
Bulletin

DE LA

SOCIÉTÉ DES SCIENCES NATURELLES

du MAROC

COMMUNICATIONS

MISSION J. DE LÉPINEY AU SOUDAN FRANÇAIS (1933-1934)

(Douzième note)

Hyménoptères

ON SOME FOSSORIAL HYMENOPTERA FROM THE SOUDAN

by Dr G. ARNOLD, The Rhodesian Museum, Bulawayo

M. André THÉRY has kindly submitted to me for determination a small collection of Hymenoptera collected by M. de LÉPINEY in the Soudan. It comprises the following species.

Family SPHEGIDAE

1. *Chlorion* (subgen. *Harpactopus*) *aegyptium* Lep. Hist. Nat. Ins. Hymen. III, p. 356, 1845.
Nema, 1 ♂. Distribution : Egypt, Abyssinia, Arabia, Cyprus et N. India.
2. *Sphex* (subgen. *Parapsammophila*) *cyaneipennis* Lep. Hist. Nat. Ins. Hymen. III, p. 370, 1845.
Nema, 1 ♂, 1 ♀. Distribution : Egypt, Nubia et West Africa.
3. *Sceliphron spirifex* L. Syst. Nat. Ed. 10 a, p. 570, 1758
Nema, 1 ♂. A common species widely distributed throughout the Ethiopian Region and the Mediterranean countries.

4. *Sceliphron Eckloni* Dhlb., var. *rufopictus* Magr., Ann. Mus. Civ. Genova, p. 577, 1884.

Sokolo, Cle de Macina, 1 ♂. The typical form is widely distributed throughout the Ethiopian Region, but this variety appears to have been recorded only from the Soudan.

5. ***Cerceris Delepineyi* n. sp.** (figs. 1-4).

♀. 19 mm long. Head ferruginous, slightly flavo-ferruginous between the facial carina and the anterior ocellus, and on the temples. Thorax, first tergite, the base of the second tergite, the first three sternites and the legs, dark ferruginous; the last three sternites fusco-ferruginous, the 2nd-6th tergites black. Antennae ferruginous, the 7th-10th joints, of the flagellum more or less blackish. Wings brownish fuscous, paler at the base. Mandibles with two teeth on the inner margin. Lateral sclerites of the clypeus dull and finely punctured. The median area of the clypeus is produced into a porrect, quadrangular lamina, which is sparsely and obliquely punctured, slightly wider in front than at the base, concave and truncate at its anterior margin, and concave below.

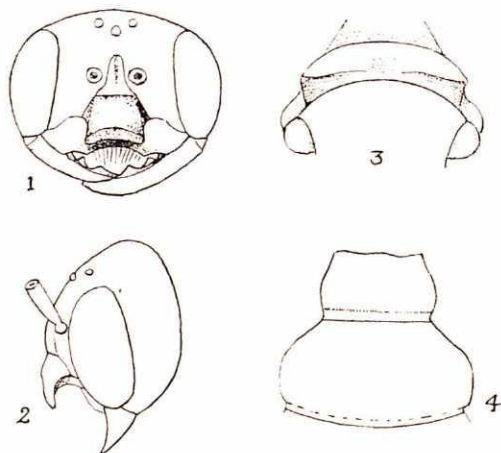


Fig. 1 and 2. — *Cerceris Delepineyi* ♀, nov. sp., head.

Fig. 3. — " " , pronotum.

Fig. 4. — " " , first two tergites.

× 6

The part below the lamina is smooth, shining and concave on its anterior margin. Inner orbits strongly divergent below. Face and vertex dull, strongly and closely punctured, the temples slightly shining and less closely punctured. Face in the middle four-fifths wider than long (from the anterior ocellus to the base of the clypeus), dull, strongly and closely punctured. Interocular distance on the vertex nearly equal to the length

of the first six joints of the flagellum. Posterior ocelli nearly twice as far from the eyes as from each other.

Pronotum transversely cristate and sharply angular outwardly just in front of the posterior margin, as strongly punctured as the vertex, but less closely, the sides obliquely rugose. Mesonotum dull, punctured like the vertex, scutellum dull, sparsely and more finely punctured than the mesonotum, the metanotum dull, closely and finely punctured. Mesopleurae and sides of the epinotum closely reticulate-rugose, the rest of the epinotum, excepting the triangular area, dull, more strongly but less closely punctured than the mesonotum; the triangular area dull, smooth and longitudinally grooved down the middle; the middle of the declivity is impunctate and transversely striate. Metapleurae transversely striate. Mesopleurae with a small tooth below. First tergite with the same puncturation as the dorsum of the epinotum, nearly twice as wide at the apex as long in the middle, one-fourth wider at the apex than at the base. Tergites 2-5 not quite dull, sparsely and fairly finely punctured, the punctures smaller than those of the first tergite. Sixth tergite with a tooth on each side below near the apex, the pygidial area sub-elliptical, nearly twice as long as wide in the middle, vermiculate-rugose, the apical margin straight. Sternites shining, sparsely punctured on the raised basal portions, the punctures larger than on the tergites.

Hind tibiae with 6 serrations.

2 ♀♀, Nema. Type in the Rhodesian Museum.

The lamina of the clypeus is not unlike that of *C. bicolor* Smith, but it is not parallel-sided as in that species, and the apex is flattened, and the whole lamina is curved downwards anteriorly.

6. *Cerceris nemaensis* n. sp. (figs. 5-7).

♂. 13 mm long. Basal half of the mandibles yellow, the apical half fusco-ferruginous. Clypeus and the face as far as the anterior ocellus chrome yellow, the vertex and temples black, the black extending downwards on the face in two narrow lines as far as the antennal sockets.

On the upper part of the temples there is a reddish yellow spot which is connected with a ferruginous streak margining the eyes. Scapes yellow, the first five joints of the flagellum and the apical two-thirds of the last joint pale ferruginous, the remaining joints black. Sides of the pronotum fusco-ferruginous at the margins, blackish in the middle, the dorsal part chrome yellow with a reddish stain in the middle; the tubercles are yellow in the middle and ferruginous at the margins. Mesonotum, meso- and metapleurae black, the mesopleurae with a reddish streak above, just under the yellow tegulae. Scutellum and metanotum chrome yellow, their hind and lateral margins ferruginous. Epinotum and first tergite ferruginous, the triangular area of the epinotum darker. Tergites 2-6 chrome yellow, fusco-ferruginous at the extreme base and on the depres-

sed apical margin. Sternites 1-3 flavo-ferruginous, the 4-6th reddish brown. Legs in greater part yellow, the upper side of the coxae, trochanters and femora somewhat reddish, the tarsi reddish yellow, the apical half, more or less, of the hind femora, blackish. Wings hyaline, strongly tinged with brownish yellow, the apical margin moderately fuscous, the stigma, costa and subcosta ferruginous, the other veins brown.

Clypeus dull, the median area coarsely but not closely punctured, the sides finely punctured. The median area is two-fifths longer than wide, and the anterior margin is moderately convex and without teeth; there is a small ferruginous pit a little behind the anterior margin. Lower half of the face dull and sculptured like the median area of the clypeus, the upper half more finely punctured; it is as wide in the middle as long, and the inner orbits are slightly divergent below. Vertex coarsely reticulate-punctate, slightly shining between the punctures, the temples shallowly and coarsely punctured. The facial carina is high and acute. Second joint of the flagellum a little longer than the third, the apical joint curved, truncate at the apex and about twice as long as wide at the base. Head and thorax with a fine, erect and greyish pubescence.

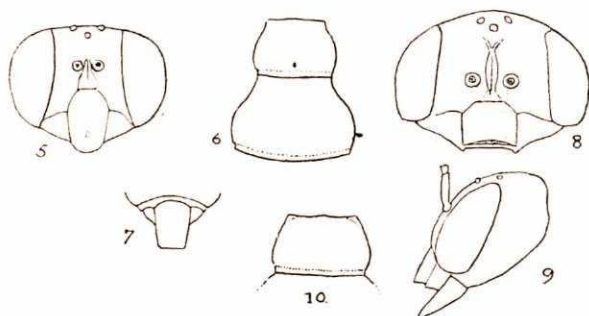


Fig. 5. — *Cerceris nemaensis* ♂, nov. sp., head.

Fig. 6. — " " , first two tergites.

Fig. 7. — " " , pygidium.

Fig. 8 and 9. — *Cerceris pallida*, nov. sp., head.

Fig. 10. — " " , first tergite.

× 6

Pronotum with a fairly coarse puncturation above and in front, coarsely and obliquely rugose at the sides; posteriorly it is raised, forming a transverse crest on each side. Mesonotum dull, coarsely and closely punctured in the middle, more closely and fairly finely at the sides and in front. Mesopleurae coarsely reticulate-rugose. Metapleurae dull, obliquely and strongly rugose, almost costate. Scutellum shining, sparsely punctured. Metanotum closely and finely punctured and dull. Epinotum coarsely reticulate-punctate, the triangular area slightly shining, smooth, except at the base, where it is very finely and transver-

sely striate; it has a well-defined median longitudinal groove. First tergite sculptured like the epinotum, very slightly narrowed in front, convex at the sides, a little (one-fifth) wider behind than long. Tergites 2-4 dull, strongly punctured, the punctures separated by spaces as wide as themselves; tergites 4-5 less closely and less coarsely punctured than the preceding segments, the pygidial area coarsely punctured, almost parallel-sided but a little narrowed towards the apex, half as long again as wide at the base. Sternites shining, shallowly and coarsely punctured on the raised basal parts. Hind tibiae with five serrations.

Nema, 1 ♂. Type in the Rhodesian Museum.

Allied to *C. algirica* Schlett., but differing considerably in colour. In the shape of the pronotum and the sculpture of the triangular area of the epinotum, this insect resembles *C. Delepineyi*, but the differences in the colour and sculpture make it improbable that it can be the ♂ of that species.

7. ***Cerceris pallida*** n. sp. (figs. 8-10).

♀. 1.5 mm long. Pale sulphur yellow. The extreme apex of the clypeus, all the sutures of the thorax, the metapleurae, the apical margin of the epinotal declivity, the posterior half of the sternum, the depressed apical margins of the abdominal segments, the base of the 2nd-5th sternites and the whole of the sixth sternite, pale ferruginous. Pygidial area fusco-ferruginous. There is a small ferruginous median spot just behind the apical margin of the first four tergites. Mandibles flavo-ferruginous, the apex fuscous. Scapes yellow, the flagellum pale ferruginous. Tarsi reddish yellow, the rest of the legs sulphur yellow, but the upper surface of the trochanters and the apices of the hind femora and hind tibiae are more or less ferruginous. Wings hyaline, the apex of the fore wing as far as the stigma and the veins in that part, fuscous; the rest of the veins and the stigma ochreous.

Clypeus and lower half of the face shining, shallowly, finely and not very closely punctured, and covered with silvery pubescence. The rest of the head, the thorax and the tergites are dull, closely and fairly strongly punctured; the metapleurae are obliquely striate and the base of the triangular area of the epinotum is rather sparsely punctured. Pygidial area vermiculate-rugose. Sternites 1-5 shining, their apical halves shallowly, sparsely and finely punctured. Sixth sternite dull; the 3rd-5th sternites are swollen on each side near the apical margin, or subtuberculate.

Median area of the clypeus subquadrate, very little wider than long, convex transversely, moderately projecting and truncate below; the apical margin below the truncation is straight and has a trace of a tooth on each side. Eyes strongly divergent below. Frontal carina high, forked at its end above. Interocular distance on the vertex equal to the length

of the first six joints of the flagellum. Temples wide, fully as wide as the eyes. Mesopleurae with two small teeth below. Triangular area of the epinotum with a median longitudinal groove. First tergite two-thirds wider than long, widest behind, broad at the base, the sides convex. Pygidial area elliptical, a little more than twice as long as wide, the apex truncate. Posterior tibiae with six serrations.

Nema, 1 ♀. Type in the Rhodesian museum.

In colour this species is not unlike the Algerian *C. straminea* Duf., but that species is not only smaller (10 mm), but has three red lines on the head. But as the description of *straminea* is quite inadequate, being confined to the colour, it is not possible to decide whether this Soudanese insect is in any way related to it.

8. *Cerceris arida* Arn. Ann. Trans. Mus. XIV, pt. 2, p. 163, ♀, 1931.

It is highly probable that the insect described below is the ♂ of this species.

♂. 8 mm long. Colour as in the ♀, but the pygidial area is ferruginous, like the rest of the abdomen. The sculpture is also like that of the ♀, but the mesonotum and the scutellum are not longitudinally rugose but coarsely reticulate-punctate all over. The median area of the clypeus is a little shining in front.

Median area of the clypeus hexagonal, nearly half as long again as wide in the middle, wider at the base than at the apex, the apical margin with three, distinct, rounded teeth. There is a trace of a tubercle on the mesopleurae. The first tergite is like that of the ♀, but a little longer. The sixth sternite has a triangular tooth on each side, and the pygidial area is coarsely punctured, rectangular and nearly half as long again as wide. Otherwise like the ♀.

Nema, 1 ♂, Rhodesian Museum. The ♀ was taken at Zangeru, N. Nigeria.

9. *Stizus Mionii* Guer., Icon. du règne anim., p. 438, ♀, 1844.

Nema, 1 ♂. This species is also found in Senegal.

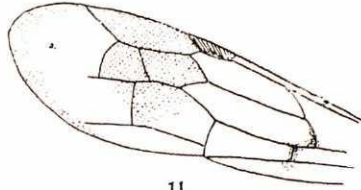
Family PSAMMOCHARIDAE

10. *Priocnemis gracilicornis* n. sp. (fig. 11).

♀. 6 mm long. Black. Basal third of the mandibles black, the rest ferruginous. Sides of the first tergite rufo-testaceous. Wings hyaline; there is a pale brownish cloud on the fore wing covering the radial, second and third cubital cells, and the outer half of the second discoidal cell. There is also a faint clouding on each side of the basal vein and the nervulus.

Sides of the metanotum and the postnotum slightly shining and obliquely striate, the rest of the body dull; head and thorax microscopically and closely punctured, the sides of the epinotal declivity with traces of transverse rugae, the abdomen microscopically transversely rugulose. There is a very fine, greyish pubescence all over.

Clypeus nearly three times wider than long, the anterior margin straight.



11

Fig. 11. — *Priocnemis gracilicornis*, fore wing.

Inner orbits parallel. Face in the middle twice as wide as one eye. Antennae distinctly long and slender, extending back as far as the apex of the first tergite; all the joints of the flagellum, excepting the first, much longer than wide; the second joint is slightly longer than the third. Posterior ocelli a little farther from the eyes than from each other. Interocular distance on the vertex equal to the length of the first two joints of the flagellum plus one-third of the third joint. Pronotum twice as wide behind as long in the middle. Postnotum one-third longer than the metanotum, deeply grooved down the middle. Epinotum slightly (one-seventh) longer than wide at the base, the dorsum and declivity forming a low and continuous arc in profile. First tergite one-fourth wider behind than long. Posterior tibiae with a row of 9 low scales on the upper surface. Stigma nearly half as long as the radial cell; second abscissa of the radius twice as long as the third. Nervulus postfurcal, its distance from the basal vein greater than its own length.

Sokolo, Cle de Macina, 1 ♀. Type in the Rhodesian Museum.

11. *Batozonus fuliginosus* Klug. Symb. physicae, t. XXXVIII, fig. 6, ♀, 1834.

Nema, 3 ♀♀. Found in the whole of Africa except the extreme north. The colour of the head and thorax is rather variable in this species. In these three specimens the head is fusco-ferruginous, and the anterior half of the thorax is more or less rufescent; the antennae are yellow as in the variety *sepulchralis* Smith. They are, however, distinctly smaller than that variety, being only 13-15 mm long.

MISSION J. DE LÉPINEY AU SOUDAN FRANÇAIS (1933-1934)

(Douzième note)

SUR QUELQUES HYMÉNOPTÈRES FOUISSEURS DU SOUDAN

par le Dr G. ARNOLD

Les Hyménoptères fousseurs recueillis par J. de LÉPINEY, au cours de sa mission au Soudan Français, en 1933 et 1934, comprennent les espèces suivantes :

SPHEGIDAE

1° *Chlorion* (s. g. *Harpactopus*) *aegyptium* Lep. — 1 ♂, de Néma.

2° *Sphex* (s. g. *Parapsammophila*) *cyaneipennis* Lep. — 1 ♂, de Néma.

3° *Sceliphron spirifex* L. — 1 ♂, de Néma.

4° *Sceliphron Eckloni* var. *rufopictus* Magr. — 1 ♂, de Sokolo, cercle de Macina.

5° *Cerceris Delepineyi* n. sp. — 2 ♀, de Néma.

Long. 19 mm. Tête ferrugineuse, légèrement ferrugineux jaunâtre entre les carènes faciales et l'ocelle antérieur, ainsi que sur les tempes. Le thorax, le premier tergite, la base du deuxième tergite, les trois premiers sternites et les pattes sont d'un ferrugineux obscur ; les trois derniers sternites sont d'un ferrugineux fauve ; les 2^e-6^e tergites sont noirs. Les antennes sont ferrugineuses, les articles 7 à 10 du flagellum plus ou moins noirâtres. Les ailes sont fauve brun, plus pâles à la base.

6° *Circeris nemaensis* n. sp. — 1 ♂, de Néma.

Long. 13 mm. Moitié basilaire des mandibules jaune, moitié apicale d'un ferrugineux fauve. Clypeus et face, jusqu'à l'ocelle antérieur, jaune de chrome, le vertex et les tempes noirs, la teinte noire s'étendant sur la face en deux étroites lignes, jusqu'à l'insertion des antennes.

Voisin de *C. algirica* Schlett., mais en différant considérablement par la couleur, la forme du pronotum et la sculpture de l'aire triangulaire de l'épinotum, cette espèce ressemble à *C. Delepineyi*, mais les différences dans la couleur et la sculpture rendent improbable qu'il s'agisse du ♂ de cette espèce.

7° *Cerceris pallida* n. sp. — 1 ♀, de Néma.

Long. 15 mm. — Par sa couleur, cette espèce n'est pas très différente de l'espèce algérienne, *C. straminea* Dufour, mais cette dernière est non seulement plus petite (10 mm), mais elle porte trois lignes rouges sur la tête. Mais comme la description de *C. straminea* est défectueuse et se borne aux couleurs, il n'est pas possible de décider dans quelle mesure l'insecte du Soudan en est plus ou moins proche.

8° *Cerceris arida* Arnold. — 1 ♂, de Néma.

9° *Stizus Mionii* Guer. — 1 ♂, de Néma.

PSAMMOCHARIDAE

10° *Priocnemis gracilicornis* n. sp. — 1 ♀, de Sokolo, cercle de Macina.

Long. 6 mm. Noir. Tiers basilaire des mandibules noir, le reste ferrugineux. Côtés du 1^{er} tergite testacé roux. Ailes hyalines; un nuage brunâtre pâle sur l'aile antérieure, couvrant les cellules radiale, deuxième et troisième cubitales, et la moitié externe de la deuxième cellule discoïdale, un faible nuage de chaque côté de la nervure basale et de la nervule.

Côtés du métanotum et le postnotum légèrement brillants et obliquement striés, le reste du corps obscur. Tête et thorax couverts d'une ponctuation très fine et très rapprochée; les côtés de la déclivité épinothoracale avec des traces de rugosités transversales; l'abdomen portant des rugosités transversales microscopiques. Sur le tout, une pubescence grisâtre, très fine.

11° *Balozonus fuliginosus* Klug. — 3 ♀, de Néma.
