

# AUSTRALIAN HYMENOPTERA CHALCIDOIDEA—I.

## SECOND SUPPLEMENT.<sup>1</sup>

By A. A. GIRAULT.

MAGNIFICATION as in previous descriptions.

### FAMILY TRICHOGRAMMATIDÆ.

#### CHÆTOSTRICHINI.

#### GENUS NEOBRACHISTA Girault.

There are two funicle joints, the first transverse but wider than the ring-joints. The scape of the male is dilated ventrad, sometimes enormously.

#### 1. NEOBRACHISTA TRIFASCIATA new species of A. P. Dodd and A. A. Girault.

*Female*:—Length, 1.10 mm.

Like *novifasciata* Girault but besides the three black stripes across the abdomen, there is a spot on each side of meson just caudad of the first stripe and a smaller spot on each side of meson farther caudad and more laterad; the second and third cross-stripes are very broad, the second not interrupted at the meson; the scutum is *without* the median sulcus which is present on the scutellum only; the scape is distinctly more compressed. Compared with the type of *novifasciata*.

*Male*:—not known.

Described from one female captured by sweeping in the jungle, January 15, 1914 (A. P. Dodd).

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2419, Queensland Museum, Brisbane, the above specimen on a slide.

#### 2. NEOBRACHISTA FASCIATA NIGRIVENTRIS Girault.

The male of this variety is probably that originally described with *fasciata*, the abdomen black. The scape is distinctly dilated ventrad, uniformly for its entire length. The male has been re-examined.

#### 3. NEOBRACHISTA FASCIATA Girault.

The male of this species is probably represented by a specimen caught April 4, 1914 at Gordonvale, Queensland, by sweeping grass in forest. It agrees in coloration as far as I could see and in structure except that the scape is enormously dilated ventrad, very much more so than in the male mentioned above, the rectangular, flat scape only somewhat longer than wide. Scutellum with a median groove, the scutum simple.

#### 4. NEOBRACHISTA INCOMPERTA new species.

*Neobrachista fasciata* Girault, *partim*.

*Female*:—Colored like *novifasciata*, the abdomen with three distinct black cross-stripes, one proximad, two distad but the second stripe is complete, not distinctly interrupted at the

<sup>1</sup> See Memoirs Queensland Museum, II, pp. 101 to 106.

meson. Also the marginal vein is not distinctly longer than wide, only slightly so. Thorax not seen nor hind wings.

*Habitat*: Cooktown, Queensland. Jungle.

*Type*: No. Hy 2120, Queensland Museum, Brisbane, one female on a slide in fragments.

#### 5. **NEBRACHISTA NOVIFASCIATA** new species.

*Antea*, first supplement, p. 101. Length, 1 mm. Second stripe of abdomen a little distad of middle, the first a little out from base. Funicle 1 not quite half the length of 2 (in the genotype only a fourth the length). June. Type on a slide.

#### GENUS NEBRACHISTELLA Girault.

##### 1. **NEBRACHISTELLA MAXIMA** Girault.

One female, sweeping grass in forest, Gordonvale (Cairns), Queensland, April 10, 1914. Wholly black, the vertex orange yellow, the thorax scaly reticulate, the so-called third ring-joint is twice the size of the others (as regards width) nearly but somewhat longer. Scape short. Mandibles tridentate. The median groove of thorax is confirmed.

#### GENUS CENTROBIELLA Girault.

##### 1. **CENTROBIELLA MAGNA** Girault.

One male, forest, Gordonvale, Queensland, April 12, 1914. The antennæ and legs are dusky black; the curved line of cilia back from the stigmal vein includes about six setæ. Fore wings with about seventeen lines of regular discal cilia, the caudal wings with a pair of conspicuous lines cephalad and a very faint line caudad.

Also one female, the same place, May 4, 1914, by sweeping in the forest. It agrees with the male. The ovipositor is extruded for half the length of the abdomen. Caudal wings with three lines of discal cilia, the third faint. Thorax densely scaly-shagreened. Pedicel and club dusky black.

In this genus, apparently, the funicle is 2-jointed as in *Ncobrachistella*, that is, the first joint very short and more or less hidden.

#### GENUS OLIGOSITA Haliday.

##### 1. **OLIGOSITA SCURRA** new species.

*Female*:—Length, 0.70 mm.

Differs from *americana* in having the funicle joint distinctly longer than wide, the body golden yellow, immaculate but the distal two club joints black; the discal cilia visible (low power) only near apex. Funicle joint distinctly longer than club 1 which is not much longer than wide, the middle club joint nearly twice its (the first's) length, longest of the flagellum, the third joint a little shorter than the second. Pedicel a little shorter than the funicle. Fore wings a little wider than their longest marginal cilia. Differs from *sacra* in having the funicle longer than the proximal club joint, the proximal tarsal joints long and the club blackish on more than the distal half.

*Male*:—Not known.

Described from one female captured by sweeping in forest, September 16, 1913 (A. P. Dodd).

*Habitat*: Kuranda, Queensland.

*Type*: No. Hy 2121, Queensland Museum, Brisbane, the above on a slide.

##### 2. **OLIGOSITA AMERICANA AUSTRALIS** new variety.

*Oligosita americana* Girault, *antea*, I, pp. 76, 86.

Differs from *americana* in having the proximal tarsal joint longer and more slender, the

pedicel long and slender, distinctly longer than wide and not cupshaped and the funicle joint somewhat longer.

*Habitat*: Brisbane and Roma, Queensland.

*Type*: No. Hy 2423, Queensland Museum, one of the Roma females on a slide; the second one was typical.

### 3. OLIGOSITA INERMICLAVA new species.

*Female*:—Length, 0.85 mm.

Differs from *poincarei* in that there are five cross-stripes of dusky on the abdomen, the first faint, the antennal club is without a prominent terminal spine, the pedicel is elongate, nearly twice the length of the funicle joint, the scutum bears a long, spindle-shaped dusky marking on each side of meson and the fore wings are hyaline, their marginal cilia somewhat shorter. From *brevicilia* differs in having the abdominal stripes complete, the scutum yellow except for the spindle-shaped markings, the funicle joint somewhat longer than wide, not distinctly wider than long, the hyaline wings and the more regular alignment of the discal ciliation of the fore wing; also the longer ovipositor which is inserted at about middle of abdomen. Sides of thorax black. Caudal wings very narrow. Stigmal spot small, distinct. Distal club joint longest, distinctly longer than the funicle which is somewhat longer than wide, somewhat longer than club 1. Venter of abdomen on each side of ovipositor to margins, black. Antennæ dusky, the legs pallid dusky. Compared with types of *poincarei* and *brevicilia*.

Described from one female taken in forest, May 18, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2423, Queensland Museum, Brisbane, the specimen on a slide.

### 4. OLIGOSITA PULLICORPUS new species.

*Female*:—Length, 0.45 mm.

Exactly similar to *pulchra* but the whole body dusky black, the legs and antennæ dusky pallid, the hind femur dusky, the pedicel rather long. The discal cilia of the fore wing appear to be sparser than in *pulchra*, only a line or two being made out (high power). Mandibles bidentate.

*Male*:—Not known.

Described from one female captured in forest, June 30, 1912.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2424, Queensland Museum, Brisbane, the specimen on a slide.

### 5. OLIGOSITA BREVICILIA new species.

*Female*:—Length, 0.70 mm.

Pale golden yellow and in my table of Australian species running to *aurea* but the abdomen bears four dusky cross-stripes, the fourth complete, the other three represented by three pairs of transverse marginal spots. Vertex, sides of propodeum, scutum except lateral margins and the median line distinctly, scutellum except median line distinctly, dusky black. Wings uniformly, distinctly yet lightly dusky. Caudal legs and cephalic femur dusky. Antennæ wholly dusky. Longest marginal cilia of fore wing somewhat less than half the greatest width of those wings. Further differs from *aurea* in having distinctly wider fore wings, in having the funicle joint distinctly wider than long, much shorter marginal cilia on fore wing and the much shorter ovipositor which is inserted at distal fourth. Fore wings with about a dozen lines of distinct discal cilia. Differs from *pullicorpus* in the broader wings, shorter marginal cilia, uniformly infuscated fore wing, shorter ovipositor and so forth, and in lacking a terminal spine on club (which is long and distinct in *pullicorpus*). In *aurea* the stripes on abdomen are very obscure and the club bears no distinct terminal spine. Stigmal spot very small. From *poincarei* differs in coloration, slender wings, smaller substigmal spot, absence of terminal seta on club (long and stout in *poincarei*), shorter ovipositor and so on. Mandibles tridentate.

Antennal club stout. Pedicel thrice the length of the distinctly wider than long funicle joint. Hind wings slender, curved, three lines of discal cilia, the caudal one faint.

*Male*:—Not known.

Described from one female taken in the forest, April 15, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2125, Queensland Museum, Brisbane, the specimen on a slide.

PAROLIGOSITA new subgenus of Girault and A. P. Dodd.

*Female*:—The same as *Oligosita* but the second division of the club is absent, the club but 2-jointed, the second joint twice the length of the first.

*Male*:—Not known.

*Type*: The following species.

**1. PAROLIGOSITA BICLAVATA** new species.

*Female*:—Length, about 0.55 mm.

Agrees with the description of *Oligosita australiensis* Girault but the knob of the stigmal vein is dusky, the longest marginal fringes of the fore wing are somewhat shorter than the greatest width of those wings and the scutum bears a median sulcus. Funicle joint quadrate. Hind wings missing.

Described from one female taken from a window, February 17, 1913.

*Habitat*: Ingham, Queensland.

*Type*: No. Hy 3453, Queensland Museum, Brisbane, the above specimen on a slide with the type *Arrhenophagoidea coloripes*.

GENUS UFENS Girault.

**1. UFENS ALBITIBIÆ** new species.

*Female*:—Length, 0.70 mm.

Differs from *flavipes* in having the discal ciliation of the fore wing denser, only a few of the lines standing out distinctly somewhat as in *picipes*; and also in having all of the femora black. Fore wings with about 25 lines of discal cilia.

*Male*:—Not known.

Described from one female captured by sweeping miscellaneous vegetation along the banks of the Pioneer River, October 15, 1911.

*Habitat*: Mackay, Queensland.

*Type*: No. Hy 2126, Queensland Museum, Brisbane, the above specimen on a slide.

**2. UFENS QUADRIFASCIATUS** new species.

*Female*:—Like *flavipes* Girault in wings and color of the legs but at once distinguished from it and all other species by the color of the abdomen which is black with four encircling stripes of white distributed over the surface. These white bands appear to be the incisions between the segments but they were present when the insect was captured and are not due to pressure after mounting. In other species of the genus I could not make them appear after application of pressure to the mounts.

*Male*:—Not known.

Described from one female captured in jungle pocket, April 2, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2127, Queensland Museum, Brisbane, the specimen on a slide.

**3. UFENS BINOTATUS** new species.

*Female*:—Like the preceding but besides the vertex, the mesoscutum, scutellum and postscutellum are orange yellow, the scutum with a rather large spindle-shaped black marking

on each side of the meson each reaching somewhat three fourths the way to apex. Thorax distinctly longitudinally lineolated. Hind tibiae more or less dusky just below knees. Marginal vein subequal to stigmal. Scape white, antenna black.

From one female caught on a native grass in forest, April 4, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2128, Queensland Museum, Brisbane, the specimen on a slide.

A second female taken May 13, same place, had the base of abdomen yellow transversely.

#### GENUS PARUFENS Girault.

The antennae bear two ring-joints. Removed from *Ufens*.

##### 1. PARUFENS ARGENTITIBIÆ new species.

*Female*:—Length, 0.70 mm.

Jet black, the vertex more or less yellowish, the trochanters, tibiae, knees and tarsi silvery white, the wings hyaline. Pedicel nearly twice the length of the funicle joint which is cupshaped, its greatest width (apex) a little more than its length; club acuminate-ovate, longer than the scape, without a terminal seta, its three joints longer than wide. Pedicel apparently with a coarse scaly sculpture. Fore wings moderate in width, with about 15 regular lines of discal cilia and a curved line from the stigmal vein with about four cilia. Stigmal vein long, the marginal longer than it but not much more so. Hind wings short, moderately broad, obtusely pointed at apex, bearing four lines of discal cilia, two cephalad and distinct, two caudad and faint; caudal marginal fringes about as long as the greatest width. Marginal fringes of fore wing very short.

Differs from the genotype only in having the tibiae silvery besides the tarsi, the funicle joint cupshaped and apparently in having one more line of discal cilia in the hind wing.

*Male*:—Not known.

Described from one female captured December 24, 1912 in forest.

*Habitat*: Capeville (Pentland), Queensland.

*Type*: No. Hy 2129, Queensland Museum, Brisbane, the specimen on a slide with the type of *Aprostocetus saltensis* Girault.

##### 2. PARUFENS ARGENTIPES Girault.

A male of this species was captured January 4, 1913 at Capeville (Pentland), Queensland, by sweeping in forest. It differs from the female in bearing a distinctly 2-jointed funicle, the antennae as in the female of *Ufens* Girault. Thus the female *Ufens* is like the male of *Parufens* except that there are two ring-joints in the latter. In the female of *argentipes*, the pedicel is coarsely sculptured into scales, while the funicle is much wider than long and apparently solid while in the male the pedicel seems simple, the funicle plainly 2-jointed and only somewhat wider than long, the division transverse. The male genitalia are extruded distinctly for some length (half that of the abdomen) and resemble an ovipositor. The mandibles are tridentate in both sexes, the hind wings with three rows of discal cilia, two cephalic. The ring-joints in the male are distinct but the second one adheres closely to the funicle.

#### GENUS ABBELLA Girault.

##### 1. ABBELLA SEXGUTTATA new species.

*Female*:—Very similar to *mira* Girault but the two distal spots on the abdomen do not form cross-stripes but are widely separated, the second spot widest, all wider than long. The substigmal spot is very pronounced as in *mira* and the club is dusky, its first joint black as in *mira*.

*Male*:—Not known.

From one female taken in forest, March 31, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2430, Queensland Museum, Brisbane, the specimen on a slide.

The female of *subflava* recorded elsewhere from Gordonvale, October 29, 1912 (window) was really this species.

#### BRACHYGRAMMATELLA new genus.

*Female*:—Allied with and similar to *Brachygramma* Girault but the antennæ are 8-jointed bearing two distinct ring-joints, the club rather long and conic-ovate. Also the scape is short, the ovipositor much longer being inserted a little out from base, the antennæ are inserted a little dorsad of the ventral ends of the eyes, the marginal vein though broad or thick is thrice longer than wide, the discal ciliation of the fore wing is extraordinarily dense and fine, hence normal, there is a short, stout hairless line on fore wing from (caudo-proximad) the end of the minute stigmal vein and the caudal wings bear about seven lines of discal cilia. The marginal cilia of the fore wing are extraordinarily short and minute, barely visible. Thorax apparently with a distinct median groove for its entire length. Tibial spurs single, absent on cephalic legs. Caudal trochanters with a flattened or compressed dorsal lobe.

*Male*:—Not known.

*Type*: The following species.

#### 1. BRACHYGRAMMATELLA NEBULOSA new species.

*Female*:—Length, 0.70 mm.

Sooty black, the vertex and scutellum orange yellow, the fore wings rather lightly infuscated out to apex of venation, the marginal vein black; infuscation of fore wing deeper under marginal vein and more or less across from apex of venation. Knees, tips of tibiæ and the tarsi silvery white. Color of scape not seen. Fore wings with a more or less clear oblique (caudo-distad) hairless line from end of venation forming with the true hairless line a short inverted V. Marginal vein hispid. Hairless line of fore wing with about four short lines of discal cilia proximad of it, as coarse as the rest of the discal cilia opposite the marginal vein, the main part of the discal ciliation much finer, none of it coarse or long. Hind femur compressed, the tibial spurs short. Fore wings oblately rounded at apex, shaped somewhat as in *Ufens*. Pedicel somewhat longer than wide at apex; funicle subquadrate, somewhat shorter than the pedicel, both joints wider than long, the first a little shorter, the suture between them oblique; club 1 longer than 2, longer than the pedicel, 2 conical, subequal to the pedicel, without a terminal seta. Legs rather short. Fore wings naked (or nearly) under submarginal vein. Mandibles with three minute teeth. Caudal marginal cilia of caudal wing distinctly shorter than the width of those wings. Club about twice the length of the pedicel.

Described from one female captured by sweeping grass in forest, April 8, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2431, Queensland Museum, Brisbane, the specimen on a slide with type of *Lathromerella unfasciata* Girault and several other chalcids.

#### MIRUFENS new genus.

*Female*:—Like *Japania* Girault but the ovipositor is inserted some distance out from base; wings as in *Ufens* but the stigmal vein is distinctly much longer than the marginal. Cephalic tibia armed outwardly (dorsad) with six small but distinct teeth-like projections (placed from base to apex). Scutellum with a narrow but distinct median grooved line, a similar line indicated at apex (caudad) of scutum. Mandibles 4-dentate. Caudal femur somewhat swollen, the caudal tibiæ serrulate dorsad. Scape much shorter than the club. Marginal vein nearly thrice longer than wide.

*Male*:—Not known.

*Type*: The following species.

**1. MIRUFENS DENTIPES** new species.

*Female*:—Length, 1.25 mm. Robust.

Jet black, the vertex orange yellow, also the antennæ except the concolorous scape and pedicel. Wings hyaline, the venation yellow, the stigmal vein black. Knees, tips of tibiæ and the tarsi silvery white. Funicle 1 somewhat longer than wide, 2 a little wider than long, 1 being nearly as long as the pedicel; club somewhat longer than the rest of the flagellum. Fore wings with about 16 regular lines of discal cilia, the oblique line from the stigmal vein long (about nine setæ). Hind wings broad, with a pair of distinct lines of discal cilia cephalad and a very faint pair of lines caudad, the caudal marginal fringes shorter than the greatest width of the blade, the cephalic cilia very short and uniform. Sculpture of thorax very fine, nearly glazed. Tarsal joints rather long. Middle tibial spur long and slender.

Described from one female taken by sweeping grass in forest, April 4, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2432, Queensland Museum, Brisbane, the specimen on a slide.

**PSEUDBRACHYGRAMMA** new genus.

*Female*:—Like *Brachygrammatella* Girault but the club is solid and the thick marginal vein is shorter, not quite twice longer than wide. Also, there is no hairless line from the venation.

*Male*:—Not known.

*Type*: The following species.

**1. PSEUDBRACHYGRAMMA PERPLEXA** new species. Genotype.

*Female*:—Length, 0.90 mm.

Agrees in every detail with *Aphelinodea speciosissima* Girault with which it is congeneric but differing from the original description of that species as follows: The caudal wings are dusky at tip and bear four lines of discal cilia, the third line disappearing caudad; the comet-shaped cross-stripe on fore wing from apex of the venation is practically all of the infuscation under the venation; the scutellum is contrasting lemon yellow.

*Male*:—Not known.

Described from one female captured in forest, April 15, 1914 (A. P. Dodd).

*Habitat*: Cloncurry, Queensland.

*Type*: No. Hy 2433, Queensland Museum, Brisbane, the specimen on a slide with the type of *Neocasca multiguttata* Girault.

**2. PSEUDBRACHYGRAMMA SPECIOSISSIMA** Girault.

*Aphelinoidea speciosissima* Girault, *antea*.

*Female*:—See *antea*, pp. 105-107.

**3. PSEUDBRACHYGRAMMA DUBIA** new species.

*Male*:—Like the female *speciosissima*; the club enlarged and short, the two joints not greatly differing in length, the pedicel flattened. The two club joints deeply divided, the distal joint short and conical without a terminal seta, the proximal one somewhat wider than long. Agreeing with the description of *speciosissima* but the head all yellow, the abdomen all black, the hind wings with six rows of discal cilia. Middle tibiæ with stiff black bristles dorsad.

A male, December 3, 1913 by sweeping in forest.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2434, Queensland Museum, the male on a slide.

## APSEUDOGRAMMA new genus.

*Female*:—Differs from *Pseudogramma* Girault in that the funicle is 1-jointed and the stigmal vein elongate, nearly as long as the marginal, the latter about half the length of the submarginal. Ovipositor inserted at about the middle of the abdomen. Mandibles tridentate. Abdomen no longer than the thorax, obliquely truncate. Hind tibial spur single, short.

## 1. APSEUDOGRAMMA POPEI new species. Genotype.

*Female*:—Length, 0.58 mm.

Jet black, the proximal two joints of the tarsi, tips of tibiae narrowly and the scape pallid. Scutum simple, reticulately scaly. Fore wing dusky from base to distad a little over half from apex of stigmal vein to the apex of the blade; venation blackish. Discal cilia of fore wing moderately dense, subnormal, a line from apex of stigmal vein to apex of wing being about the only one complete and regular; about sixteen lines of discal cilia across widest part of blade but no oblique line from the stigmal vein. Marginal cilia of fore wing short but not extremely short. Caudal wings short, moderate in width, with three complete lines of discal cilia, two along cephalic margin, the third caudal. Longest (caudal) marginal cilia of hind wing subequal to those wings' greatest width, distinctly longer than the longest marginal cilia of the fore wing. Scape short, subequal to club, a little longer than the pedicel, funicle and ring-joint combined. Pedicel longer than the funicle which is a little wider than long. Ring-joint distinct. Club with long, white streaks, funicle with a transverse oblique one proximad. Club blunt at apex.

From one female captured by sweeping secondary forest growth, May 22, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2135, Queensland Museum, Brisbane, the specimen on a slide with type of *Oligosita inermiclava*.

Dedicated to Alexander Pope.

## NEOCENTROBIELLA new genus.

*Female*:—Differs from *Centrobiella* in bearing two distinct ring and funicle joints and the fore wing lacks the oblique line of cilia from the stigmal vein.

*Male*:—Not known.

*Type*: The following species.

## 1. NEOCENTROBIELLA RARA new species.

*Female*:—Length, 0.75 mm., excluding the ovipositor which is extruded for a length equal to two thirds that of the abdomen.

Black; median line of scutum and scutellum and lateral margins of scutum, all narrowly golden yellow; head golden yellow; occiput dusky; antennae and legs wholly concolorous; fore wings lightly infuscated from base to apex of venation. Antennae 9-jointed, the funicle distinctly 2-jointed, the first joint one and a half times longer than wide, the second oval, barely longer than wide; two distinct ring-joints; pedicel longer than funicle 1, two thirds the length of the scape which is much shorter than the long, rather loosely jointed club; club 2 longest, nearly twice the length of 1, longer than the pedicel; club 1 a little longer than wide; club 3 a little shorter than club 2. Fore wings with about a dozen lines of discal cilia most of them regular and distinct, the longest marginal cilia not quite half the greatest wing width; the discal ciliation is irregular opposite the stigmal vein. Caudal wings slender, acute, with two distinct lines of discal cilia, the caudal marginal cilia barely shorter than the longest marginal cilia of the fore wing. Tarsi slender. Club without a terminal spine but with several short, thick setae from sides of apex.

Described from one female taken in forest, May 13, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2436, Queensland Museum, Brisbane, the specimen on a slide.



## TRIBE OPHIONEURINI.

The name of this tribe has been changed from Lathromerini because the oldest included genus is *Ophioneurus* Ratzburg.

## GENUS APHELINOIDEA Girault.

**1. APHELINOIDEA TINTINNABULUM** new species.

Differs from *howardii* and the other Australian species in having the discal ciliation absent just distad of venation somewhat as in *plutella* but the naked stripe is not so clearly delimited as in that species. Legs and antennæ pallid, suffused slightly with dusky, the femora dusky. Face, sides of thorax, occiput and obscure cross-stripes on abdomen blackish. Dorsum of thorax orange yellow. Only one or two cephalic lines of discal cilia reach the marginal vein, the others disappearing about the length of that vein away. Scutellum paler.

*Male*:—Not known.

Described from two females captured by sweeping forest, January 6, 1913.

*Habitat*: Capeville (Pentland), Queensland.

*Type*: No. Hy 2137, Queensland Museum, Brisbane, two females on a slide together.

**2. APHELINOIDEA PAINEI** Girault.

One female, Gordonvale, April 8, 1914, sweeping grass in forest.

**3. APHELINOIDEA SPECIOSISSIMA** Girault belongs to *Pseudbrachygramma*.

## GENUS LATHROMERELLA Girault.

A female captured at Gordonvale, Queensland, January 13, 1913, by sweeping in forest bore much less black on the pleura of thorax. The species is not uncommon in the type locality.

**1. LATHROMERELLA FASCIATA** Girault.

Five females, forest, type locality, 2,000 feet, June 3. Metathorax and propodeum laterad black. The two ring-joints are verified.

**2. LATHROMERELLA OCCIDENTALIS** new species.

*Female*:—Length, 1 mm. excluding ovipositor which is extruded a little over a fourth the length of the abdomen. Differs from the genotype in lacking a terminal spine on club and the ovipositor is distinctly extruded.

Black, the vertex, scutum and scutellum deep orange yellow, the scutum on each side of the meson with two conspicuous elongate dusky black markings reaching distad of middle. Fore wings lightly dusky from base distad half way to apex of wing from end of venation. Fore wings with about 14 lines of discal cilia in regular lines the marginal cilia not long but a little longer than usual. Legs dusky, the tips of tibiæ and tarsi pallid. Antennæ dusky. Ovipositor inserted near base. Fourth club joint longest, wider than long, the fifth joint conical, longer than wide.

From one female captured by sweeping forest, April 16, 1914 (A. P. Dodd).

*Habitat*: Cloneurry, Queensland.

*Type*: No. Hy 2438, Queensland Museum, Brisbane, the specimen on a slide with type of *Ufens binotatus*.

**3. LATHROMERELLA CHINDERAENSIS** new species.

*Female*:—Length, 0.75 mm. Antennæ with the distinct terminal spine. Abdomen normal.

Jet black, the scutum (excepting for a long wedged shaped spot on each side of meson from cephalic margin), scutellum, axillæ, meson of propodeum, abdomen across base dorsad

and vertex orange yellow. Tibiæ dusky, pallid along distal half. Fore wings with a substigmatal spot, irregularly infuscated near base. Marginal fringes of fore wing nearly as long as the caudal marginal fringes of hind wing. Otherwise like *unfasciata*.

From one female taken by sweeping in mangrove, May 14, 1914 (A. P. Dodd).

*Habitat*: Chindera, Tweed River, New South Wales.

*Type*: No. *Hg* 2139, Queensland Museum, Brisbane, the female on a slide.

#### 4. LATHROMERELLA LONGICILIATA new species.

*Female*:—Length, 0.70 mm.

Bright, deep golden yellow; head, cephalic part of thorax (pronotum and a little of mesonotum), propodeum and distal third of abdomen dusky or jet black; legs dusky. Fore wings distinctly dusky but irregularly so yet there is a distinct dusky stripe across from the stigmal vein and which is rather broad; under the submarginal vein the black is also distinctly dusky, elsewhere faintly so. Marginal vein a little longer than the submarginal. Agrees with the generic diagnosis except that the fore wings bear rather long marginal cilia (somewhat less than a third the greatest wing width) and the abdomen is shorter, the ovipositor inserted at middle (not extruded); fore wings where widest with about a dozen lines of discal cilia which are not dense but in more or less regular lines, each cilium very short. Hind wings with at least two complete lines of discal cilia, both cephalic. Mandibles tridentate, the third tooth shorter than the others. Antennæ dusky; fifth club joint longest, subequal to the terminal spine or a little shorter. Vertex transversely lineolated. Marginal cilia of hind wing caudad barely longer than the longest marginal cilia of fore wing.

From one female captured in forest, April 4, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. *Hg* 2440, Queensland Museum, Brisbane, the specimen on a slide.

What appears to be the male of this species lacks the terminal spine on the antenna and the whole abdomen is dusky black, the meson of propodeum yellow and most of scutum, the latter bearing two long, spindle-shaped black markings quite as in *Ufens binotatus*. The fore wings are more uniformly infuscated.

One male captured with the female and mounted with the type of *Ufens binotatus* Girault.

#### 5. LATHROMERELLA UNFASCIATA new species.

*Female*:—Length, 0.60 mm.

Golden yellow; a wedgeshaped marking on each side of meson of scutum cephalad, antennae, caudal legs except tibiæ and tarsi, sides of pronotum and propodeum, dusky; a rather broad stripe across abdomen at distal three fourths and a rather large round spot between this and apex on each side of meson, black. Fore wings with marginal cilia not long, the blade lightly infuscated only from stigmal vein; marginal cilia of fore wing distinctly shorter than the caudal cilia of hind wing.

*Male*:—Not known.

From one female captured by sweeping grass in forest, April 8, 1914. A second specimen June 10, 1914, in the same place. A third female, September, Pentland, Queensland.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. *Hg* 2441, Queensland Museum, Brisbane, the first specimen on a slide.

The cross-stripe of abdomen is really very narrowly divided along the meson, the mesal ends of each side turned caudad. There is also a more obscure stripe across just before tip of abdomen.

#### GENUS LATHROMEROIDES Girault.

##### 1. LATHROMEROIDES LONGICORPUS Girault.

One female, Gordonvale (Cairns), Queensland, March 31, 1914, by sweeping grasses in forest. Two females, same place, April 8, 1914.

**2. LATHROMEROIDES FASCIATIVENTRIS** new species.

*Antea*, first supplement, p. 106. Length, 1.30 mm. Mandibles tridentate. The type was captured at 2,000 feet, June 3 and is on a slide.

## PARUSCANOIDEA new genus.

*Female*:—In my table of genera running to *Uscanoidea* Girault from which it differs in bearing a long slender marginal vein, which is as long as the submarginal and about thrice the length of the stigmal; the latter is somewhat longer than in *Uscanoidea* Girault. The fore wing is quite naked. The scape is distinctly shorter than the club. Valves of ovipositor slightly, distinctly extruded. Hind wing narrow, acute, with very long caudal marginal fringes.

*Male*:—Not known.

*Type*: The following species.

**1. PARUSCANOIDEA DICKENSI** new species.

*Female*:—Length, 0.65 mm.

Black, the head and thorax bright lemon yellow but the cephalic scutum with a short longitudinal black marking on each side of meson. Trochanters, knees, tarsi and distal three fourths of tibiae pale, antennae dusky pallid. The fore wing is lightly infuscated proximad, seen more particularly in a more or less indefinite stripe across from the stigmal vein and an indefinite, suffused patch under the submarginal, the space between the two subhyaline. Hind femur compressed.

Described from one female taken in forest, January 4, 1912.

*Habitat*: Capeville (Pentland), Queensland.

*Type*: No. Hy 2422, Queensland Museum, Brisbane, the specimen on a slide with *Coccophagus auricaput*.

Dedicated to Charles Dickens.

## GENUS TUMIDICLAVA Girault.

**1. TUMIDICLAVA CILIATA** Girault.

On page 97, line 4 in the original description of this species (Part I) the peculiar grass in which the Cooktown specimens were captured is a common sedge locally called "nutgrass." On April 4, 1914, I captured a female of this species by sweeping native grasses in the forest; on this specimen I clearly saw the yellow median line on the scutum which makes the species agree with the North American genotype. Is this a case of parallel evolution?

**2. TUMIDICLAVA NIVEIPES** new species.

*Female*:—Similar to *ciliata* but the black on the body is much lighter yet forming the same pattern while the legs are yellowish white except hind coxa and femur. Also, the abdomen bears a complete line of marginal dots and about four abbreviated cross-stripes centrally. Body scaly.

Described from one female captured with the *ciliata* mentioned above. A second female same place, April 16 following and one on April 25, 1914.

*Habitat*: Gordonvale (Cairns), Queensland. Grass in forest.

*Type*: No. Hy 2443, Queensland Museum, Brisbane, the first female on a slide with the type of *Mirufens dentipes* Girault.

**3. TUMIDICLAVA CANALIS** new species.

*Male*:—Length, 0.80 mm.

Golden yellow, the occiput, antennae, scutum except median line and lateral margins, seven pairs of round marginal spots on abdomen from base to apex and three or four dots

along meson of abdomen in a line from base, dusky black. Thus much like the species *niveipes* but more robust, the antennal club lacks the prominent terminal spine and the mesothorax has a complete median sulcus. The legs are dusky.

From one male taken by sweeping secondary forest growth, May 23, 1914.

*Habitat*: Gordonvale (Cairns), Queensland.

*Type*: No. Hy 2144, Queensland Museum, Brisbane, the male specimen on a slide.

TRIBE TRICHOGRAMMATINI.

GENUS TRICHOGRAMMA Westwood.

1. **TRICHOGRAMMA AUSTRALICUM** Girault.

In Java (Paseroen) this species parasitizes the eggs of *Chilo infuscatellus*, an unknown tortricid associated with cane, *Grapholita schistaceana* and *Diatraea striatalis*. In specimens of this species reared from *Chilo* my attention was called by P. van der Goot to the presence on the male and female antenna of the minute bladder-like appendages resembling conidial spores (and thought characteristic of *Trichogrammatoides*). In the specimens sent me I observed these on the female funicle. Sometimes the female abdomen bears two broad black bands one at base, one at tip; it may be wholly blackish to jet black.

I have a female from moth eggs, Chindera, Tweed River, New South Wales, May 13, 1914 (A. P. Dodd) and many specimens from a mass of noctuid eggs on *Melaleuca*, forest, Gordonvale, June 1, 1914.

This paper taken with Part I and the first supplement completes our present knowledge of the Australian Trichogrammatidae. Students of the group should consult my rather full treatment of the world's genera now in course of publication in the Bulletin of the Wisconsin (U.S.A.) Natural History Society.

Students of this group must always be thorough and careful since the minute forms contained therein have proved *bêtes noires* to many of the most acute Hymenopterologists and in studying them we must be certain to forsake our usual confidence and be content to feel the way with Caution and Diffidence as constant companions.<sup>2</sup>

The following members of the family are common in their several habitats: *Neobrachista fasciata*; *Ufens flavipes*; *Oligosita pulchra*, *Oligosita minima*, *Oligosita sacra*; *Tumidiclava ciliata*; *Trichogramma australicum* and *Abbellia subflava*.

<sup>2</sup> Methods of collecting and describing members of this family are given in the second supplement of Part II.