

Map 36. Distribution of the genus *Pseudolasius*.

### **PSEUDOLASIUS** Emery

WORKER small, polymorphic, the head of the major being large and differently shaped from that of the minor. Mandibles well developed, with oblique apical borders furnished with 5 to 6, more rarely with 7 to 8 teeth of different sizes. Clypeus large, convex, and more or less carinate in the middle, its anterior border projecting somewhat over the bases of the mandibles. Frontal area indistinct, triangular; frontal carinae short, subparallel, rather widely separated; frontal groove indicated. Clypeal and antennary fossae confluent. Head of major worker cordate or subrectangular, deeply emarginate posteriorly; in the minor worker much less deeply concave behind. Eyes small to very small, rarely completely lacking; ocelli absent. Antennae 12-jointed, inserted near the clypeal suture; funiculi filiform, slightly thickened towards their tips. Thorax short, stout; promesonotal and mesoepinotal sutures distinct; pro- and mesonotum convex above, mesonotum impressed; epinotum short, unarmed, with short base and long sloping declivity. Petiolar scale suberect or inclined forward, its apical border emarginate or entire. Gaster short, elliptical. Legs moderately long and stout.

FEMALE considerably larger than the worker. Head similar to that of the worker major but broader behind, with well-developed eyes and antennæ. Thorax broader than the head, the mesonotum flattened above, the pronotum short and vertical. Wings long and ample, with a single large cubital and no discoidal cell.

MALE as small as the worker and of a similar color. Mandibles dentate. Eyes and ocelli large. Antennæ 13-jointed; scapes long, funiculi filiform, all their joints longer than broad. Thorax similar to that of the female; gaster more slender; external genital appendages rather narrow, hairy. Wings long and broad; venation as in the female.

Until recently these ants were supposed to be peculiar to the Indo-malayan Region, but Forel has described a species from Australia and Santschi has described one from the French Congo (Map 36). Emery<sup>1</sup> has keyed all the species known up to 1911, but several Indonesian forms have since been described. The African material before me comprises four species, one of which I refer to *P. weissii* Santschi, the other three being undescribed. Two of the latter were taken by Lang and Chapin in the Belgian Congo, one by Mr. Gowdey in Uganda. All these forms have very poorly developed eyes, compared with the majority of Indo-malayan species. Further search will probably reveal many additional species in the Ethiopian Region. The workers are hypogæic or nocturnal and are therefore rarely seen; the males and females, however, are not infrequently taken at lights.

***Pseudolasius weissii* Santschi variety *sordidus* Santschi**

Text Figure 54

To this variety I refer a major and six minor workers and two partly deälated females taken from the stomachs of toads captured by Lang and Chapin at Akenge. Owing to the fact that both females were taken from a *Bufo polycercus*, while the workers were taken from a *B. funereus*, I cannot be certain that the specimens belong to the same species. The females are of the same size as those of the typical *weissii* (6.5 mm., the fore wings nearly 7.5 mm.). The eyes are elliptical and obliquely placed, but distinctly smaller than indicated in Santschi's description; the wings are paler, being rather uniformly brown, with dark brown veins and pterostigma.

I have figured the head of the worker major and minor. The eyes, as Santschi says, are present only in the former and are very small and slightly elongate. In one of the mediæ I find them reduced to a single ommatidium. The apical border of the petiole is slightly concave in larger, entire in smaller workers. The color seems to be somewhat darker than described by Santschi for his variety *sordidus*, but this may be due to the action of the gastric juices of the toads.

<sup>1</sup>1911, Ann. Soc. Ent. Belgique, LV, p. 214.

***Pseudolasius bufonum*, new species**

Text Figure 55

WORKER MAJOR.—

Length 2.8 to 3 mm.

Head scarcely longer than broad, subrectangular, with nearly straight, subparallel sides and sinuately excised posterior border. Mandibles 5-toothed, the median tooth small, the apical long and pointed, the others shorter and subequal. Clypeus convex, subcarinate in the middle, its anterior border entire, only slightly projecting over the bases of the mandibles. Eyes very small, consisting of only three or four ommatidia, situated a little in front of the median transverse diameter of the head. Antennal scapes not reaching to the posterior corners of the head; first funicular joint longer

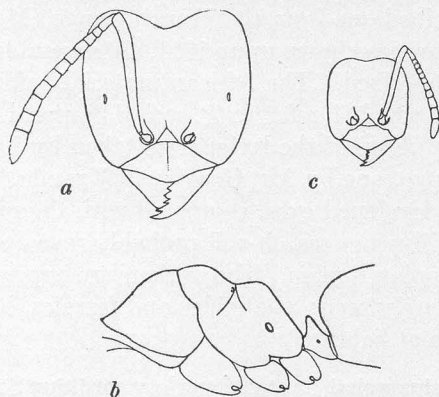


Fig. 54. *Pseudolasius weissi* variety *sordidus* Santschi.  
a, head of worker major; b, thorax and petiole of same in profile; c, head of worker minor.

than the two succeeding joints together; second joint as broad as long, joints 3 to 7 slightly longer than broad. Thorax short, stout; pronotum large and broad, longer than the mesonotum, which is as long as broad; epinotum broader than long. In profile the pro- and mesonotum form a large convexity with rather uneven outline, interrupted by the strong promesonotal suture. Mesoëpinotal impression short and not very deep, the stigmata prominent. Epinotum decidedly lower than the mesonotum, in profile rounded and sloping, with very short base and long sloping declivity. Petiole small, rather strongly compressed antero-posteriorly, with entire superior border. Gaster elongate elliptical. Legs rather stout.

Mandibles opaque, very finely and longitudinally striated. Remainder of body shining, very finely and rather densely punctate, but not more coarsely on the head and thorax than on the gaster. Clypeus smoother and more shining than the remainder of the head.

Hairs and pubescence yellowish, abundant; the former erect, longest on the thoracic dorsum, sparser and shorter on the scapes and legs; pubescence rather long and dense over the whole body but only slightly obscuring the shining surface.

Yellowish brown; gaster and appendages paler and more yellow; mandibles castaneous, their teeth and a blotch on the vertex blackish.

## WORKER MINOR.—

Length 2.5 to 3 mm.

Differing from the major worker in the shape of the head, which is decidedly smaller, distinctly longer than broad, with straight sides and only feebly excised posterior border. Eyes reduced to a single ommatidium or absent. Antennal scapes reaching to the posterior corners of the head; first funicular joint broader than long, joints 3 to 7 not longer than broad.

Sculpture, pilosity, and color as in the major worker, but the black spot on the vertex fainter or altogether absent.

## FEMALE.—

Length 5.5 to 6 mm.

Head, excluding the mandibles, broader than long, slightly broader behind than in front, with feebly convex sides and broadly and feebly excised posterior border. Eyes slightly convex, very broadly elliptical, occupying the median third of the sides

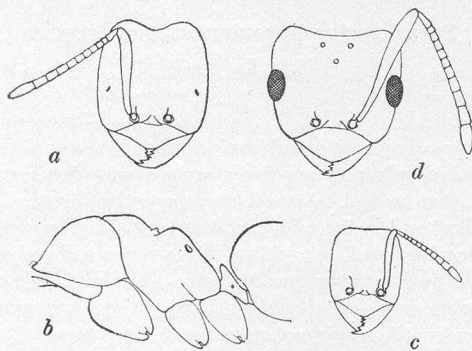


Fig. 55. *Pseudolasius bufonum*, new species. *a*, head of worker major; *b*, thorax and petiole of same in profile; *c*, head of worker minor; *d*, head of female.

of the head. Antennal scapes extending nearly one-third their length beyond the posterior corners of the head; all the funicular joints longer than broad. Thorax broader than the head; the mesonotum and scutellum flattened. Apical border of petiole blunt, straight, and transverse. Gaster large, elliptical. Wings long.

Sculpture, pilosity, and color much as in the worker, but the body darker brown, the gaster not paler than the thorax. Anterior border of clypeus blackish. Hairs lacking (possibly rubbed off), pubescence shorter and more delicate, and the surface, especially of the head and thorax, somewhat more opaque than in the worker. Wings blackish, with dark brown veins and pterostigma.

## MALE.—

Length 2.5 mm.

Head as broad as long, somewhat narrowed behind and in front. Eyes convex, hemispherical, somewhat in front of the middle of the sides, the posterior border nearly straight. Mandibles denticulate, overlapping. Clypeus convex. Antennal scapes extending about one-fourth their length beyond the posterior border of the head; all the funicular joints distinctly longer than broad, the first nearly as long as the two succeeding joints together. Thorax and petiole shaped somewhat as in the female. Gaster and legs slender, external genital valves rather long and pointed.



Sculpture and pilosity much as in the worker. Color yellowish brown above, with brownish yellow appendages, genitalia, venter, and anterior portion of head. Ocellar triangle dark brown. Wings paler than in the female.

Described from four major and eleven minor workers, three females, and eight males, all taken from the stomachs of toads (*Bufo superciliaris* and *polycercus*) captured at Medje (Lang and Chapin).

This species differs from *weissi* in the shape of the head of the major worker, the slightly larger eyes, more strongly striated and more opaque mandibles, shorter antennæ, and much more abundant pilosity and pubescence, and especially in having erect hairs on the scapes and legs. The female is smaller than that of *weissi*, with a differently shaped head, less excised behind, larger and more nearly circular eyes and longer antennæ.

### ***Pseudolasius bucculentus*, new species**

Text Figure 56

#### WORKER MAJOR.—

Length 3.2 mm.

Head large, as broad as long, broader behind than in front, with convexly inflated sides and front and deeply and angularly excised posterior border, the posterior corners being somewhat conical. Mandibles apparently 5-toothed, folded under the clypeus, which is short and in the middle convex and obtusely carinate; its anterior border in the middle with a shallow excision. Eyes very small and indistinct, situated a little in front of the median transverse diameter of the head. Frontal groove rather distinct; frontal carinæ very short; frontal area transverse, triangular, not impressed. Antennæ rather slender, the scapes not reaching to the posterior corners of the head; first funicular joint as long as the two succeeding joints together; joints 2 to 7 of subequal length, all slightly longer than broad. Thorax robust, pronotum broad, in profile only feebly convex above, the mesonotum rising higher than the pronotum to its middle and then sloping and concave to the mesoepinotal suture. Epinotum with distinct base and declivity, the former short, sloping upward but not reaching the height of the mesonotum, the declivity flat and gradually sloping backward, more than twice as long as the base. Petiole small, with sharp, compressed, very distinctly notched superior border. Gaster voluminous, subelliptical, its anterior segment flattened in front and overlying the petiole. Legs long and stout.

Whole body, including the mandibles, shining and very finely and uniformly punctate, except the mandibles, which are longitudinally striate.

Pilosity and pubescence yellow, the former short, very sparse, absent except about the mouth and on the thoracic dorsum and as a single row of hairs along the posterior border of each gastric segment. Pubescence short and delicate but very dense, more conspicuous on the head and gaster than on the thorax, very fine and short on the appendages, the latter without erect hairs as in *bufonum*.

Uniformly brownish yellow; mandibular teeth and eyes blackish.

#### WORKER MINOR.—

Length 2.2 to 2.5 mm.

Differing from the major in the shape of the head, which is distinctly longer than broad, as broad in front as behind, with less convex, subparallel sides and less deeply

excised posterior border. Eyes extremely small, reduced to one or two ommatidia, pigmentless. Scares extending a short distance beyond the posterior corners of the head. In other respects like the major worker.

MALE.—

Length 3 mm.

Closely resembling the male of *bufonum* but with the head broader than long and especially broader and more swollen behind. Body and wings much paler, brownish yellow, the posterior portion of the head dark brown. Wings opaque, grayish, with pale brown veins and pterostigma. The pilosity is also very different, the hairs being very few and confined to the mouth-parts and genital appendages.

Described from a single major worker, two minor workers, and a male taken at Medje (Lang and Chapin), without further data. This species is quite distinct in the peculiar shape of the head and mesonotum of the worker major, the strongly notched petiolar border and the very feebly developed pilosity.

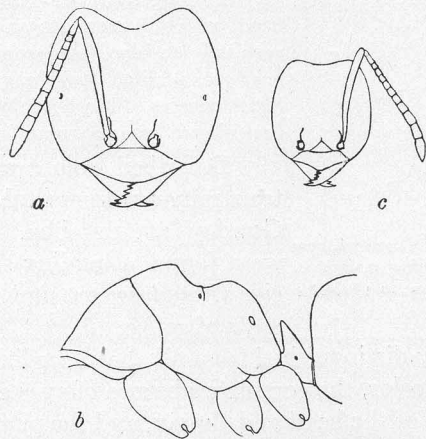


Fig. 56. *Pseudolasius bucculentus*, new species. *a*, head of worker major; *b*, thorax and petiole of same in profile; *c*, head of worker minor.

### *Pseudolasius gowdeyi*, new species

Text Figure 57

WORKER MAJOR.—

Length 2.5 mm.

Head as broad as long, subrectangular, as broad in front as behind, with straight sides and feebly but distinctly excised posterior border. Eyes absent. Mandibles with five acute teeth on their oblique apical borders, the median tooth small, the apical twice as long as the other three. Clypeus convex but not carinate, its anterior border nearly straight. Antennæ slender, the scapes extending about one-fifth their length beyond the posterior corners of the head; the second funicular joint not longer than broad, the succeeding joints slightly longer than broad. Thorax short and robust,

the pro- and mesonotum forming together an evenly rounded convexity; mesopleuræ somewhat compressed; epinotum short, nearly horizontal, lower than the mesonotum, passing through a curve into the sloping, flat declivity. Petiolar scale narrowed above, its sides curved, its superior border rather blunt, truncated, entire. Gaster elliptical. Legs rather short.

Whole body smooth and shining, except the mandibles, which are opaque and very finely and densely striated. Integument of the body and appendages apparently microscopically but not densely punctate.

Hairs and pubescence white, the former sparse, conspicuous only on the clypeus, thorax, and gaster, the appendages being without erect hairs. Pubescence short, rather dense on the head and gaster, longer on the latter, slightly oblique on the scapes and legs.

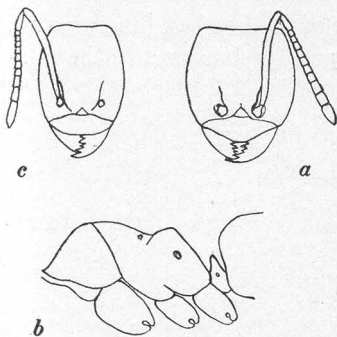


Fig. 57. *Pseudolasius gowdeyi*, new species. *a*, head of worker major; *b*, thorax and petiole of same in profile; *c* head of worker minor.

Pale yellow, the head and thorax a little darker, mandibular teeth dark brown.

WORKER MINOR.—

Length 1.8 to 2 mm.

Differing from the major worker in its smaller head, which is elongate and with very feeble occipital excision. Antennal scapes reaching nearly one-fourth their length beyond the posterior corners of the head; joints 2 to 6 of the funiculus as broad as long.

Described from two major and sixteen minor workers taken by Mr. C. C. Gowdey at Entebbe, Uganda. They were found attending subterranean coccids (*Pseudococcus citri* Risso) about the roots of coffee.

This is readily distinguished from all the preceding species by its smaller size, paler color, the complete absence of eyes even in the major workers, the shape of the head and thorax, and the pilosity.