

***Crematogaster excisa* (Mayr)**

Zambi and Thysville, ♀ (J. Bequaert); near Lie, ♀; Faradje, ♀ (Lang and Chapin). The specimens from Thysville were taken "from a nest in a tree-trunk in the rocky savannah;" those from Faradje "in a hollow tree." The single specimen from near Lie was taken from the stomach of a toad (*Bufo regularis*).

***Crematogaster excisa* subspecies *andrei* (Forel)**

Numerous workers from the Oso River and Sitaweza (between Walikale and Lubutu) (J. Bequaert). Dr. Bequaert took this subspecies at the former locality in the hollow stalks of a myrmecophytic creeper (*Uncaria africana* variety *myrmecophyta*) growing along the shore of the Oso River between Walikale and Lubutu (Part IV), in the latter locality in the hollow stalks of another myrmecophyte (*Cuviera angolensis*) in the Rain Forest (Part IV).

The following new variety of the subspecies *impressa*, though not from the Belgian Congo, was described by Santschi in connection with the forms of *excisa* which I sent him.

***Crematogaster excisa* subspecies *impressa* (Emery) variety *aglæa*
Santschi, new variety**

"WORKER.—Black; mandibles, funiculi and tarsi reddish brown. Dorsum of pronotum very densely punctate as in the typical *impressa* (Emery), the longitudinal rugæ being feebly or not at all indicated. Head and thorax narrower. Promesonotal impression feebler as in *euphrosyne*, with a small carina on the front of the mesonotum, which is sharply marginate, less concave than in *andrei* (Forel) and more so than in *impressa* (Emery). Basal surface of the epinotum scarcely broader than the petiole. Spines almost as long as the interval between their bases. Anterior angles of petiole truncated as in *andrei*. Otherwise like *impressa* (Emery).

"Dimbroko, Ivory Coast (Le Mout)."

"In *impressa* the funiculi are brownish black and in *andrei* the mesonotal carina is lacking." (Santschi)

***Crematogaster excisa* subspecies *impressa* variety *euphrosyne* Santschi,
new variety**

"WORKER.—Length 3.5 mm. More or less pale chestnut brown. Thorax narrow. Pronotum reticulate-punctate in the spaces between the fine longitudinal rugæ. Mesonotum feebly carinate in front. Resembles the variety *brazzai* Santschi,¹ but the latter has a broader thorax, without carina and the sculpture of the thorax is merely reticulate." (Santschi)

¹Originally described as a subspecies of *C. impressa* and given in our catalogue (Part VIII) as *C. menilekii* subspecies *occidentalis* variety *brazzai*.

Faradje (type locality) and Thysville (Lang and Chapin). The specimens at Faradje were found "nesting in hollow twigs. Snails (*Pachnodus herbigradus* Pilsbry) were found estivating in the same twigs inhabited by the ants and often in such numbers as to clog the passages." *Camponotus foraminosus* was found in similar hollow branches together with the same snails (see p. 248).

***Creumatogaster excisa* subspecies *impressa* variety *sapora* (Forel)**

Numerous workers from Yakuluku (Lang and Chapin) "found nesting in the cavities of small mushroom-shaped termitaria."

***Creumatogaster impressiceps* (Mayr)**

Panga and Faradje, ♂ (Lang and Chapin). The specimens from Panga were found inhabiting the hollow twigs of *Barteria fistulosa* (see Part IV), those from Faradje were associated with aphids.

***Creumatogaster impressiceps* variety *frontalis* Santschi, new variety**

"WORKER.—Length 3 to 3.5 mm. Pale brown; thorax less sculptured than in the typical *impressiceps*. Frontal groove deeply impressed. Stature less variable and smaller than in the typical form of the species and larger than in the variety *longiscapa* Stitz, but the scape also extends beyond the occiput as in that variety." (Santschi)

Numerous specimens from Malela (type locality) and Kunga (Lang, Chapin, and J. Bequaert); those at Kunga found nesting in the hollow internodes of the myrmecophyte *Cuviera* species (Part IV); the specimens from Malela "living in a small carton nest, about 9 cm. long, fixed upon a stalk of *Raphia*."

***Creumatogaster menilekii* (Forel) subspecies *proserpina* Santschi, new subspecies**

"WORKER.—Length 3.2 to 4 mm. Pale brownish yellow; head, gaster, and appendages shining; thorax and petiole nearly opaque. Front and sides of head finely striate, the remainder with a few punctures. Anterior border of head and the corners obliquely truncated. Postpetiole narrower than in the typical *menilekii*, completely sulcate in the middle, forming two ovoidal eminences. Gaster broader than the head. Allied to *C. alulai* Emery and *C. menilekii* subspecies *satan* (Forel)." (Santschi)

Numerous workers from Malela (Lang, Chapin, and J. Bequaert), with the following note: "Ants living in the stalks of *Papyrus* and making carton nests in their crowns. The workers swarm out in great masses and let themselves drop on the intruder. They bite furiously and it is

difficult to get rid of them, as they work themselves upward on the body, attacking by preference the softer parts of the skin."¹

***Crematogaster* (*Sphærocrema*) *bequaerti* (Forel) variety *atraplex*
Santschi, new variety**

"WORKER.—Length 4 mm. Rather dull yellow; gaster, postpetiole and femora yellowish brown; tips of the epinotal spines brownish black. In other respects like the type of the species and the var. *mutabilis* (Santschi), but the median impression of the pronotum is feebler. The dark tips of the spines contrast with the pale color of the thorax." (Santschi)

A dozen workers from Yakuluku (Lang and Chapin).

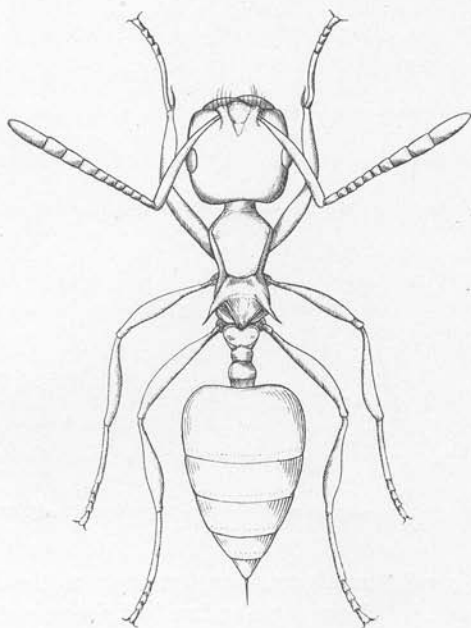


Fig. 38. *Crematogaster* (*Sphærocrema*) *concava* Emery. Worker from above.

***Crematogaster* (*Sphærocrema*) *concava* Emery**

Text Figure 38

Akenge, ♀; Stanleyville, ♀; Lukolela to Basoko, ♀ (Lang and Chapin). The specimens from Stanleyville were taken in twigs of *Barteria fistulosa* (Part IV); those from Lukolela were found running

¹Santschi has recently described a variety *pluton* of this race, collected by Dr. Bequaert from similar carton nests in the crowns of *Papyrus*, at Zambi.

over fire-wood. Three specimens from Akenge were taken from the stomach of a toad (*Bufo polycercus*).

Creinatogaster (Sphærocrema) pronotalis Santschi variety **liebknechti**
(Forel)

Text Figure 39

Numerous workers from Yakuluku and Garamba (Lang and Chapin). According to a note accompanying the specimens from the

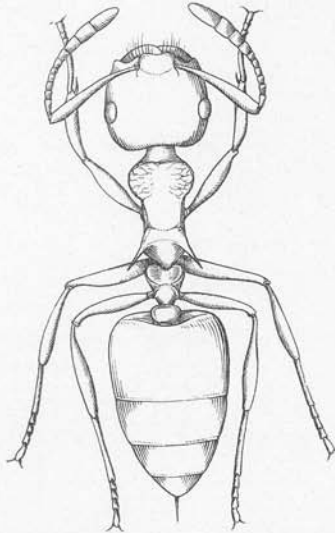


Fig. 39. *Creinatogaster (Sphærocrema) pronotalis* variety *liebknechti* (Forel). Worker from above.

latter locality, this ant "builds small carton nests on the blades of grass. It is common in swamps, from three to five feet above water level."

Creinatogaster (Sphærocrema) rugosior (Santschi)

"FEMALE (undescribed).—Length 8 mm. Thorax smooth and shining like the posterior half of the head and that of the worker, except its upper surface and the sides of the epinotum which have rugæ as in the worker. Head rectangular, a little longer than broad, scarcely arcuate laterally. The eyes occupy nearly the middle third of the sides and the scapes barely extend beyond its posterior fourth. Clypeus with a strong median impression near its anterior border. Thorax as broad as the head. Epinotum nearly vertical, but the insertion of the spines is marked by an angular ridge which occupies nearly the upper half of the sides of the segment. Petiole

as in the worker, with a tooth beneath. Wings 7 mm. long, hyaline, with brownish veins. Otherwise like the worker." (Santschi)

Numerous workers and a few females from Stanleyville (Lang, Chapin, and J. Bequaert), without further data.

***Crematogaster* (*Sphærocrema*) *striatula* Emery variety *obstinata*
(Santschi)**

Numerous workers taken by Dr. Bequaert at Leopoldville in the peculiarly inflated stipules of a species of *Uragoga*, a rubiaceous plant (Part IV). The spaces inhabited by the ants are not true nests but merely kraals or stables for *Coccidæ*, as no larvæ or pupæ were found in the structures.

***Crematogaster* (*Atopogyne*) *africana* (Mayr) variety *schumanni* (Mayr)**

A number of workers taken by Dr. Bequaert at Leopoldville in the hollow stems of a *Barteria Dewevrei* (Part IV).

***Crematogaster* (*Atopogyne*) *africana* subspecies *laurenti* (Forel)**

Numerous workers taken by Dr. Bequaert in the Rain Forest on the Tshopo River, near Stanleyville, in the hollow stems of *Plectronia Laurentii* (Part IV).

***Crematogaster* (*Atopogyne*) *africana* subspecies *laurenti* variety *zeta*
(Forel)**

Many workers and a few females taken by Dr. Bequaert at Pale (Niembo, between Wakikale and Lubutu) from the myrmecodomatia of *Plectronia Laurentii* (Part IV) and at Leopoldville in the rudimentary leaf pouches of *Randia physophylla* (Part IV); also by Lang and Chapin at Stanleyville in the stem cavities of *Cuviera angolensis* (Part IV.)

The female of this form is black and striated as in the typical *C. africana*.

***Crematogaster* (*Atopogyne*) *africana* subspecies *tibialis* Santschi, new
subspecies**

"WORKER.—

"Length 3.5 mm.

"Pale castaneous. Epinotum, postpetiole, and posterior half of gaster of a deeper castaneous tint, passing to reddish brown. A spot on the vertex and the appendages dark brown, the tibiæ and metatarsi blackish, the tarsi and the ex-

tremity of the thorax reticulate, the epinotum more finely, with some fine longitudinal rugæ on the whole basal surface. Sides of the mesonotum regularly reticulate-punctate. Sides of the pronotum more shining and of the epinotum longitudinally striate. Petiole finely reticulate; gaster finely shagreened, almost smooth. The pubescence is rather well developed on the head, the gaster, and the appendages, sparse on the thorax. The hairs are very sparse, except around the mouth and at the tip of the gaster. Head square, with rather convex sides and straight posterior border. Eyes at the middle of the sides. Frontal area short, feebly impressed behind. Frontal carinæ developed. Clypeus slightly convex, with rather arched anterior border. Mandibles striate-punctate, with four blackish teeth. The pronotum forms with the basal surface of the mesonotum a plane surface with a contour like that of *C. castanea* Smith. Sides of the basal surface of the mesonotum blunt, not marginate, with the anterior eminence scarcely indicated. Promesonotal suture little or not at all impressed. Sides of the pronotum marginate. Declivity of mesonotum oblique, feebly concave from right to left, above with marginate sides. Mesoëpinotal furrow moderately deep. Basal surface of epinotum trapezoidal, its length equal to its width anteriorly in the small worker. It is convex in front, more feebly behind. The spines are as short as a fifth of the interval between their bases, which is concave. They are directed backward and slightly outward. Declivity as long as two-thirds of the basal surface and forming with it an angle of about 145°. Petiole trapezoidal, as broad as long, and as broad as the epinotum. Last antennal joint reddish. A fine and dense striation disposed as in *africana* (Mayr) but more or less effaced on the front, vertex and occiput, where the reflection is more shining than silky. Epinotum transversely striate-rugose. Petiole smooth, postpetiole and gaster very finely shagreened, almost shining. The head is, moreover, punctate as in *africana* and much less smooth in the individuals with large head.

"The head, which varies in size independently of the rest of the body, which is almost invariable, is sometimes longer than broad and scarcely emarginate behind, sometimes broader than long, strongly concave behind and with convex sides. Eyes more posterior than in *africana*. Frontal area narrow, strongly impressed and shining. Mandibles punctate, feebly striate. Mesoëpinotal impression stronger than in *africana*, the pronotum less marginate anteriorly. Mesonotum carinate, more elongate and with the declivous surface much less abrupt than in *africana*, with longer epinotal spines, even longer than in the variety *variegata* (Mayr) and a little farther apart. Petiole and postpetiole as in *africana*." (Santschi)

Numerous workers taken at the village of Mosekowa between Walikale and Lubutu by Dr. Bequaert from the peculiar pouches of *Macaranga saccifera* (Part IV) growing in the Rain Forest. As only adult ants and no brood were found in the pouches, Dr. Bequaert does not regard them as true nests. The openings of the pouches were not closed with fibrous carton.

Creumatogaster (Atopogyne) africana subspecies **winkleri** (Forel) variety **fickendeyi** (Forel)

Numerous workers taken by Dr. Bequaert at Masongo, between Walikale and Lubutu, in the cavities of the branches of a species of *Sarcocephalus* related to *S. sambucinus* (Part IV).