

**An Additional Annotated List of the Ants of  
Mississippi\* (Hym.: Formicoidea).**

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In a previous article (Ent. News, Vol. 39, pp. 242-246 and 275-279, 1928) 19 additional species of ants were recorded for Mississippi. The present paper lists 20 more species, thus making a grand total of 126 species which have been recorded for the state. Although a great deal of collecting for ants has been done in some parts of the state, there are other areas in which no collecting or only very little collecting has been done. When these areas are adequately scouted, it would not be surprising if the list of the ants of the state is extended to include 150 species or more.

Of the 126 species collected to date, 11 species or 8.7 percent are apparently new species. New species have been found within the following genera:—*Aphaenogaster*, *Stenamamma*, *Pheidole*, *Leptothorax*, *Myrmica*, and *Camponotus* sub-genus *Colobopsis*.

The most interesting of the new species is a *Stenamamma*, which is apparently distinct from anything that has yet been recorded for North America. This species is of even further interest in that the genus *Stenamamma* is very poorly represented in this section of the country.

Another interesting new species is a *Colobopsis*, which is allied to *C. impressus* in the general shape of the head of the soldier (that is, with subparallel sides) yet is very distinct not only from this species but from all other *Colobopsis* that have yet been taken in North America.

Subfamily DORYLINÆ

107. ECITON MEXICANUM (F. Smith).

Wiggins. Male specimens of what is believed to be this species were taken by Mr. J. P. Kislanko at trap lights at Wiggins on the night of June 27, 1930. Our specimens agree very well with the figure of this species as given by Wheeler in fig. 11, plate 26 of the Bull. Amer. Mus. Nat. Hist. Vol. 24,

(\* A contribution from the Mississippi Agricultural Experiment Station)

1908. Wheeler states, "the male of this species is easily distinguished from all the known males of the genus by the peculiar shape of the mandibles which are narrow, straight at the base and curved at the tips, with the middle of the external margin concave and a low but distinct projection on the inner margin." I am inclined to believe that this ant is the male phase of *Eciton pilosus*. *E. mexicanum* is known only from the male. The male of *E. pilosus* on the other hand is not known. My reasons for believing that the males of *E. mexicanum* are very probably the males of *E. pilosus* will be given in a forthcoming article.

108. *APHAENOGASTER TEXANA* var. *CAROLINENSIS* Wheeler.

Columbus, Starkville, Greenwood Springs. The slender, yellowish-brown workers of this ant might easily be confused with the smaller workers of *Aphaenogaster fulva* or some of its forms. The head of the worker of *carolinensis* is much more slender than the head of the worker of *A. fulva*, and the posterior corners are decidedly rounder. The eyes are proportionally larger and the antennae longer.

This species was described from specimens nesting in the soil beneath stones in the open woods at Tryon, N. C. (Bull. Amer. Mus. Nat. Hist. Vol. 34, p. 414, 1915). In Mississippi I have taken the ants from the soil beneath logs and also from beneath the bark of stumps. At Columbus, Mississippi, a colony was found nesting in a pine log near a fine colony of *Euponera gilva*.

109. *STENAMMA FOVEOLOCEPHALA* M. R. Smith.

Ackerman. Two workers of this species were collected from the sandy soil on the south slope of a thinly wooded hillside, 2 miles from Ackerman, Mississippi. Although a careful search was made for further specimens none were found. These are the first workers of *Stenammina* that have been collected in the state. To date this is the fourth species of *Stenammina* to be described for North America. The other three species are as follows: *brevicornis* and its various subspecies and varieties, *nearcticum* (which is known only from the male and female phases), and *manni* which was described by Dr. Wheeler from Mexican specimens.

This species differs from *brevicornis* and its allied forms in

the following particulars: (1) the eyes are larger; (2) the sculpturing of the head is decidedly foveolate-reticulate; (3) the rugulae on the basal surface of the epinotum are transverse; (4) the postpetiole is longer and when viewed from above subcampanulate; (5) the color is darker, almost black.

The description of this species appeared in *Annals Ent. Soc. of Amer.* Vol. 23, No. 3, 1930.

110. *LEPTOTHORAX WHEELERI* M. R. Smith.

A. & M. College, Starkville, Sturgis, Adaton. This species was recently described and illustrated in *Annals Ent. Soc. of America*, Vol. 22, pp. 548, 1929. The worker of this species is very closely related to the worker of *L. schaumii* and *L. fortinodis*. From these species it differs, however, in the following particulars: (1) it has longer and larger epinotal spines; (2) the thorax is not so compressed laterally and dorsally as with the species mentioned; (3) the sculpturing is much coarser.

All of the nests which I have encountered were found in cavities in live, standing trees or in logs and stumps.

111. *LEPTOTHORAX (D.) PERGANDEI* subsp. *FLAVUS* M. R. Smith.

Adaton, Longview, Starkville. This interesting species belonging to the subgenus *Dichothorax* was also recently described in the *Annals Ent. Soc. Amer.* Vol. 22, pp. 549-550, 1929. Although closely allied to *pergandei*, the worker can be distinguished from the worker of *pergandei* by the following differences: (1) its larger size; (2) different color (yellow); (3) less acute meso-epinotal constriction; (4) the longer, blunter, and stouter epinotal spines; (5) the much larger and more convex petiole, and the distinctly broader post petiole; (6) and by the longer, coarser, and more uneven pilosity.

All the colonies which I have seen were nesting in crevices just beneath the bark of pine stumps, usually very near the soil level.

112. *LEPTOTHORAX PERGANDEI* subsp. *FLORIDANUS* Emery.

Louisville, Blue Mountain, Ripley. According to Emery this subspecies differs from *L. (D.) pergandei* in the following particulars, namely: (1) the body is more shining; (2) the epinotum smooth and shining above; (3) the mesoepinotal con-

striction is punctulate, subopaqué; (4) the petiolar node is narrower and not impressed above; (5) the postpetiole is hardly  $\frac{1}{3}$  again as broad as the petiole and proportionally narrower than in *pergandei*. Wheeler in addition states that the color, pilosity, and sculpture are the same in both forms.

Mr. S. W. Simmons, who collected the ants at two of the locations mentioned above, informs me that they were found nesting in the soil beneath logs and stones.

113. *LEPTOTHORAX* (D.) *PERGANDEI* FLORIDANUS var. *SPINOSUS* M. R. Smith.

Summit. This species was described in the same journal as the other species of *Leptothorax* just mentioned (p. 551). It is also a member of the subgenus *Dichothorax*. The worker differs from that of *floridanus* as follows: (1) the epinotal spines are longer and are directed more upward and outward; (2) the epinotal spines are not small or tuberculate as with *pergandei* and *floridanus*, but distinctly spinose, and longer than broad at base; (3) the pilosity is longer, coarser, and more uneven; (4) the color, although variable, is somewhat darker than that of *floridanus*.

These ants were collected from a rotting pine stump at Summit, Mississippi, the type-locality.

114. *STRUMIGENYS* *ORNATA* Mayr.

Louisville. One specimen of this ant was collected by Mr. G. W. Haug from amongst leaves and other debris on the ground in a dense growth of oak trees about 8 miles northwest of Louisville.

The worker of this species can be very easily distinguished by the exceedingly long clavate hairs which are directed upward from the surface of the clypeus. The ants appear to be rather rare in the state.

115. *STRUMIGENYS* *CLYPEATA* var. *PILINASIS* Forel.

Louisville. Three specimens of this species were taken by me from a small crevice in a well rotted log, lying at the foot of a hill in the same patch of woodlands as the species mentioned above.

This species can be recognized by the peculiar shape of the

head of the worker, which tapers very strongly anteriorly, thus causing the clypeus to be considerably longer than broad. The clypeus is covered with numerous erect hairs, which are not at all clavate or scale-like as in the other species of *Strumigenys*. Also the exposed sections of the mandibles are toothed internally for their entire length.

116. *SOLENOPSIS PERGANDEI* Forel.

Greenwood Springs, Quitman, Biloxi, Ackerman. The worker of *S. pergandei* can be distinguished from the worker of *S. molesta* as follows: (1) it is a larger species; (2) the head is practically quadrate; (3) the node of the post-petiole is about as long as wide and more spherically shaped. The worker of *S. molesta* has a post-petiolar node, which when viewed from above appears to be wider than long. For the description of *pergandei* see Ann. Soc. Ent. Belg. Vol. 45, p. 343, 1901. The species was described from North Carolina specimens.

I have seen nests of this ant in the soil and also in crevices in rotting pine stumps. At Quitman, alate females were found in the nest on July 6th. This does not appear to be as common a species in Mississippi as *molesta*.

117. *Solenopsis globularia* subsp. *mobiliensis* Creighton.

Ocean Springs, Perkinston, Pascagoula. This species was first collected at Mobile, Alabama, by Mr. W. S. Creighton of Harvard University. At the time he wrote me in regard to it, he was of the opinion that it was possibly an imported species. This species, the only form of *globularia* that I know to occur in the United States, is very distinct from our other species of *Solenopsis*. The worker can be readily recognized by its abnormally large postpetiole, which when viewed from above and behind is transversely-elliptical. The epinotum when viewed from the side is decidedly angular.

Mr. J. P. Kislanko, who collected the ants at two of the above named localities, found them nesting in wood in both instances, and seeds were observed in their nest on one of these occasions. Mr. R. P. Colmer sent in specimens from Pascagoula, which were stealing canary bird seed from a house.

## 118. TETRAMORIUM (TRIGLYPHOTHRIX) STRIATIDENS Emery.

West Point. A large number of workers of this imported Indian ant were collected from the brick wall of a store in the business section of West Point, by Mr. E. E. Byrd. Mr. Byrd stated that he believed the ants to be nesting in the wall as he saw numerous workers enter and leave small holes in the wall. The ants are slow moving in gait and given to sulking when touched by an object.

This is the second time that the species has ever been recorded from the United States. It was first taken in 1913 at New Orleans by Mr. E. R. Barber (Wheeler, Jour. Ec. Ent. Vol. 9, pp. 566-569, 1916). This ant, as Wheeler aptly remarks, is tending to become world-wide in its distribution. Whether it will prove a pest in the state remains to be seen.

## 119. MYRMICA SCHENCKI var. SPATULATA M. R. Smith.

Starkville. This, the only species of *Myrmica* that has yet been taken in Mississippi, is apparently a new one. As its name indicates, both workers and females can be distinguished from allied forms of *Myrmica* by the exceedingly large spoon or spatulate-shaped lobes at the base of the antennae. Viewed from above the margins of the lobes are very thin and somewhat reflexed. Viewed laterally the lobes form slightly more than a right angle with the base of the scapes of the antennae.

This species was found nesting in the soil in a low, heavily wooded area 5 miles west of Starkville. The area is frequently subject to overflow.

A description of the worker and female of this species appeared in Vol. 23, No. 3, of the Annals Ent. Soc. Amer. 1930.

## 120. PHEIDOLE LAMIA Wheeler.

Fayette. Two soldiers and a number of workers of this extremely interesting ant were collected by Mr. G. W. Haug from the soil at the base of a maple tree in the old Argentine ant area at Fayette. The soldier of this ant can be easily recognized at a glance because of its peculiarly shaped head, which is long and subcylindrical with truncated anterior portion. The soldiers are supposed to use their heads in plugging the galleries to the nest. According to Wheeler the ants are decidedly

subterranean in nature. Mr. Haug informed me that although he made a very careful search for soldiers he only succeeded in taking two specimens. Apparently the soldiers are very scarce in the nest. They may function as queens as Wheeler suggests. *Ph. lamia* was described by Wheeler from specimens collected at Austin, Texas. So far as I am aware this is the first time that the ant has been taken outside of that state.

121. *DOLICHODERUS PLAGIATUS PUSTULATUS* var. *BEUTENMUELLERI* Wheeler.

Smithville, Biloxi. The types of this species are from the Black Mountains of North Carolina. For description of the species see Bull. Amer. Mus. Nat. Hist. Vol. 20, p. 304, 1904. The worker of this species has a black head and gaster and a reddish-brown thorax. The head and thorax which bear shallow foveolae are glabrous. There are also erect hairs on the upper surface of the body.

At Smithville workers were collected from oak, hickory, and sumac where they were seeking honey dew. At Biloxi on September 5, 1929, the ants were found attending aphids on a species of grass in a marshy area, not over 125 yards from the waters of the Gulf of Mexico. Between the sheaths of the grass were found immature stages of the ants, which were covered over by fine down-like hairs that had been pulled from the grass by the worker ants. Both winged females and female pupae were found.

#### Subfamily FORMICINAE.

122. *FORMICA TRUNCICOLA INTEGR*a Nylander.

Greenwood Springs. These beautiful, robust, red and black ants were found in large numbers amongst sand, leaves, and other debris along the edge of a small stream. In this vicinity there were many elder bushes on which were numerous black aphids that the workers were busily attending. When I attempted to capture the worker ants, they hid beneath leaves and would cautiously peep out as if they were endowed with intelligence. For a description of this species see Bull. Mus. Comp. Zool. Harvard, Vol. LIII, pp. 444-445, 1913.

123. *CAMPONOTUS CARYAE* subsp. *DISCOLOR* (Buckley).

Corinth, A. & M. College. This beautiful red and black ant with emarginate clypeus is described in Proc. Ent. Soc. Phila. Vol. 6, p. 166, 1866.

Judging from our records it does not appear to be as common a species as *rasilis*, which it resembles in both appearance and habits. It can be easily distinguished from *rasilis* by the coarse, piligerous foveolae on the cheeks and clypeus of the worker and female. At Corinth a single worker was taken from the trunk of a tree in a low, heavily wooded area. At A. & M. College, Mr. J. M. Langston found one dealate female and 3 workers in a cavity in a pecan husk on the college farm.

124. *CAMPONOTUS (COLOBOPSIS) OBLIQUUS* M. R. Smith.

Starkville. This species is entirely distinct from any other species of North American *Colobopsis* that has yet been described. With respect to the shape of the head of the soldier (that is, its subparallel sides) it would appear to be closely allied to *C. impressus*. From the latter species it differs in the following characters: (1) its smaller size (3.5-3.75 mm.); (2) the much coarser sculpturing of the head; (3) the less concave, truncate surface of the head; and (4) in the more rectangularly shaped clypeus.

The workers of this ant were found nesting in a cavity in the husk of a hickory nut, *Caryae* sp., which was gathered in a low woodland pasture, 5 miles southwest of Starkville. To Mr. J. M. Langston credit is due for collecting this species.

The description of this species appeared in Vol. 23, No. 3 of the Annals Ent. Soc. of Amer. 1930.

125. *LASIVS BREVICORNIS* Emery.

Ripley. This species is apparently confined to the cooler, more northern sections of the state. Our specimens have been collected by Mr. S. W. Simmons, who informs me that this is not an uncommon ant in the area from which it is listed above. Mr. Simmons found the ants nesting in the soil in a hilly, wooded area. The worker of *L. brevicornis* can easily be distinguished by its short antennal scapes, which do not extend entirely to the posterior corners of the head. The maxillary palpi are 6-segmented.

126. *LASIVS (A.) CLAVIGER* Roger.



Ripley. This species is represented in our collection by a single dealate female, which was captured at the above named locality by Mr. S. W. Simmons. Although *L. interjectus* Mayr is a fairly common ant in this state, its cogener *L. claviger* for some unexplainable reason seems to be rare or absent in the areas where we have collected intensively.

The worker of *L. claviger* can easily be distinguished by the following characters: (1) the 3-segmented maxillary palpi; (2) the antero-posteriorly compressed petiole, the superior border of which is sharp; (3) by the absence of teeth on the superior borders of the mandibles; (4) by the numerous erect hairs which are widely distributed over the dorsal surface of the gaster.