much broader than high; clypeus about two and a half times as broad as long, broadly rounded below; ocelli in a nearly equilateral triangle, the laterals much nearer to each other than to the eyes; antennae slender, especially the apical half, second joint plus third equal to vertex-width; pronotum angulate behind; metanotum closely striate; propodeum broader than long, narrowed behind, but little curved above, in front deeply divided by a median furrow which fades out near apical third, closely transversely striate; basal segment of abdomen hardly longer than broad behind, the lower sides with a wide free margin; legs very slender, especially hind pair, the mid and hind tibiae with numerous short spines, none more than one fourth the width of joint.

In forewings the stigma long, pointed at tip, lower edge convex; marginal cell long, acute at each end, about one half its length from wing-tip; second submarginal cell below twice as long as broad, nearly one third narrowed above, receiving the first recurrent vein beyond middle; third submarginal cell one half longer than second, much wider near tip, hardly one fourth narrowed above, receiving the second recurrent (bent near middle) about at basal third; in hindwing the anal ends just before the fork. Length of forewing, 16 mm.

A female from Prince of Wales Island, Cape York, North Queensland, Feb. 18, 1939, Wind.

There is a similar species in North Queensland which has the wing-tip black and thus agrees with the Fabrician description of *P. fasciata*; this has no malar space, the clypeus comes to a point in the middle below, the propodeum has a broad, shallow depression or furrow behind each spiracle to the hind margin, and the stigmal band is broader than in *F. incompta*; it belongs to the genus *Phanagenia*.

***Ageniella leucippe*, new species (fig. 1, f).**

Female black. Head with fine sericeous pubescence nearly up to ocelli, lower anterior lobes of propodeum also silvery, metapleura, lower part of mesopleura and tip of propodeum also sericeous; abdomen shining, last segment finely sericeous; last three joints of palpi yellowish; legs, beyond femora, more brown than black; forewings hyaline, with two black bands, a slender one over basal vein, a very broad one reaching from base of stigma almost to tip of marginal cell and back to hind border, the apical part of wing beyond is milk white.

The clypeus comes almost to an angle in the middle of lower margin; only minute bristles on mentum; ocelli in nearly equilateral triangle, laterals much closer to each other than to eyes; second plus third joint of antennae not equal to vertex-width; pronotum broadly rounded behind; propodeum a little longer than broad, sides parallel, seen from side the dorsum evenly curves to tip, surface finely striate and without hair, seen from side the front part is plainly margined just above the spiracle to half way back, there is no trace of median groove at base or elsewhere.

Abdomen petiolate, the first segment one and a half times as long as wide behind; last segment with much fine pale hair both above and below; hind tibiae without trace of spines above, two very minute ones near middle on lower outer side, inner spur about two fifths of basitarsus.

Forewings with marginal cell nearly truncate at base, over three times as long as broad, second submarginal cell nearly twice as long as broad, receiving the first recurrent a little before middle; third submarginal little longer than the second below or above, but wider, receiving the second recurrent (bent in middle) at the basal third; in hindwing the anal ends before fork. Length of forewing, 7 mm.

One from Yandina, Russell Island, Solomons, Mann.

Turner describes from the Solomons a subspecies, *mendana*, of *A. numeria* Smith, differing in having the median segment plainly striate, but Smith says of *A. numeria* that it is finely, transversely rugose. Neither *A. numeria* nor *mendana* are said to have the white tip to wings, *A. numeria* is said to have the antennae ferruginous below, and *mendana* is not said to differ in this respect; *mendana* is said to have some trace of median sulcus. There are various other species (*A. amalthea* Smith, *A. eudora* Smith, *A. nasuta* Smith, *A. morota* Banks) in Insulinde that have white-tipped wings, but all differ in structure or basic color.

#### PSAMMOCHARINAE

- |  |                      |
|--|----------------------|
| 1. Front tibiae with short spines or with spine-pits on upper side; wings tend to fold longitudinally; spines below on last joint of hind tarsus; female with tarsal comb..... | 2                    |
| Front tibiae without spines or spine-pits above, except near tip.....  | 3                    |
| 2. Abdomen with scale-like appressed hairs on basal segment, besides the upright hairs, also similar scales on parts of thorax.....  | <b>Episyron.</b>     |
| Abdomen and thorax without such scales.....  | <b>Batazonus.</b>    |
| 3. Pronotum longer than mesonotum, nearly flat; propodeum behind is concave between projecting sides; head thin; pronotum without lateral humps .....                          | <b>Platyderes.</b>   |
| Pronotum not longer than mesonotum, more or less bent down in front, and usually lateral humps.....  | 4                    |
| 4. Sides of propodeum humped; spines under last joint of hind tarsus; female with tarsal comb.....   | <b>Turneromyia.</b>  |
| Propodeum without distinct humps each side.....  | 5                    |
| 5. Tip of abdomen with straight, stiff bristles; last joint of hind tarsus with spines beneath; female without tarsal comb, three submarginal cells .....                      | <b>Anoplinellus.</b> |
| Tip of abdomen with few fine, soft hairs; female with tarsal comb; but two submarginal cells.....  | 6                    |
| 6. Spines under last joint of each tarsus.....   | <b>Ctenostegus.</b>  |
| Last joint of all tarsi smooth.....  | <b>Aglochares.</b>   |

**Batazonus tricolor** Smith.

One from Prince of Wales Island, Cape York, Feb. 18, 1939, Wind. Fairly common in North Queensland.

**Platyderes collaris** Fabricius.

Several from Prince of Wales Island, Cape York, July 1920, Kusche, and one from Guadalcanar Island, Solomons, Jan. 1921, Kusche. Common in North Queensland.

Genus **TURNEROMYIA**, new genus

Small spines near tips of mid and hind femora above; pocket in base of third discoidal cell; hind tibiae with scattered spines; front tibiae without spines above; female with tarsal comb of long spines; a distinct but short, malar space; claws toothed; last tarsal joint smooth below, or almost so; in forewing the marginal cell is pointed at each end, hardly its length from wingtip (much like *Cryptochilus*); the second submarginal cell is much longer than the third; the stigma short; the basal vein interstitial with transverse; in hindwing the anal ends at the fork.

Propodeum widened each side into a prominent hump, front part with a deep, median furrow, posterior part steeply sloping, terminal ridge with a distinct tooth each side, tip of abdomen has only fine hairs.

Genotype: *Psammochares ahrimanes* Turner.

**Turneromyia ahrimanes** (Turner) (fig. 1, *l*).

Female large, wholly black, male (which has not been described) also wholly black, with a more slender body. The face with the pubescence as in the female, the occiput also white, the lower part of pronotum white, and a fine line (interrupted in middle) of gray pubescence on hind border of pronotum; the propodeum widened only a little at middle, but the spiracles almost as prominent as in the female, with a deep median groove as in female, and the hair fully as long. The femora with fine hairs as in female, the legs spined about as much, the inner spur of hind tibia fully one half of basitarsus; the genital plate rather broad, slightly rounded at tip, and with a median crest of stiff hairs from base to near tip. Length 20 mm.

One female from Prince of Wales Island, Cape York, Aug. 1920, Kusche. This large wasp, described from Townsville, Queensland, is not uncommon near Coen, Cape York, in May.

**Anoplinellus minor**, new species (fig. 1, *h*).

Black, marked with silvery pubescence; face below antennae, and the clypeus, each side of face half way up to vertex, a spot on each lower anterior corner of pronotum, a spot each side on hind border, a spot below forewings, larger spot on lower mesopleura, a spot each side in front of scutellum, a

small spot each side of scutellum, a small spot each side of postscutellum which is silvery on top, larger spot each side at tip of propodeum, a spot at base of first abdominal segment, a transverse spot each side near base of the next three segments (in male nearly forming bands) and in male with the top of last segment silvery; front coxae silvery in front, hind coxae above; wings fumose, a broad darker band across apical part. Clypeus very broad, nearly four times as broad as long, lower border truncate; face quite wide, but little narrowed above; ocelli in a low triangle, laterals nearer to each other than to eyes; antennae rather short, but slender, the second plus third joint hardly equals vertex-width; pronotum angulate behind; propodeum short, evenly sloping; abdomen broad at base, stiff hairs near tip above, slender hairs below, few on other segments; some fine, short hairs on head, few on pronotum, none on mesothorax, propodeum nor base of abdomen. Forewings with marginal cell triangular and its length before wing-tip; second submarginal cell oblique, about as high as long, receiving the first recurrent vein at apical third; third submarginal cell triangular, longer than the second below, but coming to a point or almost so above, receiving the second recurrent vein (slightly curved) near middle; the basal vein ends a little before transverse, and in hind wing the anal ends a trifle beyond the fork. The legs are moderately spinose, inner spur of hind tibia equal to one half of basitarsus. The male has a more slender body, but marked the same, the second plus third plus fourth joint of antennae equal to vertex-width; the penultimate ventral segment is covered with a dense brush of black hair; the spines on hind tibia shorter than in female, and the inner spur more than one half of basitarsus. Length of forewing, 8 mm.

Solomon Islands: female from Fulakora, Ch. Bignell; male from Malaita, Auki, Mann.

***Ctenostegus ornatus***, new species (fig. 1, *j*, *k*).

Similar to *C. cingulatus*, with the cinereous bands on all five segments, the first with a basal spot also, the last segment with a spot on each side, venter with five broad bands; the face, front and hind border of pronotum (both broader than in *C. cingulatus*); the two spots between base of wings in *C. cingulatus* form a broad band; the propodeum, pleura and legs cinereous as in *C. cingulatus*. Wings colored as in *C. cingulatus*, though basal part rather paler.

The antennae and ocelli about as in *C. cingulatus*, but third antennal joint a little shorter. The forewing is more slender, the marginal cell shorter, and about twice its length from the wing-tip (hardly more than length in *C. cingulatus*); the second plus third submarginal cell is twice as long behind as high, much narrowed above, the second abscissa hardly equal to first; receiving the first recurrent vein before middle, and the second recurrent a little before tip, the second recurrent much sloping, but little curved. The tarsal comb is much longer and the spines heavier than in *C. cingulatus* (fig. 1, *j*, p. 236). Length of forewing, 10.5 mm.

One female from Prince of Wales Island, Cape York, Australia, Aug. 1920, Kusche.

Genus **AGLOCHARES**, new genus

In appearance somewhat like *Ctenostegus*, but shorter. Hind femora with minute spines above near tip; third discoidal with pocket in base; claws toothed; pulvillus pointed; last joint of all tarsi without spines below; no spines above on front tibia; second and third submarginal cells united into one fairly long cell which receives both recurrent veins; basal vein interstitial with transverse; tip of abdomen with a few fine hairs; in female a tarsal comb; in the genotype the marginal cell is short, and the outer side plainly concave. Readily separated from *Ctenostegus* by the smooth last tarsal joint.

**Aglochares vachali**, new species (fig. 1, *a*).

Body black, with sericeous marks; face fully up to antennae, back of head, front part of pronotum, and narrow line on hind margin, hind margin of mesonotum, slope of propodeum, apical band on three segments, all of last segment, second ventral with broad apical band, front of front coxae, sides of mid and hind coxae, and mesopleura, all sericeous; legs with femora and tibiae largely sericeous. Wings hyaline, with two broad bands, one over basal and transverse veins, other over marginal cell and back, tip plainly white. Sides of face nearly parallel, except close to top where it is somewhat narrowed; ocelli in a low triangle, the laterals a little nearer to each other than to eyes, a faint line from anterior ocellus toward the antennae; antennae slender, but second plus third joint not equal to vertex-width; pronotum short, broadly concave behind; propodeum smooth, narrowed behind, from side, gently curving; abdomen rather broad at base, widest at end of second segment, smooth, with few fine hairs at tip, venter with few hairs on each segment.

Legs with but few spines; hind tibia with two rows, inner of four, outer of five, not nearly as long as the width of joint; inner spur of hind tibia more than one half of basitarsus; lower outer side of front tibia has three spines, one near base very small; tarsal comb of moderately long spines, not, however, as long as the third joint.

Wings with a short marginal cell, outer side very plainly concave, about its length from wing-tip; base of second plus third cell oblique, tip truncate, receiving first recurrent vein about one fourth from base, and the second recurrent (slightly curved) at about one fifth from the tip. In hindwing the tip of cubitus is rather suddenly curved backward. Length of forewing, 8.7 to 9 mm.

Two females from New Caledonia, Houailou, Sept. 25, 1925, Oct. 28, 1925, Ford.