

ON THE PARASITIC HYMENOPTERA COLLECTED BY  
MAJOR C. G. NURSE IN THE BOMBAY PRESIDENCY.

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To make this paper more complete I have added, as an appendix, a list of the Parasitic Hymenoptera described previously from the Bombay Presidency. As will be seen, the catalogue is not an extensive one.

BETHYLINÆ.

*Dissepyris pallidinervis*, sp. nov.

Black, the scape, pedicle of antennæ, mandibles, palpi, legs, tegulæ, the 1st abdominal segment, the 2nd broadly laterally, at the base, more narrowly in the middle and the apical segment more obscurely, red; fore wings slightly but distinctly smoky, the hinder clear hyaline, the apices not ciliated; the stigma, parastigma and nervures pale, the radius darker coloured at the apex. Head opaque, more shining at and behind the ocelli, finely closely shagreened, almost punctured and bearing small, shallow scattered punctures. Eyes large; the temples one-fourth of their length; malar space about as long as the temples, shorter than the pedicle of antennæ. There is no distinct keel between the antennæ; ocelli in a triangle, the hinder separated from each other by a distinctly less distance than they are from the eyes. Terminal tooth of mandibles long, gradually narrowed. Occiput transverse. Pronotum not quite so long as the head behind the antennæ; aciculated, sparsely punctured, the punctures distinctly larger than those on the head; the punctures on the head are still larger. Metanotum irregularly, closely obliquely striated; it bears 5 keels in the middle; the central is stout, straight; the inner 2 converge and become weaker, more irregular towards the apex; the outer are stronger and curve roundly, broadly inwardly at the apex; they are more widely separated from the 2nd than that is from the central; there is an indistinct longitudinal furrow on the inner side of the outer bordering keel. Pro- and mesopleuræ finely, the metapleuræ more strongly and regularly obliquely striated. The pubescence on the legs is longish, white and moderately dense. The 2nd discoidal cellule has the apical and lower nervures faint compared with the upper basal. The radius is not much longer than the stigma and parastigma united; the transverse median nervure is roundly curved; its lower part being opposite the apex of the transverse basal; it has not the upper and lower parts straight, oblique and sharply angled where the lower abscissa leaves the upper, as shown in Kieffer's figure of *D. rufipes* (also from Bombay)—Ann. d. l. Soc. Scient. de Bruxelles, XXIX, pl. 1, f. 12. The apices of tarsal joints are armed with stiff longish spines; the tibiæ not spinose, the hinder shorter than the tarsi, the metatarsus below thickly covered with stiff hair; it is distinctly shorter than the following 2 joints united. The sides of the metanotum at the apex above bear a short blunt tubercle, before the terminal curve. ♀.



Length 6 mm.

Deesa.

Antennal scape as long as the following 2 joints united; thick; the 2nd about 3 times longer than thick, as is also the last. Allied to *D. rufipes*, Kief., from Malabar.

#### CHALCIDIDÆ.

##### *Chalcididinae.*

##### *Cælochalcis carinigena*, sp. nov.

Black, densely covered with long white pubescence, the apex of the 4 anterior tibiæ and the greater part of the tarsi rufo-testaceous; wings clear hyaline the nervures black.

♂ Length 4 mm.

Deesa. January.

Head, pronotum, mesonotum and scutellum rugosely punctured. Cheeks clearly longer than the eyes, keeled on the outer and inner sides; the inner keel indistinct on the top. Scutellum large, narrowed towards the apex; the apical teeth large, as long as wide, irregular. Metanotum with 3 areæ; the central of almost equal width, extending from the base to the apex; the lateral areæ wider, widened in the middle, the basal part rounded, the apical straight, oblique. Propleuræ rugosely punctured; mesopleuræ with the basal half smooth, finely, widely longitudinally striated; metapleuræ rugosely punctured with some round, separated punctures at the base. Basal segment of abdomen strongly closely aciculated, bare, the others punctured, densely pilose. Legs densely covered with short, white pubescence.

The apex of the scutellum is more distinctly bidentate than it is in *C. carinifrons*, Cam. (also from Deesa), which has also the legs red for the greater part.

##### *Euchalcis trichiocephala*, sp. nov.

Black; the legs, except the forecoxae, red; the antennæ red, the apical joint black, the preceding 2 joints infuscated, the head, especially below, thickly covered with longish silvery white pubescence; wings hyaline, the nervures black. ♀.

Length 5 mm.

Deesa. January.

Front and vertex irregularly punctured. Malar space distinctly longer than the eyes, which converge slightly above. Temples obsolete; the eyes behind projecting beyond the occiput, which is narrowed laterally. Mandibles reddish in the middle. Pro- and mesonotum rugosely punctured. Scutellar teeth stout narrowed towards the apex; the space between wider than long. Metanotum with a central area which is slightly narrowed towards the base, the apex rounded; in the centre are 2 indistinct transverse keels; at the sides, at the base, are 3 areæ, of which the central is much the larger; the inner is 4-angled, obliquely narrowed at the base, the 2nd is wider than long; its apex is dilated in the middle; below, next to the central, is a large area, longer than wide



and of equal width ; the sides of the segment have the upper half dilated, the top projecting upwards into a blunt tooth, its lower edge also slightly projecting. Propleuræ covered with deep, round, clearly separated punctures ; the base of mesopleuræ smooth, the base bordered by a row of round foveæ, its apex by a crenulated furrow ; the rest of the pleuræ rugosely punctured-reticulated. Abdomen smooth, shining ; the basal half bare, the apical thickly covered with silvery pubescence. Sheaths of ovipositor distinctly projecting, broad. Hind femora distinctly dilated near the top, the apex of the dilated part with an oblique slope.

*Antrocephalus varipilosis*, sp. nov.

Black, covered with silvery pubescence ; the apex of the 4 anterior femora and the 4 front tarsi dull red, the hind femora red ; the apical third of their tibiæ of a duller red ; the tibiæ at the base behind suffused with red ; wings hyaline, slightly infuscated at the apex ; the nervures black. ♂.

Length 5 mm.

Deesa. October.

Head and thorax strongly, closely punctured. Scutellar teeth short, broad, inconspicuous. Post-scutellum about twice longer than wide, hollowed, with broad margins. Areola on metanotum extending from the base to the apex, slightly narrowed at the apex, the upper two-thirds hollowed, the lower third rugosely punctured ; the sides are distinctly margined ; above is a small triangular area ; the metapleuræ thickly covered with longish silvery pubescence. Underside of femora with a white hair fringe ; their basal half black below. Flagellum of antennæ opaque, covered with white down ; the scape shining, bare, narrowed at the apex. The silvery hair on the sides of the abdomen is mixed with golden. Tegulæ testaceous.

*Oncochalcis nursei*, sp. nov.

Black, shining, with the following parts pallid yellow : the apex of the 4 anterior femora, more broadly below than above, an irregularly oval mark on the apex of the hinder femora on the outside, the 4 anterior tibiæ, the posterior on the outer side, the 4 anterior tarsi and the tegulæ ; the hinder tarsi rufous ; wings hyaline, the nervures black ; the temples, sides of face, apex of scutellum and the metapleuræ densely covered with long, silvery pubescence. ♀

Length 5 mm.

Abu.

Flagellum opaque, covered with a white pubescence ; the antennæ are inserted shortly above the lower edge of the eyes. Front at the sides strongly, closely punctured, the punctures running into each other ; the vertex less strongly punctured. The plate in the centre of the face, large, shining, broad below, becoming gradually, roundly narrowed above, bordered by an obscurely crenulated furrow ; the lower border with shallow, not very distinct punctures. Basal half of mandibles closely punctured, the apical smooth and brown.



Clypeus broadly depressed, the apical margin raised. Propleuræ shagreened, the fore margin raised; the smooth base of mesopleuræ with 4 foveæ, of which the 3rd is the larger and more irregular, the part below covered with round, not very deep, punctures, the middle with a broad striated band, widest above, the rest smooth, shining; metapleuræ rugosely punctured. Pro-mesonotum and scutellum strongly punctured; the pronotum more closely than the rest. Metanotum coarsely reticulated; on the basal half of the metapleuræ, on the inner edge, is a curved oblique area, fully 4 times longer than wide and curved, roundly inwardly on the innerside; the sides are broadly rounded, without projections. Basal segment of abdomen shining, the sides weakly punctured; the others are strongly punctured, except at the base and apex. On the hind femora are 7 large, clearly separated teeth (the basal more widely separated than the others) and 3 smaller, closely pressed apical. Hind coxæ smooth and shining above, shagreened and pilose below. The areola is about twice longer than wide, rounded and narrowed at the base, transverse at the apex.

This species may be known from *marginata*, Cam. and *deesæ*, Cam. by the pale, not bright lemon-yellow colour of the legs and tegulæ. The 3 may be separated thus:—

- a. Middle of face without a smooth, shining, clearly defined plate; temples very short, underside of hind femora thickly covered with silvery pubescence..... *deesæ*, Cam.
- b. Middle of face with a large, clearly defined smooth plate, temples not very short.  
     legs bright lemon-yellow, clypeus raised in the centre;  
     areola obliquely, sharply narrowed at the base..... *marginata*, Cam.  
     legs whitish yellow; clypeus broadly depressed;  
     areola bluntly rounded at the base ..... *nursei*, Cam.

*Chalcis megaspila*, sp. nov.

Black, the tegulæ and the legs, except the coxæ, trochanters, the femoral teeth and a large mark, longer than wide, on the middle of the outerside of the hind femora; the mark is slightly oblique, extends to the basal fourth and has the base rounded; they have 12 minute black teeth, the basal less distinct and widely separated; wings hyaline, the nervures black. ♀.

Length nearly 5 mm.

Abu.

Orbits, face and clypeus densely covered with longish white pubescence; closely rugosely punctured, the face more coarsely than the rest; clypeus smooth, except for a row of weak punctures in the middle; the labrum smooth, its sides raised. Mandibles closely rugose, smoother towards the apex. Temples distinct, moderately wide. Pro-mesonotum and scutellum closely rugosely punctured, the scutellum more coarsely than the rest, the apex broadly bidentate, the lobes brownish. Metanotum deeply reticulated; the reticulations in rows; there is no areola; the sides broadly rounded; roundly dilated below. Basal segment smooth, shining, bare, the others closely, strongly punctured and thickly covered with white hair. The 3 lower teeth on the femora are smaller,



blunter and more widely separated than the others. Upper half of propleuræ shagreened, irregularly punctured; the lower smooth. Base of mesopleuræ smooth; the apex stoutly, closely striated. Metapleuræ strongly rugosely punctured. The apex of the hind coxæ and the hind trochanters are rufescent.

This species agrees with *C. ornatipes*, Cam., from Kashmir in having the coxæ yellow, with a distinct black spot; the spot in *ornatipes* is smaller and is in the middle, not on the outer edge, and the pubescence has a golden tinge.

## EVANIIDÆ.

*Gasteruption rotundicolle*, sp. nov.

Black, the basal half of mesonotum, the mesopleuræ except at the sutures the mesosternum, the greater part of the metapleuræ and of the metanotum, red; the base of the 4 anterior tibiæ and tarsi and a band near the base of the hinder tibiæ, much broader below than above, white; the apex of the 1st and the 2nd abdominal segments, dull rufous; wings hyaline, the nervures black. Prothorax long, longer than the mesothorax, cylindrical, not much widened towards the apex, aciculated. ♂.

Length 12 mm.

Deesa. January.

Antennæ black; the pedicle fully twice longer than wide; the 3rd joint slightly shorter than the 4th, about as long as the scape. Eyes bare; the ocelli in a triangle; the posterior placed behind the eyes, separated from them by about the same distance as they are from each other. Temples long, two-thirds of the length of the eyes; obliquely narrowed; the occiput transverse. Middle of clypeus at the apex, with a semicircular depression; the apex fringed with golden hair. Basal half of mesonotum in the middle irregularly transversely striated; the apical irregularly reticulated. Scutellum somewhat strongly, but not closely punctured. Metanotum transversely reticulated, a smooth, shining keel down its centre. Propleuræ closely rugosely punctured, more finely below than above, the middle irregularly reticulated; the meso closely rugose; below the middle coarsely aciculated; the apex crenulated, the upper half with a row of round foveæ; the metapleuræ irregularly reticulated at the base and apex, the middle closely rugose. Hind coxæ closely striated; about 4 times longer than thick. Basal abscissa of radius as long as the 2nd or nearly so. The pubescence is dense and silvery.

This species comes near to *G. orientale*, Cam., which is also from Deesa; the 2 may be separated, as regards the males, thus:—

Eyes hairy, pedicle of antennæ not much longer than wide, mesonotum and scutellum entirely red; prothorax shorter than mesothorax, thick ..... *orientale*.

Eyes bare; pedicle of antennæ more than twice longer than wide; mesonotum at apical half and scutellum black; prothorax as long as mesothorax, slender ..... *rotundicolle*.

*Gasteruption abuense*, sp. nov.

Black; the apices of the 2nd and 3rd abdominal segments broadly ferruginous; the base and outer side of the tibiæ and the base of the tarsi broadly



white ; the mandibles, except the teeth, rufous ; wings hyaline, the nervures and stigma black ; the head and thorax densely covered with silvery pubescence, calcaria minute, hardly as long as the width of the apex of tibiæ. Collar as long as the temples, densely covered with longish white pile ; finely rugose, a stout keel down its centre. Occiput transverse, margined ; it is not quite so wide as the length of the temples ; ocelli in a curve, the hinder separated from each other by a distinctly greater distance than they are from the eyes—by more than the length of the antennal scape. Basal 2 joints of antennal flagellum united, as long as the 3rd, which is longer (but not much) than the 4th. Mesonotum opaque, covered with white pubescence ; the puncturation is distinct ; the punctures clearly separated ; the apex is flat in the centre. Scutellum sparsely punctured laterally, the centre opaque, almost impunctate ; the basal furrow is transverse, narrow, but distinct. Median segment closely, rugosely punctured ; towards the apex it bears round, separated punctures. Pleuræ alutaceous, densely covered with silvery pubescence. Parapsidal furrows narrow, oblique. Pleuræ alutaceous, densely covered with silvery pubescence. ♀.

Length 11-12 mm. ; terebra 7 mm.

Abu.

The hind legs are unfortunately absent.

*Evania deesaensis*, sp. nov.

Black ; the antennal scape, the first joint of flagellum, the 2nd and base of 3rd rufo-testaceous ; the fore legs testaceous, the middle femora and trochanters almost fuscous ; wings hyaline, the nervures and stigma testaceous, the stigma darker coloured than the nervures. Face strongly obliquely striated, the striæ stout, clearly separated, converging towards the middle of the face below ; the upper part of the face being quite smooth. Sternal process Y-shaped ; the apical forks straight, oblique. ♂.

Length 4 mm.

Deesa. February.

Eyes parallel ; the upper inner orbits bordered by 2 longitudinal striæ, of which the outer is the more distinct. Ocelli in a curve ; the hinder separated from each other by almost double the distance they are from the eyes. The antennal pedicle and the following joint together are as long as the scape ; the 3rd is distinctly shorter than the 2nd and about the same length as the 4th. Apex of pronotum transverse, with the sides rounded. Parapsidal furrows deep, converging towards the apex ; the space between them covered with round, distinct, clearly separated punctures ; the outer edge of the mesonotum bordered by a narrow keel ; inside this is a stouter keel, which unites with the parapsidal furrows, forming a triangular area. Scutellum rugosely punctured. Median segment regularly, closely reticulated. Propleuræ filled up with 3 rows of deep punctures. Upper half of mesopleuræ smooth, shining ; the lower covered with round, not very clearly separated punctures. Abdominal petiole a little longer than the metanotum, stoutly, sharply, longitudinally striated.



Mandibles dark rufous, the teeth black at the apex. Palpi testaceous. Hind coxæ sparsely punctured in the middle. Calcaria testaceous, the longer, hinder, two-thirds of the length of the metatarsus. Radial cellule short, wide, the apical abscissa of the radius nearly as long as the basal 2 united. Transverse median nervure interstitial, as is also the recurrent; but the latter is angled before uniting with the transverse cubital. The hinder trochanters are almost half the length of the femora. Body and limbs (but especially the apex of metanotum) covered with a white pile. Malar space nearly as long as the 2nd joint of the flagellum—not half the length of the eyes. Temples wide, very little narrowed.

## BRACONIDÆ.

*Braconinæ.**Iphiaulax spilocephalus*, sp. nov.

Reddish testaceous, the antennæ, head above the antennæ, and hind tarsi, except at base, black; the face, mandibles, except at apex and a line on the upper inner orbits, interrupted, or at least narrowed in the middle, pale-yellowish testaceous; wings yellowish hyaline to the top of the transverse basal nervure, fuscous beyond, hyaline in the 1st cubital cellule, extreme base of radial, small cloud in front of the recurrent nervure and a narrower one bordering the 2nd transverse cubital nervure. Abdomen ovate, as long as the thorax and broader than it; there is no area on the base of the 2nd abdominal segment, which is, as is also the 3rd, closely, longitudinally striated; the 4th and 5th closely, strongly punctured, the apical smooth; the middle lobe of 1st closely striated, the middle striæ stronger, more clearly separate and pale golden in tint; the lateral furrows wide, the inner part obscurely striated. Sutureform articulation wide, deep, crenulated, as is also the 2nd furrow; the apical are distinct, smooth. Head, thorax and base of abdomen densely covered with longish pale pubescence. Stigma ochreous yellow, black at the base. ♀ & ♂.

Deesa. April to October.

A variable species in size; a ♀ is 10 mm. long, with the ovipositor 4 mm.; another is 8; and a ♂ is only 7 mm. The species comes close to *I. elizeus*, Cam., from which it may be readily separated thus:—

A broad continuous line on the upper inner orbits and the face ivory white; abdomen long, narrow; apex of hind tibiæ and base of tarsi black ..... *elizeus*, Cam.

A narrow short interrupted or narrowed line on the upper inner orbits; abdomen short, broad, ovate; apex of hind tarsi not black ..... *spilocephalus*, Cam.

*Cheloninæ.**Chelonus indicus*, sp. nov.

Black, the abdomen immaculate, the apex of the 4 anterior femora (the middle narrowly), their tibiæ and tarsi, a broad band on the hind tibiæ commencing near the base and extending shortly beyond the middle, the basal three-fourths of the hinder metatarsus and the spurs, whitish testaceous; wings hyaline, a broad fuscous cloud in the middle filling the radial and basal 2



cubital cellules; the stigma and nervures fuscous; the basal nervures paler than the others, the stigma darker in front. ♀.

Length 5 mm.

Ferozepore. March (Major C. G. Nurse).

Middle of mandibles rufous. Clypeus shining, closely distinctly punctured; its apical half depressed; it is clearly separated from the face; the rest of the head closely rugosely punctured, more or less striated; the sides of the vertex with distinct curved striæ. Thorax closely rugose; the middle of mesonotum irregularly longitudinally reticulated, striated, weakly at the base, more strongly at the apex. Median segment longitudinally reticulated; deeply and strongly on the apical slope, which has, on the sides above, a stout triangular tooth. Abdomen with the basal half strongly, closely, irregularly, longitudinally striated, the striæ becoming gradually weaker; the apex is alutaceous, covered densely with a close white pile. Antennæ over 30-jointed; the apex is broken off. Palpi blackish, fuscous towards the apex. The punctuation on the lower part of the mesopleuræ is coarse and runs into reticulations.

*Microgasterinae.*

*Pseudapanteles leptothecus*, sp. nov.

Black, densely covered with short white pubescence, shining, the apex of anterior femora broadly, their tibiæ and tarsi, the basal third of the middle tibiæ, the middle tarsi and the basal third of the hind tibiæ, testaceous; the spurs paler; wings very clear hyaline, almost lacteous, the costa, stigma and nervures almost white. ♀

Length 4.5 mm.; terebra 2 mm.

Deesa. January.

Scutellum large, longer than wide, narrowed towards the apex, shining, smooth, glabrous. Postscutellum longer than wide, bordered by 2 stout keels, which hardly converge at the base. Metanotum smooth, shining, glabrous; the apical slope with an indistinct pyriform depression. First abdominal segment almost square, depressed in the middle at the base; the other segments are wider than long, transverse, smooth and shining; the apical is covered with white pubescence. Sheath of ovipositor broad, narrowed at the base. Pterostigma large, widest in the middle, the basal slope rounded, the apical straight, oblique. Pleural furrow wide, deep, covered with white pubescence which gives it a striated appearance.

This species belongs to the genus *Pseudapanteles*, Ashm, which, however, is not recognised as valid by Szépligeti, who sinks it in *Apanteles*, (Hal.) al Cf. Genera Ins. Braconidæ, p. 105.

*Agathinae.*

*Disophrys laticeps*, sp. nov.

Luteous, the antennæ, except the scape above, black, wings fuscous, the base to the middle of the transverse basal nervure and a cloud, gradually narrowed



posteriorly, between the base of the stigma and the apex of the areolet, yellowish-hyaline; the areolet square, of equal width; the hind wing fuscous, the basal third yellowish-hyaline; stigma pale luteous. ♂.

Length 8 mm.

Abu. June.

Head as wide as the thorax; the temples roundly narrowed, the occiput roundly incised; frontal laminae stout. Areola large, obliquely narrowed towards the base and apex; the apical part the larger; its knees not so stout; on either side of its base is a large, triangular area, its apex at the middle of the areola; from the apex a keel runs obliquely to unite with the keel bordering the outer edge of the metanotum. Pro- and mesothorax punctured, the pleurae more closely than the upper surface; the basal half of the mesonotum has 2 parallel furrows down the middle. Pleural furrow oblique, weakly crenulated, straight. Basal segment of abdomen large, triangular, longer than it is wide at the apex; the large wide central part of equal width, separated by furrows.

This is a broader, stouter species than usual; the abdomen is also wider, broader and more sessile at the base, it differing also in being clearly trilobate there. There is no stump on the 2nd transverse cubital nervure, but it is thickened in front. The lateral keels on the front are stout, high. The hind coxae can hardly be called "short" as they are by Szépligeti (Gen. Ins. Brac. 124), for *Disophrys*, being more than twice longer than wide and reaching to the apex of the 1st abdominal segment. Hind claws simple.

#### ICHNEUMONIDÆ.

##### *Tryphoninae.*

##### *Metopius pulchripes*, sp. nov.

Black; the head in front below the antennæ, the upper inner orbits to the anterior ocellus, the line obliquely narrowed above, mandibles, except the teeth, palpi, a broad line on the apical half of the pronotum, the basal lateral edges of the scutellum, a broad line on its apex, including the lateral teeth, post-scutellum, tubercles, base of mesopleurae to near the middle, a spot on the sides of metanotum to near the top of apical slope, basal half of 1st abdominal segment, basal third of 2nd, the 3rd from near the middle, the 4th from shortly behind the middle, the base of the band trilobate, the lateral lobes larger than the central; a band, half the size, on the apex of the 5th, its middle broadly, squarely narrowed; narrow bands on the apical two, similar bands on the ventral segments; and the 4 front legs, bright lemon-yellow; the hind coxae black, the trochanters and apex of femora narrowly yellow, the rest of the legs bright red. Wings hyaline, the apex of the radial and the 3rd cubital cellule smoky; the stigma testaceous, the nervures black; the antennal scape yellow, the flagellum brown, darker above. ♂.

Length 13 mm.

Abu. September.

Front and vertex closely finely punctured, striated above the antennæ; the face is more strongly punctured, especially in the centre; in front sparsely, behind the



eyes more thickly covered with longer white pubescence. Pro- and mesothorax strongly, closely punctured, the mesonotum more strongly than the pleuræ; these are densely covered with white pubescence. Scutellum punctured like the mesonotum; its basal depression deep, with 3 stout keels. Post-scutellum smooth, depressed in the middle at the base. Metanotum closely, rugosely punctured; its centre with 2 curved keels, converging at the apex, on the top of the apical slope; there is an indistinct keel between them at the base. Abdominal segments, except the apex of the 1st, strongly closely punctured.

This is a *Metopins*, s. str., the head being as wide as the thorax; and the 2nd joint of the maxillary palpi is greatly swollen.

*M. rufus*, Cam. (also from Abu), may be known by the rufous head and thorax.

*Ophioninæ.*

*Campoplex nursei*, sp. nov.

Black, a narrow short line on the lower side of the 2nd abdominal segment at the apex, and the following, except irregularly above, rufous, the 4th and 6th with the top black mark larger than on the others; the forelegs, except for a broad line on the base of the femora, the apex of the middle femora, their tibiæ and tarsi and the hind tibiæ except for a small black spot and a slightly larger mark on their apex, pale whitish yellow, as are also all the calcaria; mandibles, except the teeth and the palpi pale yellow; wings clear hyaline, the nervures and stigma pale yellow; the areolet large, the nervures almost touching in the middle; the recurrent nervure received in the middle. ♀.

Length 12 mm.; terebra 1 mm.

Abu.

Sides of front, face, clypeus, mandibles, and outer orbits densely covered with long silvery pubescence. Face and clypeus closely, rugosely punctured; the front and vertex much more sparsely punctured. Thorax more strongly punctured than the face; on the apex of the mesonotum the puncturation runs into reticulation, and there is a striated space before the scutellum, which is roundly convex and strongly, closely punctured, more or less striated. The puncturation on the metanotum is close, more or less transversely striated; there is a weak curved transverse keel at the base, but no area; the base of the metanotum is more finely punctured than the rest. Except at the base the propleuræ are closely strongly striated; the mesopleuræ more strongly punctured than the mesonotum, the punctures too are more clearly separated; behind the middle is a strongly striated band, the apex itself being smooth; the metapleuræ are more closely, finely punctured, smoother behind the spiracles.

Characteristic of this species are the yellow hind tibiæ.

*Tarytia*, gen. nov.

Wings without an areolet, the recurrent nervure received on the outside of the transverse cubital, almost interstitial. Parallel nervure broken shortly above the middle; transverse median nervure interstitial, apical nervures in hind wings entirely absent. Clypeus not separated from the face, its apex



broadly rounded. The mandibular teeth large, of equal size, diverging. Metanotum irregularly areolated in the middle, the areola open at the apex; the spiracles small, oval. First abdominal segment clearly longer than the second; the post-petiole distinctly nodose. Ovipositor longish. Claws simple. Hind spurs long, nearly as long as the 2nd tarsal joint. Antennæ long, longer than the abdomen. Malar space distinct, not furrowed. Hind coxæ stout, about two-and-a-half times longer than thick; basal joint of hind tarsi nearly as long as the following 3 united. Eyes large, parallel, not incised.

In the arrangement of Szépligeti this genus would come near *Agrypon*, Foer. (Gen. Ins., Ichn. Ophon., p. 6). The 2 may be separated thus:—

Spurs short; clypeus pointed, 2nd abdominal segment longer than the 1st... *Agrypon*.

Spurs long, clypeus broadly rounded, 2nd abdominal segment shorter than the 1st... *Tarytia*.

*Tarytia basimacula*, sp. nov.

Rufo-testaceous, the head yellow, a triangular mark covering the ocelli, the base of the 1st abdominal segment, and a broad stripe down the centre of the basal half of the 2nd black; the apical segments infuscated; legs coloured like the body but paler; mesonotum with 2 broad yellowish lines; wings hyaline, the nervures and stigma dark testaceous. ♀.

Length 8 mm.; terebra 2 mm.

Deesa. October.

Face and base of clypeus closely punctured, the apex of clypeus smooth. Front and vertex closely punctured, more strongly than the face; above each antenna is a longish deep fovea, the 2 distinctly separated by a broad keel. Eyes large; they have a greenish hue and do not converge above or below. Ocelli large, glassy, pale coloured, placed in a triangle; the hinder separated from each other by a greater distance than they are from the eyes. Mesonotum closely punctured. Scutellum roundly convex. Metanotum rugosely punctured; the apical slope strongly transversely striated. Pleuræ closely distinctly punctured; the base of the meso- and metapleuræ with a large irregular orange-yellow mark. Post petiole aciculated; the 2nd dorsal segment closely, distinctly, longitudinally striated; the base of the 3rd more weakly striated. The transverse keels on the metanotum are indistinct.

*Tarytia nigromaculata*, sp. nov.

Yellowish testaceous; the sides of mesonotum and the back of abdomen rufous; the head and the parts bordering the black line on the mesonotum lemon-yellow; the ocellar region, 2 broad lines on the middle of front, a large mark, narrowed above, on the middle of occiput, a broad line on the basal two-thirds of the mesonotum, the hollows at the wings, a broad mark, contracted near the base, rounded at the apex, on the basal third of the metanotum in the centre, the base of the 1st abdominal segment, more than the basal half of the 2nd and the base of the 3rd, black. Four front legs pale yellow; the hinder rufous, the tibiæ and tarsi darker coloured than the femora, the coxæ and



trochanters pale yellow, a fuscous band near the base of hind tibiæ, a darker band on the apex of tibiæ; the tarsi infuscated. Wings hyaline, the stigma pallid testaceous, darker round the edges, the nervures paler; antennæ dark brown; the scape yellow, black above. ♂.

Length 7 mm.

Deesa. October.

Face and clypeus finely and closely punctured; the front and vertex somewhat more strongly punctured; the former raised in the middle, this part being rufous. Mesonotum and scutellum closely, strongly punctured; the scutellum with a rounded slope from the base to the apex. The metanotum is more strongly punctured; the posterior median area, *i.e.*, the apical two-thirds is closely strongly striated. Pleuræ, if anything, more strongly punctured than the mesonotum, the punctuation becoming stronger towards the apex. Abdomen smooth; the 2nd segment finely, closely, longitudinally striated.

*Tarytia flavo-orbitalis*, sp. nov.

Rufo-testaceous; the face, clypeus, orbits, mandibles, except at apex and 2 lines on mesonotum, pale lemon-yellow; the ocellar region slightly, the 1st segment above, except at the apex, the 2nd, base of 3rd and a slight spot on the apical 2, black; antennæ fuscous-black; the scape yellowish. Legs pale testaceous, almost white at the base. Wings hyaline, the nervures and stigma testaceous. ♀.

Length 8 mm.; terebra 3 mm.

Deesa. October.

Face closely punctured, the clypeus only very sparsely punctured; the front and vertex more strongly punctured; the hollows bordering the broad central keel striated; keel is broadened above. Mesonotum strongly, but not very closely punctured; the scutellum is almost smooth. On the metanotum is a small petiolar area; the areola is wide, bulges out roundly on the basal half; the posterior median area is not so wide and is slightly narrowed at the top and bottom; there is an indistinct keel on either side of the apex. Post-petiole finely and closely, the 2nd segment more strongly and as closely striated.

*Tarytia cariniscutis*, sp. nov.

Testaceous? (the specimen is discoloured), a broad line on the basal half of the 2nd abdominal segment above, the basal half of the 3rd, the black extended down the sides, and similar marks on the apical two, black; antennæ fuscous, lighter coloured below, the scape yellow. Wings clear hyaline, the stigma and nervures pale testaceous. ♂.

Length 8 mm.

Deesa. July.

The head unfortunately has got crushed; the face and clypeus are closely punctured. Thorax closely, but not strongly punctured; the propleuræ smooth. Scutellum closely punctured; keeled laterally to near the middle; the keel



highest at the base. Petiolar area distinct, triangular, the keels broad, uniting at the apex into one; areola wide, roundly narrowed at the base, slightly narrowed towards the apex, it extends to shortly below the middle; the keels then bulge out slightly and run to the apex, this widened apical part being shorter than the upper, which is weakly and sparsely striated, the lower, strongly and closely transversely striated. The 2nd segment above is finely, closely, the base of the 3rd more weakly striated. Genital valves broad, long, largely projecting.

May be known from the other species by the scutellum being keeled beyond the base and by the large, distinctly defined petiolar area.

This species also differs from the others in having distinct parapsidal furrows.

*Zaporus? argenteopilosus*, sp. nov.

Black, densely covered with longish silvery pubescence, the antennal scape except for a line above, mandibles, except at apex, palpi, the 2nd and 3rd abdominal segments at the sides, the others entirely and the legs except the coxæ and trochanters, rufous; the 4 anterior legs of a paler colour; tegulæ yellowish; wings hyaline, the stigma and nervures black. ♀.

Length 9 mm.; terebra 2 mm.

Deesa. June.

Head closely, somewhat strongly punctured, as is also the thorax; the pubescence on the base of scutellum and on the sides of metathorax longer and denser than elsewhere. Scutellum prominent, roundly convex; the post-scutellum densely covered with silvery pubescence. Abdomen smooth, shining, the 2nd segment faintly aciculated. Base of hind femora and tibiæ and apex of tibiæ black.

The metanotum is distinctly areolated; the areola large, longer than wide, closed at base and apex; the base transverse in the middle, with the sides oblique; the apex is roundly turned inwardly; there are 2 large lateral areæ, the apical the larger; the apical slope is keeled round the edges; spiracles oval, about twice longer than wide. Post-petiole distinctly dilated. Recurrent nervure received distinctly beyond the transverse cubital which is longish; the transverse median nervure interstitial; the apical nervures in hind wings obsolete, the transverse median nervure unbroken. Claws with at least 3 longish spines. Clypeus not separated from face; its apex rounded. Mandibles large, the upper tooth longer and sharper than the lower. Labrum projecting, broad. Radial cellule long; narrowed at base and apex, widely, indistinctly angled at the transverse cubital nervure. Abdomen dilated laterally on the apical half.

This may not be a *Zaporus*; it comes nearest to that genus in the Foersterian-Ashmeadian systems.

*Nototrachus flavo-orbitalis*, sp. nov.

Head and thorax rufous, the face, except in the centre above, the orbits broadly all round, a line on the sides of mesonotum, dilated roundly, inwardly at the base, scutellum, except the basal slope and more narrowly at the apex, a



line on the lower part of propleuræ, dilated at the apex, a small, triangular mark below the tegulæ, a larger one in the middle below, a still larger, triangular mark below the hind wings and the apical half of metanotum, the spot narrowly dilated in the middle above, yellow; the ocellar region and the front broadly—the mark broadest above, a mark on the base of propleuræ in the middle, the scutellar depression and keels, the lower sides broadly, a spot covering the spiracles on metanotum and the abdomen, except the basal half of 1st segment (which is dull red), black. Four front legs rufo-fulvous, the coxæ yellow; the hind legs black, the coxæ rufous, the femora largely rufous. Wings hyaline, iridescent, not much longer than the head and thorax united; the stigma and nervures black. Antennæ black, the scape rufous below. ♂.

Length 9 mm.

Deesa. February.

Face closely, the clypeus sparsely punctured; the latter broadly black above, narrowed below to a point which is bidentate; the black central part of front strongly, transversely striated and keeled down the middle, the sides punctured. Vertex sparsely punctured laterally and between the ocelli. Mesonotum reticulated, the base in the centre finely, minutely punctured, the sides transversely striated; the outer edges with large, clearly separated punctures. Scutellum coarsely punctured; the lateral keels black, distinct. Base of metanotum bordered by a transverse keel, smooth, with 2 keels in the middle; the rest reticulated and thickly covered with longish white pubescence. Propleuræ smooth at the base, the apex above punctured, the rest stoutly, longitudinally striated. Mesopleuræ rugosely punctured; more or less reticulated, the top stoutly striated at the base, smooth at the apex; the apex with stout striæ. Metapleuræ reticulated. Abdomen at least 3 times longer than the thorax, very smooth and shining.

*Pimplinæ.*

*Xanthopimpla maculifrons*, sp. nov.

Luteous, the abdomen largely marked with rufous; the mesonotum with 3 rufous stripes, an elongated triangular spot covering the ocelli, an irregular spot, broader than long, on the sides of metanotum at the base, 2 spots on the 1st to 5th abdominal segments and 2 larger, more oval, spots on the 7th, black; wings hyaline, the nervures and stigma black, the latter testaceous at the base; areolet small, triangular, almost appendiculated, the recurrent nervure received shortly beyond the middle. ♀.

Length 11; terebra 2 mm.

Deesa. June.

Areola large, 6-angled, the lateral angles at the middle; the apex transverse; it is longer than it is wide at the apex; tooth-bearing area large, 4-angled slightly narrowed on the innerside. Face strongly, but not very closely punctured; a longish depression, widest below, in its centre. Clypeal foveæ large, deep. Thorax smooth; the parapsidal furrows narrow, extending to the middle. First abdominal segment about one-fourth longer than it is



wide at the apex; the keels reach to the middle; the 2nd to 5th segments strongly punctured; the 3rd to 5th closely and regularly; the 2nd with the punctures larger and sparser and with a smooth space down the middle. Antennæ blackish above, brownish below on the flagellum, yellow on the scape. Apical third of hind tibiæ with short rufous spines, the lower part with more than the upper. Ovipositor as long as the basal 3 joints of the hind tarsi united.

*Xanthopimpla nursei*, sp. nov.

Luteous, tinged with rufous, the head pale lemon-yellow, with a black mark covering the ocelli and extending below close to the antennæ, the mark becoming narrowed below; 2 large oval marks on the centre of mesonotum on the lateral lobes, a spot on the depression behind the tegulæ, 2 oblique, ovate marks on the base of mesonotum, an irregular stripe across the middle of 1st abdominal segment, its centre narrowed and irregular, transverse marks on the 2nd to 5th, those on the 4th and 5th broader and more regular; and 2 large irregularly ovate marks on the 7th, black. Antennæ brownish black above. Wings hyaline, the stigma and nervures black. Ovipositor as long as the basal, 4 joints of the hind tarsi united. ♀.

Length 12 mm., terebra 2 mm.

Parapsidal furrows deep; indicated on the basal slope only. Areola large, 6-angled, narrowed at the base, as long as it is wide in the middle, before it begins to narrow; the lateral areæ not much narrowed on the innerside. Except at the base of the mesonotum in the middle, where it is weakly punctured, the whole of the thorax is smooth and shining; the mesonotum is thickly covered with whitish pubescence. Face closely, strongly punctured, the sides more weakly than the centre; the clypeus is not separated from it. Labrum long, gradually narrowed to a point. First abdominal segment impunctate; the 2nd at the base and middle smooth, the rest strongly punctured, the punctures clearly separated; the 2nd to 5th are closely, strongly punctured, except at the raised apices; the transverse furrow on the apex of the 2nd is wider and with the punctures larger and deeper. Basal slope of 1st segment strongly keeled on either side. Areolet small, triangular, almost appendiculated.

The middle of the face above and on the sides is bordered by shallow furrows; the face is as long as broad. Scutellar keels distinct from the base to the apex; higher at the base than at the apex. The 1st abdominal segment is one-half longer than it is wide at the apex. Apex of tibiæ with 2 rows of short spines.

The orange colour may be owing to discolouration.

CRYPTINÆ.

*Cratocryptus rufipes*, sp. nov.

Black; the eye orbits on the innerside and below, the line on the lower part dilated above, a squarish mark in the centre of the face, clypeus, basal half of mandibles, the dilated basal part of pronotum, a line on the propleuræ, at the base below, tegulæ, scutellum, the sides of metanotum at the apex broadly, the mark extending narrowly on to the pleuræ a large, irregularly oval mark



on the base of the mesopleuræ in the centre, a triangular mark under the hind wings, and the apices of the basal 2 abdominal segments broadly and of the others more narrowly, pale yellow. Legs red, the 4 anterior coxæ and trochanters distinctly, their tibiæ and tarsi less distinctly tinged with yellow; the hind knees, apex of hind tibiæ and the tarsi, black. Wings hyaline, the stigma and nervures black, the areolet small, almost square. ♀.

Length 7; terebra nearly 2 mm.

Deesa. October.

Antennæ longer than the body, thickened towards the apex; joints 9-13 for the greater part white. Middle of front below the ocelli coarsely irregularly reticulated-striated; the part immediately below the ocelli stoutly, obliquely striated; there is a smooth line in the middle of the punctured part, which is narrowed roundly below and does not reach to the antennæ. Face and clypeus strongly, closely punctured and covered with white pubescence. Pro- and mesothorax strongly closely punctured, more or less reticulated; the middle of scutellum, except at the base and the apex, broadly impunctate. Base of metanotum strongly punctured, the punctures clearly separated, the sides between the keels stoutly obliquely striated, more or less reticulated, the central part smooth at the base, the rest with large, separated punctures, the apical slope closely, distinctly reticulated; areola deep, shining, wider than long. Pleuræ and sternum opaque, closely, regularly, distinctly, but not coarsely punctured. Basal 2 segments of abdomen closely, somewhat strongly punctured, the 3rd more finely punctured, the others smooth. The metanotal teeth are not prominent.

The genus *Cratocryptus*, Cam. was described in the Journ. St. Branch Roy. As. Soc. 1905, p. 142, on a species from Borneo. It may be separated from that here described thus:—

Mesopleuræ immaculate, middle of face black, metanotal spines	
distinct, hind tarsi white .....	..... <i>maculiceps</i> Cam.
Mesopleuræ with a large yellow mark; middle of face yellow,	
metanotal spines indistinct, hind tarsi black.....	..... <i>rufipes</i> , n. sp. .

*Melcha nursei*, sp. nov.

Ferruginous, a line on the inner orbits, the base of pronotum, post-petiole, the 4th and following segments of the abdomen above, white; the antennal scape red, the flagellum black, with joints 9-11 white; legs coloured like the thorax; the 4 anterior tibiæ white behind; the posterior knees, tibiæ and tarsi black; the basal fourth of the tibiæ white; wings hyaline, the stigma and nervures black, the former with a white spot at the base. ♀.

Length 8-10 mm.; terebra 2 mm.

Deesa. February to December.

Face and clypeus closely, somewhat strongly punctured; the front irregularly obliquely striated above, the striæ running into reticulations; there is a stout keel down the middle; ocellar region rugosely punctured; the orbits are sparsely punctured. Mandibular teeth black. Palpi pale testaceous. Mesonotum closely, strongly punctured; faintly striated along the furrows; the



scutellum faintly striated. Base of metanotum finely irregularly striated behind the keel; the rest of the metanotum closely, strongly reticulated. Pro- and mesopleuræ closely, rugosely punctured; there is an oblique keel above the middle of the former. Metapleuræ closely rugosely punctured at the base; the apex stoutly obliquely striated, the striæ intertwining. Base of post-petiole strongly, but not closely punctured; it has an oblique furrow on either side; the apex is much more sparsely punctured, smooth in the middle; the 2nd, 3rd and 4th segments are closely, strongly punctured.

A variable species as regards size; the hinder femora may be infuscated towards the apex.

*Friona octobalteata*, sp. nov.

Black; the face, clypeus, basal half of mandibles, orbits, except the upper half of the outer, palpi, base of prothorax, scutellar keels, scutellums, the pleuræ below the hind wings broadly, the apical slope of metanotum with an A-shaped mark of the same length projecting backwards from its centre behind, tegulæ, tubercles, the base of the 1st abdominal segment to near the middle and the apices of all the segments broadly, pale yellow. Legs yellow, tinged with fulvous; the 4 anterior tarsi darker; the hind coxæ, trochanters and femora rufous, their tibiæ dark fuscous, broadly testaceous at the base, hind tarsi black, the apex of the 1st, the 2nd, 3rd and base of 4th joints black, white. Wings clear hyaline, the nervures and stigma black, the latter with a white spot at the base. ♂.

Length 11 mm.

Deesa. October (Major Nurse).

A stout keel runs down from the ocelli, the part bordering the ocelli stoutly, obliquely striated. Raised central part of face closely, rugosely punctured. Pro- and mesothorax smooth and shining. Metanotum, except at the base behind the keel, irregularly, transversely, rugosely striated. There is a striated band in the centre of the propleuræ; the meso-, as usual, closely, longitudinally striated; the meta- closely rugose, except at the base above. Areolet longer than wide along the radius; the recurrent nervure is received at the base of the apical third; the transverse median received behind the transverse basal.

*Ichneumoninae.*

*Fileanta rufipes*, sp. nov.

Black; a broad line, narrowed above and below, on the upper inner orbits, a line on the apical half of the pronotum, scutellum, a narrow line on the apex of post-scutellum, a line, dilated laterally, on the apex of the 1st abdominal segment, a somewhat broader one on the 2nd and 3rd and the whole of the apical 2, yellow; the legs red, the apex of the hind tibiæ and the hind tarsi, black, the 4 front tarsi infuscated; wings hyaline, very slightly tinged with fulvous on the basal half; the stigma and nervures black, antennæ black, the 10th to 16th joints white; the other joints infuscated below. ♀.

Length 11-12 mm.

Deesa. June.



Face and upper part of clypeus strongly punctured, the punctures clearly separated; the depressed apex of the clypeus with a row of large deep punctures, the smooth sides at the apex with some smaller punctures. Front and vertex punctured closely, but not so coarsely as the face. Sides of clypeus at the apex laterally, and the mandibles, except at the apex, rufous; the clypeal foveæ large and deep. Palpi pale testaceous. Pro- and mesothorax closely punctured, the scutellum is not so closely punctured. Median segment strongly, irregularly punctured; the areola with the top slightly, roundly curved downwards; the apex much more deeply curved upwards; the sides slightly bulging outwardly; the inside stoutly, irregularly, longitudinally striated, the striæ intertwining; posterior median area strongly, transversely striated, the striæ running into each other; the lateral areæ stoutly, irregularly reticulated. Apex of 1st and the 2nd and 3rd abdominal segments closely punctured; the base of post-scutellum with scattered punctures; there is a curved closely finely punctured furrow on the base of the gastracœli. The stump on the disco-cubital nervure is minute, on the recurrent nervure it is longer; the transverse median nervure is interstitial.

The sides of the apex of metanotum above are slightly marked with rufous, the basal part of the 1st abdominal segment is largely rufous.

*Eutanyacra alboannulata*, sp. nov.

Black, the face, clypeus, basal half of mandibles, palpi, a line on the lower third of the inner orbits, a line on pronotum, not reaching to the base, widest at the apex, tegulæ, scutellums, a broad line on the apex of the 5th abdominal segment, a broader one on the 6th, almost the whole of the 7th and the tubercles, whitish-yellow; the apex of the 1st abdominal segment—the line broadest in the middle—and the whole of the 2nd and 3rd red; the legs red; the 4 anterior largely marked with yellow, their coxæ and trochanters yellow; the hind coxæ marked with yellow on the outer, with black on the inner side; the apex of the hind tibiæ broadly—more than the fourth—and their tarsi, except at the base, black. Antennæ black above, the scape yellowish below, the base of flagellum reddish brown below; the middle with a broad yellowish white band. ♂.

Length 11 mm.

Abu.

Face and clypeus closely strongly punctured, thickly covered (as is also the base of mandibles) with white pubescence; the front and vertex are more closely punctured; they are not so densely pilose. Pro- and mesothorax closely regularly punctured, shortly pilose. Scutellum roundly raised, more sparsely punctured than the mesonotum. Base of metanotum smooth and shining in the middle at the base, this part roundly narrowed towards the apex; the areola open at the base, transverse at the apex, slightly roundly narrowed towards the base, about as long as wide; it has a few irregular striæ; the lateral areæ are confluent; the rest of the segment is closely, rugosely punctured; the spiracles are large, wide, oval, about 3 times longer than wide; the keels rufous. Recurrent nervure received near the base of the apical fourth of the areolet.



Post-petiole closely, sharply, longitudinally striated; the 2nd and 3rd segments closely punctured; gastraceli shallow, smooth and transverse at the apex. Aedigus large, black, closely punctured and densely covered with black pubescence, longest on the apex below; looked at from the sides the upper (and larger) part is straight and oblique, the lower rounded; the 7th ventral segment is broad at the base, the narrowed apical (and large) part becomes gradually narrowed to a bluntly rounded point.

The following is a list of the described species from the Bombay Presidency :—

*Bethylinæ.*

*Mesitus indicus*, Kieffer, Bull. d. l. Soc. d. Hist. Nat. d. Metz, XII, 89. Bombay (Biro).

*Epyris montanus*, Kief., l.c., 89, Matheran. 800 m. (Biro).

„ *indicus*, „ „ 90 „ „ „

„ *conjunctus*, „ „ 90 Bombay, Malabar.

„ *feai*, „ „ Ann. d. Mus. di Stor. Nat. di Genova, XLI, 408.

*Epyris conjunctus*, Kief.

This species has been taken at Deesa by Major Nurse.

*Propristocera percurrens*, Kief., Bull. d. l. Soc. d. Hist. Nat. d. Metz, III, 97, Matheran. 800 m.

*Propristocera levicollis*, Kief., l.c., 98. Matheran. 800 m.

*Diapriidæ.*

*Trichopria indica*, Kief., l.c., 103, Matheran. 800 m.

CHALCIDIDÆ.

*Leucospisinaæ.*

*Leucospis petiola*, Fab.

This species is, there can be no doubt, identical with *atra*, Fab. and *guzeratensis*, West. Cf. Schletterer, Berl. Ent. Zeit. XXXV, 224. It varies greatly in size and colouration. It may be entirely black, or with only a short line on the pronotum; or it may be largely marked with yellow. In one example are the following yellow markings:—the underside of the scape, a broad transverse line, narrowed at the sides on the base of pronotum, 2 lines, widened in the middle, on its apex, a line on the sides of mesonotum at the tegulæ, the apical half of scutellum, the mark deeply, irregularly incised in the middle at the base, an ovalish spot on the lower side of the propleuræ, a broad oblique line below the hind wings, a longish conical mark on the base of the hind coxæ, 2 conical spots, almost united at the base, near the base of the 1st abdominal segment, a narrow line at the base of the 2nd segment, a conspicuous line on the base of the 3rd, transverse and obliquely sloped at the apex, the base dilated at the middle; the apex of the 4 anterior femora, the tibiæ and base of tarsi behind, a large conical mark on the base of the hind coxæ above, a line on the base of the femora, broadly irregularly dilated to the apex below and the upperside of the hind tibiæ. The base of the



abdomen may be entirely black, or it may be largely ferruginous as in *petiolata*. The coxæ may be black, or almost entirely ferruginous.

Deesa. July and August.

*L. petiolata* has been taken by Mr. G. A. J. Rothney at Barrackpore, where he has also taken *L. semirufa*, Wlk.

#### *Chalcidinae.*

*Chalcis responsator*, Walker, Trans. Ent. Soc., 1862, 355.

Deesa. March to August. Probably a common Indian species.

*Chalcis eccentrica*, Cameron, Manchr. Mem. xli, 1897, 39.

Bombay.

*Oncochalcis deesensis*, Cam., Zeit. f. Hymen. ii. Dipt., 1905, 285.

Deesa.

*Oxycorypus pilosellus*, Cam., The Entomologist, 1904, 110.

Deesa.

*Antrocephalus fascicornis*, Walker, Notes on Chalcidæ, 43.

Bombay.

*A. tarsalis*, Walk., l.c., 44.

Bombay.

*A. divisicornis*, Walk., 44.

Bombay.

*A. ornatipennis*, Cam., Journ., Bomb. Nat. Hist. Soc., 1900, 439.

Deesa.

#### *Toryminæ.*

*Ecdamua indica*, Walker, Notes on Chalcidæ, 35.

Bombay.

#### EVANIIDÆ.

*Gasteruption orientale*, Cam., Manchr. Memoirs, 1888, 19.

Deesa. January to August.

#### BRACONIDÆ.

*Iphiaulax elizeus*, Cam., The Ent., 1905, 107.

Deesa. October to February.

*Bracon deesensis*, Cam., Journ., Bomb. Nat. Hist. Soc. 1900, 433.

*Vipio smenus*, Cam., The Ent., 1905, 107.

Deesa. March to August.

*Lisitheria nigricornis*, Cam., The Ent., 1904, 306.

Deesa.

#### ICHNEUMONIDÆ.

*Metopius rufus*, Cam., Zeit. f. Hym. ii. Dipt., 1905, 281.

Abu.

*Exochus appendiculatus*, Cam., Journ., Bomb. Nat. Hist. Soc., 1900, 430.

Deesa.

*Lissonota xanthoria*, Cam., l.c., 426.

Deesa.

*Stictocryptus testaceus*, Cam., Zeit. f. Hym. in Dipt., 906.

Deesa. September.





Cameron, Peter. 1907. "On the parasitic Hymenoptera collected by Major C. G. Nurse in the Bombay Presidency." *The journal of the Bombay Natural History Society* 17, 578–597.

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