

NEW SPECIES OF AFRICAN HYMENOPTERA
No. 14

By G. ARNOLD

The majority of species described herein were collected by Professor O. W. Richards in S.W. Tanganyika, and a few in Basutoland. Unless otherwise stated, the type of the new species will be deposited in the British Museum, Natural History. The least magnification required to resolve the sculpture, using a stereoscopic binocular microscope, is shown in brackets (... diameters).

Subfamily TRYPOXYLONINAE

Trypoxylon latiscutatum rectirugosum var. n.

T. latiscutatum, Arnold, 1946, *Occ. Pap. Nat. Mus. S. Rhod.* 12, 72.

The collection contains six specimens from various places in the Rukwa valley, Tanganyika, which differ from the type of the species only in having the transverse rugae on the median area of the epinotum straight and evenly spaced, and in the second joint of the flagellum being only one-tenth longer than the third. A re-examination of the type of the species indicates a correction to the original description; the second joint is only three-tenths longer than the third, not half as long again as stated. The paratype of *latiscutatum* taken at the same time and place as the type should be assigned to the variety. The petiole, or first tergite, is six times longer than its greatest width in the type of the species, and slightly less, $5\frac{5}{8}$, in the variety. Type in British Museum, Natural History.

Trypoxylon cariosum sp. n. (Figs. 1 and 1a)

♀. 11 mm. long. Black. Wings hyaline, the veins black, the costa of the forewing pale brown. Clypeus and face below the scutate area and the temples with silvery pubescence, the thorax with exserted, fairly long and silvery pubescence, moderately dense on the mesopleura.

Facial shield, sides of the face and the vertex dull, strongly and closely punctured, the interspaces as wide as the punctures. Pronotal dorsum closely punctured, the punctures as large as those of the face. Mesonotum in the anterior third strongly and transversely rugose and punctured between the rugae, the posterior two-thirds only punctured, the punctures about twice as large as those of the vertex, the interspaces slightly wider than the punctures. Mesopleura dull and closely punctured, the punctures a little smaller than those of the mesonotum; the mesosternum nitidulous and punctured, the punctures for the greater part half as wide as the interspaces. Scutellum and metanotum finely and

sparsely punctured. Median area of the the epinotal dorsum broadly U-shaped, as long as wide at the base, the basal third with a few oblique rugae on each side, the median groove with four transverse costae, the sides beyond the groove reticulate-rugose; the sides of the dorsum with four thick rugae; behind the median area there is a deep pit, and the declivity, which is not steep, has six large transverse rugae and a few indistinct punctures in the interspaces. The sides of the epinotum are vertically and closely rugose, the rugae increasing in size posteriorly.

Clypeus one-third wider than long, the apical margin convex. Interocular distance on the vertex about one-fourth greater than across the base of the clypeus. Facial shield one-third longer than wide across the lateral angles, which emit a straight carina extending to the inner margin of the eyes in the lateral sinus. The carina above the lateral angles is convex and incurved, and is separated from the arcuate upper carina by a space as wide as the anterior ocellus. Second joint of the flagellum not quite three times longer than wide, and one-third longer than the third joint. Mesonotum one-sixth wider behind than long. Petiole fully seven times longer than wide across the node, one-eighth longer than the second and third tergites united, the second as long as the third, both moderately widened caudad. Posterior coxae with a rounded tooth on the upper margin.

Rukwa valley, Tanganyika, 20 Aug. 1952 type, 22 Aug. 1952 paratype. Type in British Museum, Natural History. Related to *T. turbulentum* Arnold, from which it differs by the greater length, the shape of the facial shield, the rugoso-punctate metanotum, the sculpture of the epinotum and the longer petiole.

***Trypoxylon lucidum* n.sp. (Figs. 2, 2a and b)**

♂. 9.3 mm. long. Black. Palpi ochreous, mandibles flavo-ferruginous. The underside of the tarsi and anterior tibiae, the apex of the anterior and middle femora and the extreme base and apex of the tibiae, brownish ochreous. Wings hyaline, the veins black. Clypeus, lower face and temples with silvery pubescence, the thorax with a sparse, exserted and white pilosity. Upper half of the face and the vertex shining, lower half of the facial shield very finely and very sparsely punctured, the upper half, chiefly at the sides, the vertex and sides of the face with larger punctures, the interspaces about three times wider than the punctures. Pronotum smooth and shining, its posterior half stramineous. Mesonotum, mesopleura, scutellum and metanotum shining, and with a very fine, very sparse and shallow puncturation. Epinotal dorsum shining between the rugae, the sides closely and obliquely rugulose. Abdomen not quite dull. Clypeus nearly twice as wide as long, its anterior margin feebly sinuate, almost straight. Facial shield one-fifth longer than wide across the lateral angles, which emit a short and straight carina into the ocular sinuses. Above the lateral angles the margin is slightly incurved and half way up is extended mesad into a small tubercle. Interocular distance on the vertex one-fourth greater than across the base of the

clypeus. Posterior ocelli separated from the eyes by a distance a little greater than their own diameter. Second joint of the flagellum twice as long as wide, and as long as the third joint, the apical joint acuminate, slightly curved, nearly twice as long as wide at the base, and half as long again as the preceding joint. Mesonotum nearly two-fifths wider than long. The U-shaped median area of the epinotal dorsum a little wider at the base than long, with a median longitudinal groove which is widened caudad and has five transverse rugae in its posterior half, the sides of the median area with six oblique rugae, the sides of the epinotal dorsum also with six rugae, the declivity with a few thin transverse rugae and sparsely punctured. First tergite five times longer than wide at the apex, twice as long as the second tergite, the third barely longer than the second and one-fourth longer than wide at the apex.

Rukwa valley, Tanganyika, 16 Sept. 1952. Type in the British Museum, Natural History. Related to *T. kohli* Arnold, from which it differs, *inter alia*, by the shape of the facial shield and the sculpture of the epinotum. As the type is the only specimen. I have not attempted to extract the genitalia.

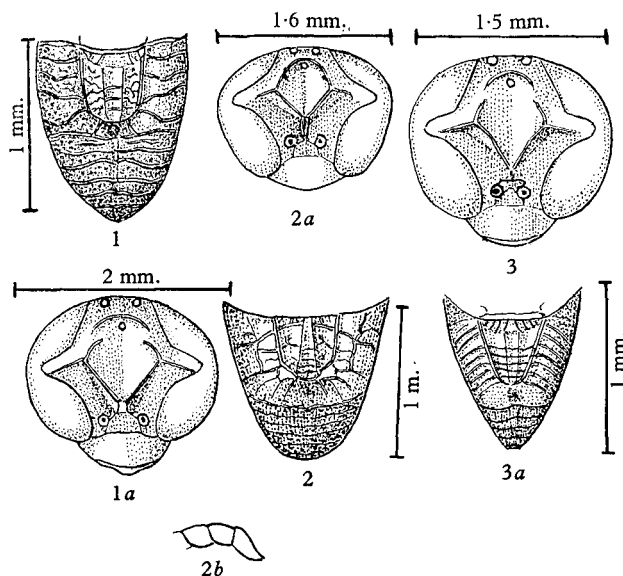


Fig. 1, 1a. *Trypoxylon cariosum*, ♀.
 Fig. 2, 2a. *Trypoxylon lucidum*, ♂.
 Fig. 3, 3a. *Trypoxylon insulsum*, ♀.

***Trypoxylon insulsum* n.sp. (Figs. 3 and 3a)**

♀. 8.2 mm. long. Black. Wings hyaline, strongly iridescent, the veins black. Clypeus and lower half of the face, and the temples, with silvery pubescence. The thorax with the usual white pubescence, fairly dense on the epinotal declivity. Face and vertex dull, closely and shallowly

punctured, almost reticulate-punctate, the punctures barely resolvable with a magnification of 25 diameters. Pronotal dorsum sparsely and finely punctured on the anterior half. Mesonotum and mesopleura nearly dull, sparsely and finely punctured, the interspaces for the greater part three to four times wider than the punctures, the scutellum and metanotum with a slightly larger and closer puncturation than the mesonotum. Dorsum of the epinotum with a U-shaped median area, obliquely rugose at the base, twice as wide at the base as at the apex, shallowly grooved down the middle and closely, transversely rugose, (six rugae). The lateral areas of the dorsum have eight large and oblique rugae, the declivity is grooved down the middle with a deep pit at the top, and has five transverse rugae below, the interspaces shining and sparsely punctured. The sides of the epinotum closely and obliquely rugose. Clypeus a little more than one and a half times wider than long, the anterior margin convex. Facial shield one-third longer than wide across the lateral angles, which emit a carina into the ocular sinuses. The margin of the shield above the lateral angles is directed inwards and does not join the arcuate upper margin. Posterior ocelli separated from the eyes by a little less than their own diameter. Interocular distance on the vertex barely greater than across the base of the clypeus. Second joint of the flagellum four times longer than wide and one-third longer than the third joint, (the joints beyond the second have been lost). Petiole five and one-third times longer than wide behind, two and one-fifth times longer than the second tergite, the latter as long as the third, both moderately widened caudad.

Rukwa valley, Tanganyika, 22 Aug, 1952, type in the British Museum, Natural History. Related to *T. turbulentum* Arnold, from which it differs by the much finer puncturation of the head and mesonotum, the coarser rugosity of the epinotum, the shape of the facial shield and the shorter petiole.

***Trypoxylon breviventre* n.sp. (Figs. 4 and 4a)**

♀. 8 mm. long. Black. Wings hyaline and iridescent, the veins black, the apical fourth of the forewing faintly fuscous. Palpi ochreous, mandibles flavo-ferruginous. Apex of the anterior femora, anterior tibiae and tarsi, middle tibiae below and the metatarsus and the basal fifth of the hind tibiae, pale ochreous. Clypeus, lower half of the face, the ocular sinuses, temples, occiput, sides of the thorax and the declivity of the epinotum with decumbent silvery pubescence. The abdomen with a sparse, decumbent, microscopic and whitish pubescence. Clypeus and face dull, microscopically and closely reticulate (50 diameters), the vertex behind the posterior ocelli nitidulous, sparsely and finely punctured. Thorax, not including the epinotum, shining and with a shallow and very fine puncturation (30 diameters), the interspaces fully three times wider than the punctures. Mesonotum about one-third wider than long. Epinotum long, one and-a-half times longer than wide at the base, shining, considerably narrowed caudad, twice as wide at the base as at the apex. Median area of the dorsum broad, a little wider than long,

divided by two longitudinal rugae into three parts, the central part transversely and finely striate, the lateral parts coarsely reticulate-rugose. The upper half of the declivity is very little lower than the dorsum and has in the middle a sub-ovoid marginate area, feebly reticulate and grooved lengthwise in the middle, the sides and bottom of the declivity reticulate-rugose, the apex with a sharp transverse carina. Clypeus twice as wide as long, the anterior margin convex. Face convex, without a scutate area, produced into a transverse shelf above the antennal sockets. Ocular sinuses as wide at the base as long. The inferior interocular distance, across the base of the clypeus, is a little greater than on the vertex. Posterior ocelli contiguous with the eyes. Second joint of the flagellum three and a half times longer than wide and very little, one-sixth, longer than the third joint. Abdomen short and clavate, petiole three times longer than wide across the rather swollen node, with a median longitudinal groove over its basal half, two-thirds longer than the second tergite which is about one-third longer than wide behind.

Rukwa valley, Tanganyika, 22 July 1952, 1 ♀, type in the British

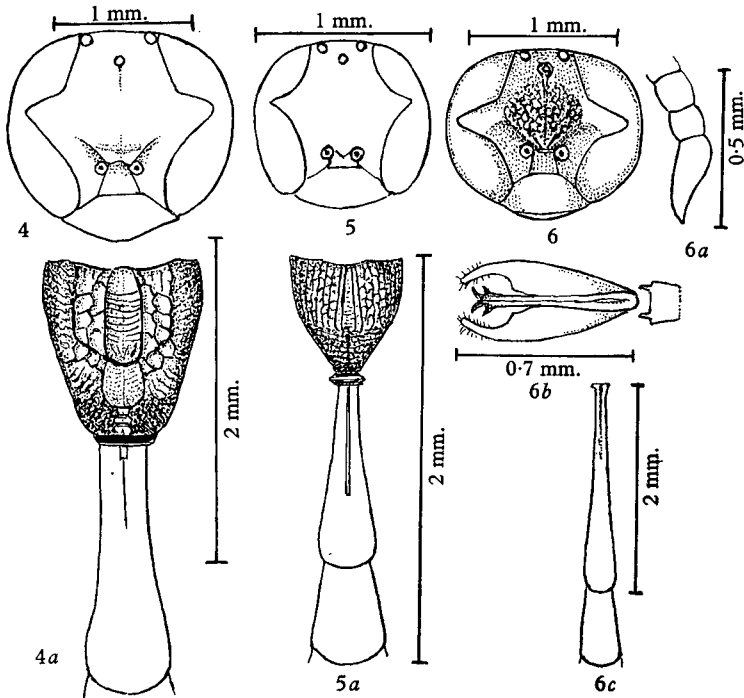


Fig. 4, 4a. *Trypoxylon breviventre*, ♀.

Fig. 5, 5a. *Trypoxylon pumilio*, ♂.

Fig. 6. *Trypoxylon dendrophilum*, ♂.

Fig. 6a. *Trypoxylon dendrophilum*, apical joints of the flagellum.

Fig. 6b. *Trypoxylon dendrophilum*, genitalia.

Fig. 6c. *Trypoxylon dendrophilum*, first two tergites.

Museum, Natural History. Related to *T. tremulum* Arnold from which it differs by the colour of the tibiae, the sculpture of the epinotum and the shorter and thicker first tergite. In colour it resembles the Madagascan *T. luteosignatum* Arnold, from which it is easily distinguished by its greater size, the much longer joints of the flagellum and the sculpture of the epinotum.

***Trypoxylon pumilio* n.sp. (Figs. 5 and 5a)**

♂. 5.3 mm. long. Black. Wings hyaline, slightly smoky, strongly iridescent. Clypeus, lower half of the face and the temples with silvery pubescence. Thorax with a sparse, very short, decumbent and whitish pubescence. Face and vertex dull, closely and microscopically reticulate (50 diameters), temples nitidulous and impunctate. Dorsum of pronotum slightly shining, finely and sparsely punctured. Mesonotum dull, very closely reticulate-punctate (30 diameters), the interspaces not wider than the punctures. The scutellum and metanotum dull, as finely punctured as the mesonotum but not so closely. Mesopleura not quite dull, very shallowly and sparsely punctured, the epimerum with a sparse puncturation about twice as large as that of the mesonotum. Metapleura shining and obliquely rugose. Epinotum dull, reticulate-rugose, punctulate between the rugae and without a median area on the dorsum distinctly scutate and raised above the lateral areas. Clypeus nearly three times wider than long. The interocular distance on the vertex equal to that across the base of the clypeus. Ocular sinuses shallow, wider at the base than deep. Second joint of the flagellum nearly twice as long as wide and as long as the third joint, none of the joints more than twice as long as wide. Posterior ocelli separated from the eyes by a distance equal to half their own diameter. Mesonotum one and a half times wider than long. First tergite nearly three times longer than wide across the node, nearly as long as the second and third united. Seventh tergite four times wider than long, its apical margin very convex.

Mamathes, Basutoland, 28 Sept. 1952, 2 ♂♂. Type in the British Museum, Natural History. The type is damaged, the head and abdomen being detached from the thorax, the other specimen consisting of only the head and thorax. Closely related to *T. stevensoni* Arnold from which it differs by the entirely black tarsi, the much finer and closer puncturation of the mesonotum and the closer and finer sculpture of the epinotum.

***Trypoxylon dendrophilum* n.sp. (Figs. 6, 6a c)**

♂. 8.2 mm. long. Black. Palpi ochreous, mandibles reddish yellow, anterior tibiae and tarsi brownish ochreous, hind tibiae and tarsi brown. Tegulae stramineous. Wings hyaline, slightly smoky at the apex, the veins black. Face and vertex dull, the face between the antennal sockets and the anterior ocellus tumid and reticulate rugose and with a median impressed line; the ocular sinuses smooth, the vertex finely punctured. Pronotum, mesonotum, mesopleura, scutellum and metanotum shining, very sparsely and very finely and shallowly punctured (30 diameters).

Epinotum shining, the dorsum with a U-shaped median area, widely grooved down the middle, closely, finely and transversely rugose, the lateral areas of the dorsum and the upper half of the declivity reticulate-rugose, the sides of the epinotum obliquely and closely striate. First tergite very narrow over its basal two-thirds, nearly six and a half times longer than wide across the node, two and a half times longer than the second tergite. Clypeus twice as wide as long, the apical margin convex. Ocular sinuses deeper than wide at the base. Interocular distance on the vertex one-third greater than across the clypeus. Second joint of the flagellum not quite twice as long as wide, as long as the third joint, the fifth not excavated below, the apical joint curved and acuminate, two and a quarter times longer than wide at the base and as long as the two preceding joints united. Mesonotum nearly as long as wide, the scutellum feebly convex.

Kawanga, Rukwa valley, Tanganyika. 2♂♂, on trees. Type in the British Museum, Natural History. The paratype has the epinotum more coarsely rugose than in the type and the anterior tibiae are nearly black. Related to *T. solivagum* Arnold from which it differs by the finer sculpture of the epinotum, the stronger puncturation of the mesonotum, the shorter apical joint of the flagellum and the shape of the eighth sternite.

Subgenus **Asaconoton** n.subg.

This differs from the genus as follows: Face tumid, ending below in two short carinae which at their junction are continued into a high and acute carina or beak, extending beyond the antennal sockets. Dorsum of the pronotum not divided into two parts by a transverse groove. Epinotum without rugae, almost smooth, the dorsum without a raised U-shaped median area.

Type of the subgenus *T. egregium* n. sp.

Trypoxylon egregium n.sp. (Figs. 7 and 7a)

♀. 10 mm. long. Black. Mandibles, palpi, apical margin of the clypeus, underside of the scapes, pale brownish yellow, Anterior tarsi and the underside of the tibiae, the extreme apex of the middle and hind femora and the extreme base of their tibiae, pale ochreous. Middle and hind tarsi brown. Tegulae brownish yellow. Wings hyaline, the veins black. Clypeus and lower half of the face, including the ocular sinuses, and the temples with silvery pubescence. Thorax and abdomen with a decumbent pubescence, silvery at certain angles, more abundant on the pleura and the declivity of the epinotum than elsewhere. Head dull, the tumid middle part of the face with a shallow and fine puncturation, the interspaces about three times wider than the punctures, the vertex a little more closely and more finely punctured. Thorax nitidulous, with an exceedingly fine and shallow puncturation (50 diameters), the interspaces from three to four times wider than the punctures, the sides of the epinotum impunctate and shining. Abdomen nitidulous, even more finely punctured than the thorax. Clypeus three times wider than long,

the apical margin almost straight. The interocular distance across the base of the clypeus is only half as long as on the vertex. The ocular sinuses are deeper than wide at the base. The beak-like carina prolonged from the tumid area of the face is plainly visible when the head is viewed from the side. The posterior ocelli are separated from the eyes by a distance equal to half their own diameter. First joint of the flagellum not quite twice as long as wide, the second and third are twice as long as wide and of equal length, and very little longer, one-seventh, than the

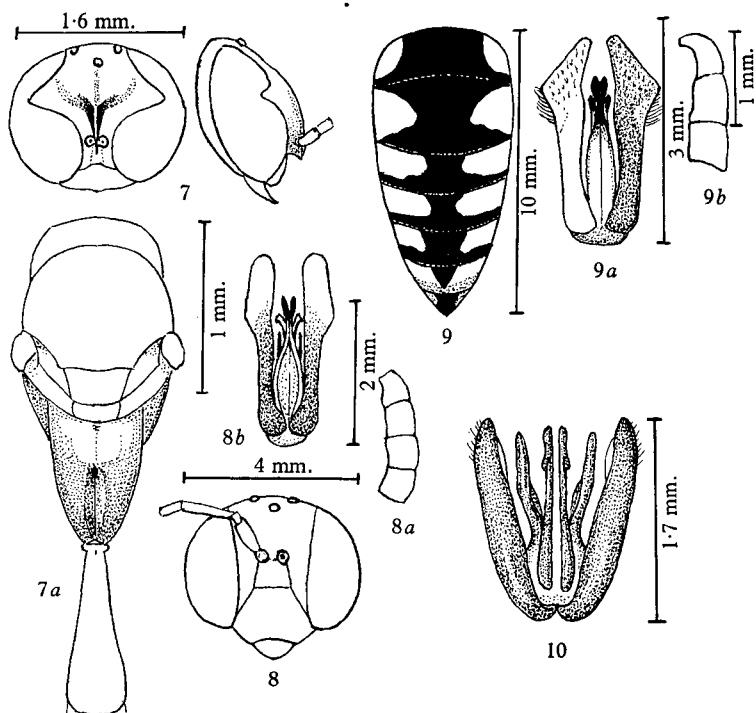


Fig. 7, 7a. *Trypoxylon egregium*, ♀.

Fig. 8. *Stizus richardsi*, ♂.

Fig. 8a. *Stizus richardsi*, apical joints of the flagellum.

Fig. 8b. *Stizus richardsi*, genitalia.

Fig. 9. *Stizus wheeleri*, ♂, abdomen.

Fig. 9a. *Stizus wheeleri*, genitalia.

Fig. 9b. *Stizus wheeleri*, apical joints of the flagellum.

Fig. 10. *Sphex rukwaensis*, ♂, genitalia.

first. Shoulders of the pronotum oblique. Mesonotum one-fifth wider than long. Epinotum smooth, without rugae or striae, the dorsum twice as wide at the base as long, with a narrow longitudinal groove and a median area faintly indicated caudad by a thin line. Declivity of the epinotum with a deep longitudinal groove which does not extend to the bottom. First tergite without a distinct node, three and a third times

longer than wide behind, three-sevenths longer than the second tergite which is three-quarters longer than wide behind. Calcaria pale brown.

Rukwa valley, Tanganyika, 1 ♀, on a window. Type in the British Museum, Natural History.

The following species were also collected in several parts of the Rukwa valley, *T. stroudi* Gribido and *T. cognatum* Arnold.

Subfamily STIZINAE

Stizus richardsi n.sp. (Figs. 8, 8a and b)

♂. 16–17 mm. long. Mesonotum, excepting the ferruginous lateral margins, mesopleura, epinotum, first four abdominal segments and the base of the fifth sternite, black. The apical margins of the second to fifth sternites narrowly yellow. Mandibles excepting the black apical third, labrum, sides of the face and the median triangle, pale yellow, clypeus reddish yellow. Upper half of the face and the temples pale ferruginous, an oblong black spot above each antennal socket, the ocelli ringed with black, the underside of the head black. Antennae ferruginous. Pronotum ferruginous, the dorsal edge whitish yellow, the prosternum black. Scutellum ferruginous, the apical margin of the metanotum and the margin of the triangular area of the epinotal dorsum, narrowly ferruginous. The fifth, sixth and seventh abdominal segments and the legs ferruginous. Wings flavo-hyaline, the veins ferruginous, the radial cell faintly fuscous. The whole body with a fine, white and exserted pubescence, the underside of the femora with dense, decumbent and yellow pubescence. Labrum sparsely punctured and shining. Head dull, the puncturation microscopic, except the upper half of the sides of the face and behind the posterior ocelli where there is a visible puncturation. Thorax dull, finely reticulate-punctate, the punctures oblique. Tergites slightly shining, closely and obliquely punctured, the punctures larger than those on the mesonotum. Sternites shining, the second to sixth with large oblique punctures, larger than those of the tergites, the interspaces about three times larger than the punctures. Clypeus moderately convex, the apical margin shallowly concave, nearly two-fifths wider than long in the middle. Interocular distance on the vertex one-fourth greater than across the base of the clypeus. Second joint of the flagellum nearly five times longer than wide at the apex, and almost two and a quarter times longer than the third; the apical joint curved, slightly narrowed towards the truncate apex and as long as the preceding joint. Posterior ocelli separated from the eyes by a distance equal to twice their own diameter. Lateral margins of the epinotal declivity not excised. Apical margin of the seventh tergite subangular.

♀. 17 mm. long. Colour of the head and thorax like that of the ♂, but the first three tergites have yellow maculae on each side, and the remaining tergites are reddish yellow, the fourth and fifth slightly black in the middle at the base. In the unique specimen the antennae are missing. The scutellum has a pubescent fovea in the middle (*ruficornis* group). Otherwise like the ♂.

Mweru Wantipa, N. Rhodesia, 2 ♂♂, of which one is the type; Abercorn, N. Rhodesia, 1 ♂ (stylopised); Rukwa valley, Tanganyika, 1 ♀. Types in the British Museum, Natural History. Superficially the ♀ is very similar to *S. bredoi* Arnold but larger, from which it is easily distinguished by the flagellum and the genitalia. The ♀ could be mistaken for a small specimen of *S. baumanni* Handl.

***Stizus wheeleri* n.sp. (Figs. 9, 9a and b)**

♂. 17 mm. long. Black. The following parts are chrome yellow: basal half of the mandibles, labrum, clypeus, lower half of the face, the scapes, a thin line on the temples margining the posterior orbits, the dorsal edge and tubercles of the pronotum, large lateral maculae on all the tergites and small subquadrate spots on the posterior corners of the second to sixth sternites. The sides of the mesonotum and the posterior two-thirds of the scutellum dark ferruginous. Flagellum ferruginous, the apical half darker. Legs ferruginous, the coxae and trochanters black, the upperside of all the tibiae chrome yellow. Wings hyaline, the veins ferruginous, the radial cell not infuscated. Head and thorax with greyish pubescence, fairly long on the pleura and epinotum. Face and vertex dull, the latter with a very shallow, close and small puncturation. Thorax with a fine, close and oblique puncturation and dull, the abdomen a little more strongly punctured than the mesonotum. Clypeus a little more than one-third wider than long in the middle, the apical margin concave. Interocular distance on the vertex about one-fifth greater than across the base of the clypeus. Posterior ocelli separated from the eyes by a distance equal to one-third of their own diameter. Second joint of the flagellum curved, flattened dorso-ventrally, six times longer than wide at the apex, two and a quarter times longer than the third joint; the apical joint curved, excavated below and truncate at the apex.

Turk Mine, S. Rhodesia. 10 Feb. 1957, 1 ♂. Type in the National Museum of S. Rhodesia. As in *S. bensoni* Arnold the first transverse cubital vein is straight as in the *ruficornis* group, but on account of the genitalia this species should be placed in the *fasciatus* group, like *bensoni*. From the latter it differs by the different colour pattern of the head, the apical joint of the flagellum and the angular dilatation of the outer paramera of the genitalia and the presence of a fringe of cilia below the angle.

Subfamily SPHECINAE

***Sphex (Calosphex) rukwaensis* n.sp. (Fig. 10)**

♂, type 15 mm. long, paratype 13 mm. long. Black. Wings flavo-hyaline, the apical area beyond the cells moderately fuscous, the veins ochreous. Clypeus with decumbent silvery pubescence. The head including the clypeus with a long, fine, white and exserted pilosity, dense on the face and temples. A similar pilosity covers the thorax, short on the promesonotum, long elsewhere, but in no way obscuring the under-

lying sculpture. Sixth and seventh sternites with a dense, decumbent and brownish yellow pubescence, the second tergite with a trace of microscopic white pubescence at the sides, otherwise the abdomen is glabrous. Legs, including the coxae with decumbent greyish pubescence. Upper half of the face and the vertex smooth and slightly shining. Pronotum shallowly punctured and dull. Mesonotum dull, with a marginate groove in the middle of the anterior half, closely and obliquely rugose on each side of the groove. Mesopleura dull, coarsely and closely punctured, the upper half also with some rugae. Scutellum not quite dull, with a few large punctures. Mesonotum coarsely reticulate-rugose. Dorsum of the epinotum dull, strongly, closely and transversely rugose, the sides of the epinotum obliquely striate, the declivity punctate and rugose. Abdomen smooth and slightly shining. Interocular distance on the vertex equal to the length of the second to fourth joints of the flagellum and three-tenths greater than the interocular distance at the bottom of the eyes. The distance of the posterior ocelli from the eyes is slightly greater than their distance from each other. Second joint of the flagellum two and two-thirds longer than wide, three-fifths longer than the third joint and very little longer than the fourth. Dorsum of the pronotum convex lengthwise, fully four times wider than long in the middle. Dorsum of the epinotum one-fourth wider at the base than long. Petiole as long as the hind metatarsus. Claws with two blunt teeth at the base. The proportions of the abscissae of the radius are as 6:4:7. The first cubital cell is three and three-quarter times longer on the cubitus than the second, and four-elevenths longer than the third. The first and second transverse cubital veins are slightly curved inwards.

Ukia, Rukwa valley, Tanganyika, 30 May 1950, type ♀; Mbarazi, Rukwa valley, 21 Nov. 1950 (leg. Fitzgerald). This species differs from the other two African species, *niveatus* Dufour and *nigropectinatus* Taschenberg by the yellow wings, the much less dense pilosity on the thorax which is not snow white but dull white, and by the absence of that pilosity on the first tergite. The vertex is also wider.

Subfamily LARRINAE

Tribe LARRINI

Prosopigastra pilosa n.sp. (Figs. 11 and 11a)

♂. 6.3 mm. long. Black. Mandibles brownish yellow, femora dark brown, tibiae and tarsi pale ferruginous, the apex of all the femora and the basal fourth of all the tibiae, yellowish white. The apical third of the mesopleural teeth pale ochreous. Seventh tergite brown. Wings hyaline, the costa ochreous, the veins dark brown. Face, excepting the glabrous median tubercle, with a sparse silvery pubescence. Thorax and femora with fairly long, sparse and silvery pilosity, the hairs on the mesonotum curved backwards, the apical margin of the first five tergites brownish and covered with decumbent silvery pubescence. The median tubercle on the face and the ocellar area shining and coarsely punctured.

Mesonotum, scutellum and mesopleura shining, sparsely punctured, the interspaces about three to four times wider than the punctures, the metanotum shining, more closely punctured than the scutellum, the dorsum of the epinotum shining, with a marginate median area which is obliquely and strongly rugose, the interspaces a little wider than the rugae, the sides shining and coarsely reticulate-rugose, the declivity dull and reticulate-punctate. Tergites nearly dull, very finely and closely punctured (25 diameters), the sternites shining, finely and sparsely

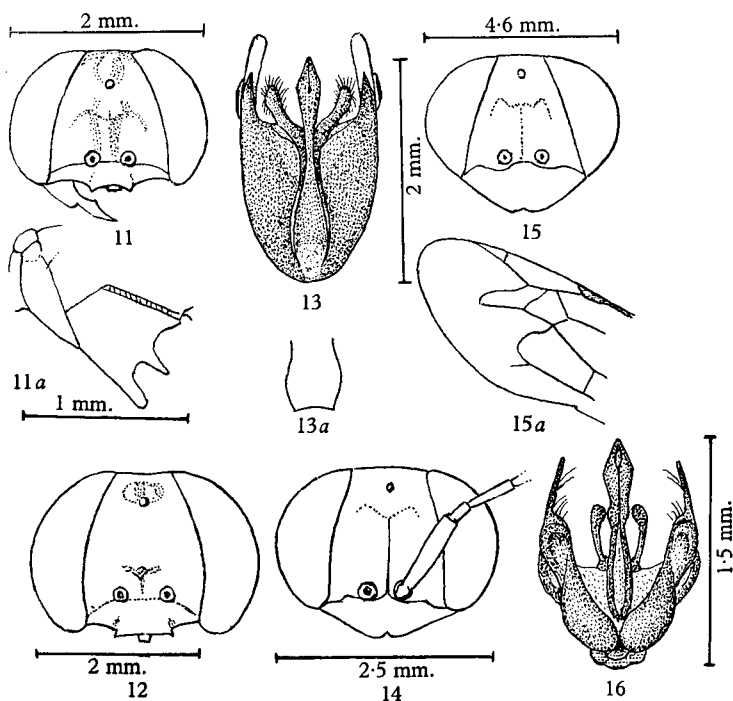


Fig. 11. *Prosopigastra pilosa*, ♂.
 Fig. 11a. *Prosopigastra pilosa*, mesopleura, lateral view.
 Fig. 12. *Tachysphex argenteiceps*, ♂.
 Fig. 13. *Tachytes abercornensis*, ♂, genitalia.
 Fig. 13a. *Tachytes abercornensis*, 8th sternite.
 Fig. 14. *Liris (Motes) jucunda*, ♀.
 Fig. 15, 15a. *Liris (Motes) atrox*, ♀.
 Fig. 16. *Liris (Motes) consobrina*, ♂, genitalia.

punctured, the fourth and fifth with a transverse lamella extending over nearly the whole width of the segments. Clypeus very short, the middle third of the apical margin concave, produced into a short lobe in the middle and with a short tooth at the corners. Inner orbits strongly convergent above, the interocular distance across the middle of the clypeus being fully three times greater than across the vertex. The ocellar area with a few large punctures. First joint of the flagellum one-fourth

longer than wide, the second joint not quite twice as long as wide and very little shorter than the third joint, which is twice as long as wide. Temples smooth and shining. Anterior coxae subconical, the apex laterad, produced at the base into a thin lamelliform lobe which seen from the side appears as a backwardly directed and curved tooth, as in *P. mocsaryi* Brauns. The mesosternum is deeply concave transversely. The mesopleura are produced below into two lamelliform blunt teeth, the anterior one twice as wide as the posterior. They are much longer than in *P. mocsaryi*. Mesonotum three-fourths wider than long. (The pin holding the specimen has been pushed through the dorsum of the epinotum so that the middle part cannot be seen, but it probably has a median longitudinal carina as in *mocsaryi*). The venation of the wings is like that of *mocsaryi*.

Itumba, Rukwa valley, Tanganyika, 3 Sept. 1952, 1 ♂. Type in the British Museum, Natural History. Related to *P. mocsaryi* Brauns, from which it differs by the much wider vertex, the mesopleural teeth, the pilosity of the thorax and the absence of the dense, decumbent and long pubescence on the margin of the vertical basal face of the first tergite.

***Tachysphex argenteiceps* n.sp. (Fig. 12)**

♂. 7-9 mm. long. Head and thorax black, abdomen and legs pale red, the apical margin of the first six tergites slightly translucent and yellowish. Eyes brown below, greyish green above. Wings hyaline, the veins yellowish red. Tegulae pale yellow. Clypeus and face as far as the anterior ocellus covered with a dense, decumbent and bright silvery pubescence, the temples with a similar pubescence but not so dense. Thorax with a sparse, short and white pubescence, more abundant on the sides of the epinotal declivity than elsewhere. Tergites with transverse bands of very fine silvery pubescence on the apical margins. Ocellar area glabrous, shining, sparsely and finely punctured. Vertex dull, finely reticulate-punctate. Mesonotum, scutellum and mesopleura moderately shining, strongly punctured, the interspaces from two to three times wider than the punctures. Metanotum dull, very finely reticulate-punctate (30 diameters). Dorsum of the epinotum dull, longitudinally rugose or finely costate, the rugae straight and parallel over the middle third and reaching the apical margin, the interspaces two to three times wider than the rugae; the sides of the epinotum coarsely and obliquely, the declivity transversely rugose. Abdomen nitidulous, very shallowly and closely punctured, the punctures very small (35 diameters). Inferior interocular distance, measured across the apex of the clypeus, nearly three times greater than on the vertex, where it is equal to the length of the first two joints of the flagellum. The second joint of the flagellum is as long as the third and both are three times longer than wide at the apex. Clypeus slightly more than three times wider than long in the middle, the median part dentate on each side and produced in the middle into a short and rectangular lobe. Dorsum of the epinotum three-fifths wider at the base than long, not much

narrowed caudad, being only one-fourth wider at the base than at the apical margin, which is almost straight or convex only at the posterior corners. The declivity is flat and perpendicular.

Itumba, Rukwa valley, Tanganyika, 5 Sept. 1952, 2 ♂♂. The larger specimen is the type. British Museum, Natural History, Related to *T. prosopigastroides* Bischoff from which it is clearly distinguished by the paler colour of the abdomen, the finer puncturation of the head and thorax, the sculpture of the epinotum, and shape of the clypeus and the colour of the pubescence on the face.

***Tachytes abercornensis* n.sp. (Figs. 13 and 13a)**

♂. 19 mm. long. This species belongs to the *T. basilica* Guerin group, in which the tergites are covered with reddish golden pubescence arranged in a chequered pattern. Black, the apical third of the first four abdominal segments rufescent. Middle and hind tarsi fusco-ferruginous. Wings hyaline, slightly yellowish, the veins ferruginous. Clypeus, face, temples, thorax and anterior coxae with long yellowish grey pubescence, longer and abundant on the epinotum. Tergites with deep golden pubescence, the sternites with long and brown pubescence. Head and thorax dull, microscopically reticulate-punctate (30 diameters), the sternites moderately shining, shallowly, finely and sparsely punctured. The interocular distance at the bottom of the eyes is eight times greater than on the vertex, where it is equal to half the length of the second joint of the flagellum. Galea much longer than the scape. Clypeus strongly convex lengthwise, two and two-thirds wider than long. Third to eighth joints of the flagellum concave above and convex below, the second joint as long as the third and two and a half times longer than wide at the apex.

Abercorn, N. Rhodesia, 13 April 1951 (leg. F. O. Albrecht) 2 ♂♂. Type in the British Museum, Natural History. Related to *T. dilaticornis* Turner, from which it is easily distinguished by its greater size, narrower vertex, the deep golden pubescence of the tergites and by the genitalia. The type is the larger specimen, 19 mm. long. The paratype, 16 mm. long has the epinotal dorsum more strongly punctured.

***Liris (Motes) jucunda* n.sp. (Fig. 14)**

♀. 8.5 mm. long. Black. Scapes and legs, including the trochanters, and the apical abdominal segment pale red. Wings hyaline, faintly fuscous beyond the cells, the veins dark brown. Mandibles, excepting the black apex, and the clypeus fusco-ferruginous. Clypeus and face with dense silvery pubescence. Thorax with a microscopic greyish silvery pubescence, the first three tergites with bands of similar pubescence on the apical margins. Head and thorax dull, the head and mesothorax with a microscopic and close puncturation (45 diameters), the puncturation of the scutellum and metanotum slightly larger, the dorsum of the epinotum very finely reticulate-rugose, with a few thin transverse rugae on the lateral margins and with a carina in the middle which does not

reach the posterior margin. The sides and declivity transversely rugulose. Abdomen microscopically transversely rugulose and dull, the pygidium dull and finely punctured above, smooth and shining at the sides. Clypeus four times wider than long, the apical margin with a shallow angular excision in the middle. The interocular distance across the base of the clypeus is nearly two and a half times greater than on the vertex, where it is equal to a trifle more than the length of the second joint of the flagellum. The antennae are slender, the scape is as long as the first and second joints of the flagellum united, the second joint is fully three times longer than wide at the apex and a little shorter than the third joint. Dorsum of the epinotum not much narrowed caudad, only one-seventh wider at the base than at the apex and one-eighth wider than long. Pygidium clothed with decumbent yellow setae and with four black spines on the rounded apex. Spines and calcaria of the legs black, the calcar of the hind tibiae five-sevenths as long as the metatarsus. First abscissa of the radius nearly as long as the second and third united, the recurrent veins separated on the cubitus by a distance equal to half the second abscissa of the radius. Anterior metatarsi with four spines on the outer margin.

Rukwa valley, Tanganyika, 3 Sept. 1952, 1 ♀. Type in the British Museum, Natural History. Related to *L. erythropyga* Arnold, from which it differs by the slender antennae, the sculpture of the epinotum and the median excision of the apical margin of the clypeus.

***Liris (Motes) atrox* n.sp. (Figs. 15 and 15a)**

♀. 16 mm. long. Black. Mandibles brownish black. Scares and first joint of the flagellum, legs excluding the coxae and trochanters, the fifth abdominal segment excepting the base and the whole of the sixth, fusco-ferruginous. Wings pale flavo-hyaline, the apical part beyond the cells faintly fuscous, the veins ferruginous. Clypeus, face, vertex, temples and the dorsum of the pronotum with a dense, decumbent and pale golden pubescence. Mesonotum and scutellum with brownish golden, very fine and decumbent pubescence, the epinotum with erect, short and yellowish grey pubescence. Tergites 1-4 with a pruinose pubescence, dark brown except on the apical fourth of the segments where it is silvery, more conspicuous when viewed from behind. Pygidial area densely covered with dark brown hairs, the apical margin with black setae. Fifth and sixth sternites shining and fairly closely punctured, the rest of the body dull and closely, microscopically punctured (35 diameters), except the dorsum and declivity of the epinotum which are sparsely and transversely rugose, the rugae thin. Clypeus three times wider than long, the apical margin with a very small median excision; there are a few large punctures behind the apical margin. Interocular distance at the bottom of the eyes three and a half times greater than across the vertex, where it is equal to five-sixths of the length of the second joint of the flagellum; the latter is three times longer than wide and as long as the third joint. Dorsum of the epinotum one-third wider

at the base than long, not much narrowed caudad, the lateral margins moderately convex. The proportions of the first three abscissae of the radius are as 10:5:7. The recurrent veins coalesce at their junction with the cubitus. Claws edentate.

Abercorn. N. Rhodesia, 25 Jan. 1951 (leg. F. Albrecht). Type in the British Museum, Natural History. Not closely related to any of the other African species but nearer to *L. croesus* Smith than any other and from which it is easily distinguished by the colour of the legs, the mesonotum which is evenly convex transversely, the peculiar erect pubescence on the epinotal dorsum and the paler colour of the wings.

***Liris (Motes) consobrina* n.sp. (Fig. 16)**

♂. 10 mm. long. Black. Wings hyaline, slightly fuscous in the apical part beyond the cells, the veins brownish yellow. Clypeus, face, temples and anterior femora below with silvery pubescence, the thorax with decumbent and greyish silvery pubescence, on the epinotum only on the sides of the dorsum and on the declivity. Legs and abdomen pruinose, the first four tergites with apical fasciae of greyish silvery pubescence. Dull, closely punctured (35 diameters), the dorsum of the epinotum closely and transversely rugulose, reticulate between the rugae and with a few larger rugae at the posterior corners. There is a median longitudinal carina which does not reach the posterior margin. The declivity and sides transversely rugulose and punctulate. The interocular distance measured across the anterior margin of the clypeus is a little more than twice the interocular distance on the vertex, where it is equal to a trifle more than the length of the first and second joints of the flagellum united. The first joint of the flagellum is four-fifths the length of the second joint, which is one and two-thirds longer than wide and as long as the third. Clypeus two and two-thirds wider than long, the apical margin straight. The dorsum of the epinotum is two-sevenths wider at the base than long, and its lateral margins are feebly convex. Apical margin of the eighth sternite arcuately excised.

Kafokola, Rukwa valley, Tanganyika, 3 Aug. 1952, 1 ♂. Type in the British Museum, Natural History. Closely related to *L. (Motes) setigera* Arnold, the genitalia being similar, but the abruptly attenuated apical third of the outer paramera are much longer and parallel-sided, and the basal two-thirds are of a different shape. Fig. 16 should be compared with the figure of *setigera* Arnold (*radialis* Arnold 1923, nec *radialis* Saussure 1887) given on p. 396 *Ann. Transv. Mus.* 1929 under the name of *radialis*. For corrections in the synonymy of *radialis* Saussure and *setigera* Arnold the reader is referred to 1940 *Ann. Transv. Mus.* xx, part 2, p. 123.

Liris (Motes) cyphononyx Kohl, 1894, *Ann. K. N. H. Mus.* 9, 299, ♀.

Liris (Motes) arnoldi Benoit, 1951, *Rev. Zool. Bot. Afr.* xlv, 129.

I am able to establish this synonymy through the kindness of Monsieur Benoit who presented paratypes of both sexes to the National Museum.

Tribe PEMPHREDONINI

***Ammoplanus cradockensis* n.sp.** (Figs. 17, 17a and b)

♂. 2.2 mm. long. Black. Palpi, mandibles, clypeus, lower three-fourths of the face, and the scapes, lemon yellow. Tegulae and the pronotal tubercles white. Anterior and middle legs, including their coxae and trochanters, pale ochreous. The trochanters of the hind legs, the extreme apex of the hind femora and the greater part of the tibiae yellowish white, the apex of the latter pale brown; the last three joints

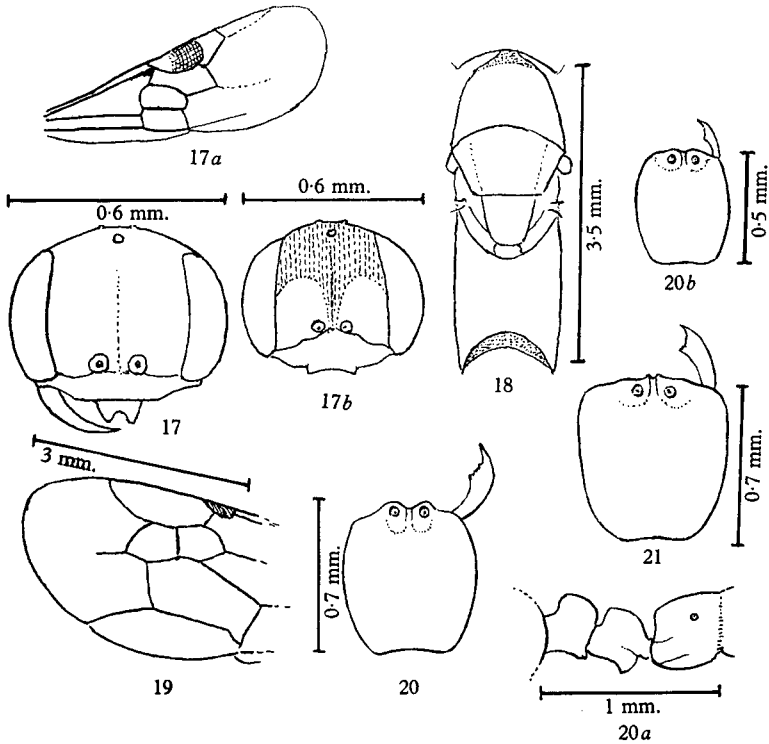


Fig. 17, 17a. *Ammoplanus cradockensis*, ♀.

Fig. 17b. *Ammoplanus cradockensis*, ♂.

Fig. 18. *Homonotus rukwaensis*, ♂.

Fig. 19. *Anoplius alecto*, ♀, apical half forewing.

Fig. 20. *Aenictus furibundus*, ♀, major.

Fig. 20a. *Aenictus furibundus*, ♀, petiole.

Fig. 20b. *Aenictus furibundus*, ♀, minor.

Fig. 21. *Aenictus eugeniae*, ♀, major.

of the middle and hind tarsi brownish ochreous. Wings hyaline, intensely iridescent, viewed at a certain angle, purplish blue, crimson and gold, the veins and greater part of the pterostigma dark brown. Glabrous and shining. Clypeus and the yellow part of the face impunctate, the vertex

microscopically and transversely striolate (48 diameters). Declivous face of the pronotum, the mesonotum and the scutellum transversely and closely striate (48 diameters). Metanotum smooth. Mesopleura with traces of oblique striation. Dorsum and sides of the epinotum reticulate-rugose, the declivity with a few thin transverse rugae and a median sulcus. Abdomen impunctate. The antennae are damaged, only the seven basal joints of the flagellum being present. Inner orbits almost parallel, the inferior interocular distance being not quite one-fourth greater than on the vertex, where it is equal to the length of the first six joints of the flagellum. Clypeus nearly three and a half times wider than long in the middle, the median third produced, its apical margin feebly concave and acutely angular at the corners. First joint of the flagellum one and a half times longer than wide, the second to fifth a little wider than long, the sixth a little longer than wide. Posterior ocelli half as far again from the eyes as from each other. Dorsum of the pronotum distinctly tumid on each side. Mesonotum twice as wide as long. Dorsum of the epinotum moderately narrowed caudad, one and a half times wider at the base than long. The apical spine of the eighth sternite is semi-elliptical. Proximal third of the pterostigma hyaline, the rest chitinated and brown. The apex of the radius is curved (Fig. 17*a*).

♀. 2.1 mm. long. Black. Labrum and mandibles pale yellow. The legs as in the ♂, but the yellow parts are a little darker. Scapes and flagellum pale brown. Sculpture as in the ♂. Inner orbits moderately convergent below, the interocular distance on the vertex being one-fourth greater than across the base of the clypeus. The anterior margin of the clypeus is straight in the middle and slightly concave at the sides. Posterior ocelli twice as far from the eyes as from each other. The specimen is defective, lacking the promesonotum, abdomen and greater part of the antennae.

Ten miles north of Cradock, E. Cape Province. 2 ♂♂ and 2 ♀♀. Of these only the ♂ type is complete. British Museum, Natural History. This species differs from *A. consobrinus* Arnold and *A. rhodesiensis* Arnold by the colour of the legs, antennae and pterostigma, and from *A. mandibularis* Cameron by the venation.

Family POMPILIDAE

Tribe HOMONOTINI

***Homonotus rukwaensis* n.sp. (Fig. 18).**

♂. 9 mm. long. Black. Mandibles dark brown. Palpi ochreous. The extreme apical margin of the clypeus reddish yellow. Scapes black, flagellum ferruginous. Tergites and sternites 3-7 ferruginous, the apices of the tibiae and all the tarsi greyish red. Wings pale fuscous, the basal half paler than the apical, the veins black. Spines on the legs black, the calcaria of the middle and hind tibiae white. Head and thorax with a greyish bloom, the declivity of the epinotum, the base of the first two tergites with a decumbent, silvery pubescence. Nitidulous, with a

microscopic puncturation (50 diameters) Clypeus one and three-fourths wider than long, the apical margin strongly convex. Face in the middle five times wider than one eye. Posterior ocelli twice as far from each other as from the eyes. Interocular distance on the vertex equal to the length of the first five joints of the flagellum. The first joint of the flagellum is as long as wide, the second and third one and a half times longer than wide. Pronotum distinctly longer than in *H. ruficornis* Mayr, only one-third wider at the posterior angles than long, and not quite half as long again as the mesonotum. Scutellum as long as wide in front. Dorsum of the epinotum about three-tenths wider at the base than long, the posterior angles acutely dentiform. First tergite one-seventh longer than wide at the apical margin. The proportions of the four abscissae of the radius are as 2:3:3:6. The third cubital cell is nearly one-third longer on the cubitus than on the radius. Inner calcar of the hind tibiae five-sixths the length of the metatarsus.

Rukwa valley, Tanganyika, 3 Aug. 1952, 1 ♂. Type in the British Museum, Natural History. Closely related to *H. ruficornis* Mayr, from which it differs by the lengths of the first three joints of the flagellum, the longer clypeus and longer pronotum. For a description of *ruficornis* Mayr see 1935 *Ann. Transv. Mus.* 4, 469, where it is described as *H. aegyptiacus* Rad. which is a synonym of *ruficornis*.

Tribe IDOPMILINI

***Idopompilus handlirschii basutorum* n.ssp.**

I. handlirschii Arnold, 1936, *Ann. Transv. Mus.* 18, 81, ♀.

♀. 7.2 mm. long. This differs from the type of the species as follows: smaller, microscopic pubescence on the abdomen black, not brown. Clypeus three and a half times wider than long. Face in the middle not quite as wide as one eye. Dorsum of the pronotum shorter, three-fifths wider in the middle than long. Basal half of the wings paler.

Mamathes, Basutoland, 29 Sept. 1952, 2 ♀♀, including the type, which is in the British Museum, Natural History; 10 miles north of Cradock, E. Cape Province, 1 ♀.

Tribe POMPILINI

***Anoplius alecto* n.sp. (Fig. 19)**

♀. 10 mm. long. Black. Wings fuscous, the veins black. Head and thorax with a sparse, fine, erect and black pilosity. Sixth tergite with a yellowish grey and decumbent pubescence, and numerous black setae. Postnotum transversely rugose, otherwise without visible sculpture. Clypeus very nearly three times wider than long, the apical margin feebly concave. Face in the middle a little more than twice as wide as one eye. Interocular distance across the base of the clypeus two-thirds greater than on the vertex, where it is equal to nine-elevenths of the length of the second joint of the flagellum. Posterior ocelli one and a half times farther from the eyes than from each other. Flagellum slender,

the second joint nearly four and a half times longer than wide, fully one-sixth longer than the third joint. Hind margin of the short pronotum obtusely angular. Mesonotum one-third wider behind than long. Postnotum grooved down the middle, two-thirds as long as the metanotum. Dorsum of the epinotum twice as wide at the base as long, with a very shallow median impressed line, joining the declivity in a wide arc. Anterior metatarsus with four spines on the outside. Claws with a tooth in the middle. The proportions of the first three abscissae of the radius are as 3:5:5.

Ten miles north of Cradock, E. Cape Province, 1 ♀, 25 Sept. 1952. Differs from *A. montanus* Haupt by the distance of the posterior ocelli from the eyes, the venation of the forewing and the metatarsus with four spines instead of only one.

Family FORMICIDAE

Subfamily DORYLINAE

Aenictus furibundus n.sp. (Figs. 20, 20a and b)

♀. 2.4–3.7 mm. long. Reddish ochreous (Seguy, *Code Univ. des Couleurs*, approximately rouge 158), the head and thorax a little darker or more red than the abdomen. Metapleura, epinotum and first node of the petiole dull, very finely reticulate (50 diameters), the rest of the body smooth and shining, with a few scattered punctures. Sixth to ninth joints of the flagellum dull, closely punctured, the other joints shining. A sparse yellow pilosity on the whole body, fairly long on the epinotum and on the femora and tibiae. Mandibles dull, microscopically striolate, the masticatory margin with 6 or 7 teeth and a large apical tooth. Clypeus very short, the apical margin with numerous small teeth. The head is widest in the middle (in front of the middle in *A. eugeniae* Emery, Fig. 21) and in the largest ♀♀ it is one-fifth wider in front than at the occipital margin; in the smallest it is as wide in front as behind. The scapes extend back very little beyond the middle of the head. In the largest ♀♀ the first two joints of the flagellum are two-thirds longer than wide, the third as long as wide, the seventh and eighth a little wider than long and the apical joint is a trifle more than three times longer than wide and as long as the seventh and eighth united. Promesonotum two-thirds longer than wide. Dorsum of the epinotum one-fourth longer than wide, widest a little in front of the middle. The junction of the dorsum with the declivity is not sharply marginate as in *eugeniae*, and the declivity is flat transversely. First node of the petiole a little longer than the second, both a little less than one and a half times longer than wide, the first produced below into a large lamelliform tooth, rounded at the apex.

Cashel, S. Rhodesia. Type in the National Museum S. Rhodesia. A large colony of some thousands of individuals under a stone, from which several raiding columns were going in different directions. Probably only a temporary bivouac, since digging failed to uncover any

larvae. Related to *eugeniae* from which it differs by the wider limits between the largest and smallest individuals and by the shape of the head, the number of teeth on the inner margin of the mandibles and the length of the third and fourth joints of the flagellum. From *rotundatus* Mayr by the colour, size, stronger puncturation of the epinotum and the length of the joints of the flagellum.

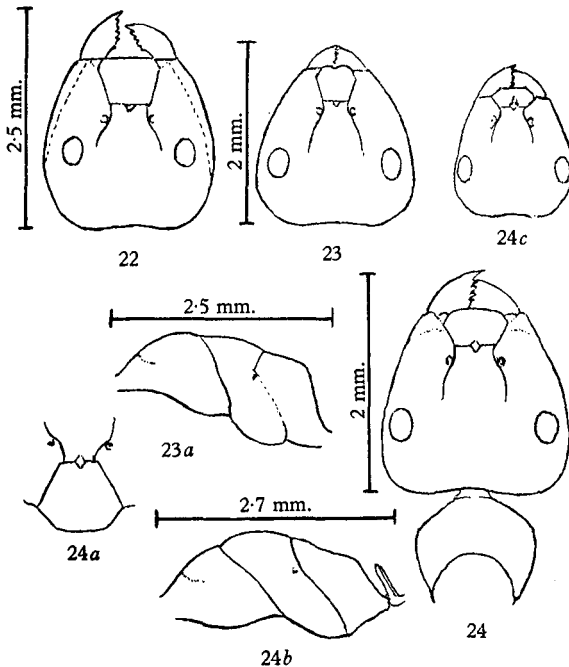


Fig. 22. *Camponotus werthi skaifei*, 2♂, dotted line = *werthi* i.sp.
 Fig. 23. *Camponotus olivieri patersoni*, 2♂.
 Fig. 23a. *Camponotus olivieri patersoni*.
 Fig. 24. *Camponotus victoriae*, 2♂.
 Fig. 24a. *Camponotus victoriae*, clypeus seen from in front.
 Fig. 24b. *Camponotus victoriae*, thorax.
 Fig. 24c. *Camponotus victoriae*, ♀ minima.

Subfamily CAMPONOTINAE

***Camponotus (Tanaemyrmex) werthi skaifei* n.var. (Fig. 22)**

C. werthi Forel, 1908, *Bull. Soc. Vaud. Sci. Nat.* 44, 18, ♀ minor.

C. werthi Forel, 1914, *Bull. Soc. Vaud. Sci. Nat.* 50, 253, ♀ major.

C. werthi Arnold, 1914, *Ann. S. Afr. Mus.* 14, 660.

2♂ 7.4. mm. long. This differs from the type of the 2♂ of the species as follows: smaller; the width of the head, measured just behind the eyes is distinctly less than twice the width in front, measured between the outer corners of the base of the mandibles, whereas in the type of the species the head is narrower in front, the width behind the eyes being

only a little less than twice as wide in front (seven-elevenths). The clypeus lacks the median carina and the dorsum of the epinotum is longer, narrower and more convex transversely.

♀ minor. 5.5 mm. long, including the mandibles. Like the same caste as in the type of the species in regard to the shape of the head and the presence of a rounded carina on the clypeus, but differing therefrom in the dorsum of the epinotum which, as in the ♂ is longer, narrower and more convex transversely. Tiervlei Cape Province, March 1957 (Dr S. H. Skaife), type in the National Museum, S. Rhodesia, paratypes in the British and South African Museums.

***Camponotus (Myrmotrema) olivieri patersoni* n.ssp. (Figs. 23, 23a)**

C. olivieri Forel, 1886, *Ann. Soc. Ent. Belg.* 30, 175.

♂ 8.5 mm. long. Dark black. Mandibles, antennae and legs dark ferruginous. Thorax and the head, excepting the sides from about the middle of the eyes to the base of the mandibles, which are shining, dull and microscopically reticulate-punctate. The shining sides have pit-like and somewhat elongated punctures, as in *olivieri* i.sp. with the interspaces about three to four times wider than the pits. The clypeus and the area between the frontal carinae have similar but much smaller pits. The first tergite and the apical halves of the second and following tergites are nitidulous and microscopically reticulate-punctate (35 diameters), the basal halves shining and transversely striate (50 diameters). Pronotum, mesonotum and the apical halves of the second to fourth tergites with a very sparse, short, decumbent and white pubescence. The lateral margins of the epinotal declivity and the scale of the petiole with thick, blunt, erect and white setae, about nine on the declivity; the apical margin of the first four tergites and along the junction of the striate and reticulate halves of those segments with similar but shorter and thinner setae. Mandibles nitidulous, sparsely and strongly punctured, the inner margin with seven teeth. Clypeus very little wider in front than behind, feebly convex, without a carina, the apex very slightly emarginate in the middle. Head subtriangular, including the closed mandibles, widest a little behind the eyes and very little longer (excluding the mandibles) than wide, 2 mm. wide, 2.2 mm. long, not quite twice as wide at its widest as across the anterior angles, the sides moderately convex, the occipital margin shallowly concave. Eyes situated a little behind the middle of the sides. The scapes, slightly flattened over the apical fourth, extend back as far as the hind margin. First joint of the flagellum as long as the second. Pronotum wider in front than behind, the anterior angles narrowly rounded, three-fourths wider than long in the middle. Dorsum of the epinotum very convex transversely, three times longer than wide, the declivity one and a half times longer than the dorsum and concave lengthwise. Scale of the petiole moderately convex in front, flat behind, the dorsal edge trenchant.

♀ media. 7.5 mm. long. Like the ♂.

♀ minor. 5-5.7 mm. long. Apical margin of the clypeus straight,

without a median excision. Shoulders of the pronotum more rounded than in the larger castes. Declivity of the epinotum longer, nearly twice as long as the dorsum.

Ootsie Bechuanaland, vi, 1957, nesting in the ground. *C. olivieri* was described by Forel as a race of his *foraminosus* (1886, *Ann. Soc. Ent. Belge*, 175), but was rightly raised to specific rank by Santschi (1915, *Ann. Soc. Ent. Fr.* 84, 270) on account of the shining abdomen on which the decumbent pubescence is neither dense nor yellowish grey in colour and which lacks the median glabrous line on the tergites. This race differs from the type of the species by the colour of the legs and antennae and the much more sparse pubescence on the abdomen. It differs from the race *lemma* Forel also by the colour of the legs and the sculpture of the head. In *lemma* the large pit-like punctures extend over the whole head, including the space between the frontal carinae, the mandibles are more closely punctured and in the ♂ the clypeus is parallel-sided and flatter. From the race *infelix* Forel it differs by the colour of the legs, the white setae and the more transversely compressed epinotum so that the dorsum is narrower. The shoulders of the pronotum are also less angular than in *infelix*.

***Camponotus (Myrmopiromis) victoriae* n.sp. (Figs. 24, 24a-c)**

♂ 8.3 mm. long. Except in the shape of the clypeus this species is deceptively like *C. berthoudi* Forel, of which the original description could apply to this species in nearly all details. Black. Mandibles, antennae, tibiae and tarsi ferruginous, femora darker or reddish brown. Mandibles shining, the sides of the pronotal dorsum, the epinotal dorsum, the basal third of the tergites and the scale of the petiole slightly shining, the rest of the body dull. The basal third of the second and following tergites microscopically, closely and transversely striate (50 diameters), the rest of the body microscopically reticulate-punctate (35 diameters). On the anterior third of the head there is superimposed a sparse and larger puncturation. At the back of the head, a little in front of the hind margin, there are a few erect white hairs and four in front of the hind margin of the pronotum. On each side of the epinotal dorsum there are eight yellowish white setae, on the edge of the scale there are about fourteen, and there are some similar setae on the apical margins of the tergites, about fourteen on each, and there are a few half way between the base and apex. Head, including the closed mandibles, one-fifth longer than wide, widest a little behind the eyes where it is two-thirds wider than across the anterior margin. Mandibles with seven teeth. Clypeus hexagonal, about as long as wide, not carinate, the apical margin straight. The scapes extend back a little beyond the occipital margin. First joint of the flagellum a little longer than the second. Dorsum of the pronotum one and a half times wider than long in the middle, the shoulders rounded. Dorsum of the epinotum feebly convex transversely, three times longer than wide, its junction with the oblique declivity rounded. Scale of the petiole flat behind, convex in front, the dorsal edge trenchant.

♀ minima. 5.8 mm. long. Apical half of the scapes brownish red. Sides of the head much less convex than in the 2♂ widest across the eyes, where it is half as wide again as at the anterior margin. The scapes extend back beyond the occipital margin by one-third of their length. Clypeus three-fourths wider than long, the basal half tumid lengthwise but not distinctly carinae. Dorsum of the pronotum two-thirds wider than long in the middle. Otherwise like the 2♂.

Victoria West, Cape Province, June (R. H. N. Smithers). Type in the National Museum S. Rhodesia. In plate 1, fig. 6 (1979, *Bull. Soc. Vaud. Sci. Nat.* 16) Forel gives a figure of the clypeus of *C. berthoudi*. It is slightly longer than wide, subrectangular and parallel-sided, quite different from that of this species.