Miami, Florida by W. F. Buren).

Paratypes. 39 majors, 26 workers.

Discussion

The type material comprises 23 majors and 16 workers, collected on December 19, 1945 in Miami, Florida, by W. F. Buren; 6 majors and 6 workers collected in 1975 in Baldwin County, Florida by D. P. Wojcik; 10 majors and 8 workers collected on November 25, 1975, in Naples, Florida by M. A. Naves.

The holotype and several paratypes are deposited at the Florida State Collection of Arthropods, Division of Plant Industry, Gainesville, Florida; and the M. A. Naves collection. The species is named in honor of Dr. Robert E. Gregg, Professor of Entomology, University of Colorado.

Gregg (1958) expended a great deal of effort trying to identify a sample of this species that he and Mrs. Gregg collected in Brickell Hammock, Miami, Florida. In his own words:

> The specimens of *sculptior* from Miami, Florida (Buren det.) and the sample obtained from Brickell Hammock are indistinguishable. Despite the similarities of the scrobes and their sculpture, these ants are not identical, however, with the examples of *sculptior* from Puerto Rico and Martinique, nor with the types from St. Vincent. This is evident especially from the smooth (almost sculptureless) and shining occipital lobes of the Florida ants. In *sculptior*, the cephalic rugae and punctures completely cover the head, making it opaque, except at the extreme posterior margin around the foramen which is smooth and shining. In addition, the epinotal spines of the Brickell Hammock ants are longer and sharper than those of *sculptior*. These two samples of the *flavens* group in Florida cannot represent *P. flavens sculptior* (from the West Indies), and unless this subspecies is known from Florida by other specimens, or is there but not yet collected, this discovery requires a revision of the North American list. *Pheidole flavens sculptior* must be dropped, and that is the plan followed in this paper (p. 45).

Fig. 21 shows the head of *P. greggi* from the original specimens collected at Miami, Florida, by W. F. Buren. This confirms Gregg's conclusion that they are not conspecific with *sculptior*. The occipital lobes of *P. flavens sculptior* from St. Thomas, Virgin Islands, also collected by Buren on January 18, 1952, are shown in fig. 56.

The specimens collected at Naples were from a colony at the base of a telephone pole on sandy soil close to the beach. The colony was quite sizeable as in *P. anastasii*, *P. floridana* and *P. moerens*.

Although Gregg showed that Buren's original identification of *sculptior* from Florida specimens was in error, and that apparently *sculptior* does not occur in the U.S., he left unresolved the question of what name should be applied to the Florida species. The present studies indicate that it is a new, undescribed species distinct from *P. flavens* Roger (fig. 55), *P. flavens sculptior* Forel, *P. floridana* Emery, *P. anastasii* Emery and *P. moerens* Wheeler.

Much more study is needed in order to fully understand this difficult group which has several related species, 8 subspecies and 13 varieties in the new world.

This new species differs from *P. anastasii* and *P. floridana* by the shape of the postpetiole which is slightly larger than the petiole and does not have the distinct lateral connules. It differs from *P. flavens* by having the scrobe heavily reticulo-punctage, and the vertex not smooth and shining. It differs from *P. flavens sculptior* by having smooth and shining occipital lobes. It also differs from *P. moerens* by having a reticulo-punctate scrobe, which is opaque as well as the entire head.

11. Pheidole lamia Wheeler

P. lamia Wheeler, 1901. Amer. Nat. 35:534. - Wheeler, 1908. Amer. Mus. Nat. Hist., Bul. 24:477-478. - Wheeler, 1910. Ants, pp. 212, 248. - Wheeler, 1926. Ants, pp. 212, 248. - Smith, 1931. Ent. News 42:21-22. Creighton, 1950. Bull. Mus. Comp. Zool. 104:182. - Smith, 1951. Cat. Hym. Amer. No. of Mex. U.S.D.A. Mon 2:803. - Gregg, 1956. Ent. News 67:37-39. - Gregg, 1958. N.Y. Ent. Soc. 66:23.

Type locality. Austin, Texas

Types. M.C.Z., A.M.N.H.

Range. North Florida to Texas

P. lamia is a small, yellowish, shining species with a subcylindrical head in the major which is truncate anteriorly. The soldier of *P. lamia* has the most striking head shape in the genus.

Discussion

The head shape of *P. lamia* led Wheeler (1908) to suggest that it was a phragmotic ant. He also believed it to be a very rare species. Buren *et al.* (In Press), showed by laboratory and field observations that phragmosis does not occur in this species.

At Tall Timbers Research Station where this species is common, I had the opportunity to observe the biology of this interesting species. Colonies are monogynous and sometimes have up to about 200 majors and 1,000 workers. The nests are in the ground, usually in grassy areas as well as among taller vegetation. The nesting sites, at least at Tall Timbers, can be easily spotted in the morning due to the reddish clay soil cast up in very small honey-combed hillocks. These clumps consist of fine soil particles and can have several openings connected to a vertical tunnel of about 2 mm in diameter. From the vertical tunnel branch single secondary galleries each directly connected to an oval chamber of about 0.5 to 1.5 cm in height and about 4 to 6 cm in length. Each colony has several chambers. The first is found usually over 40 cm deep. I have dug over 1.5 m deep following the main tunnel without reaching the end of it in four colonies. In the summer of 1973, I found the first female after digging seven colonies. In July, 1974, I found about thirty males in tunnels close to the soil surface. In July, 1975, I found 18 females inside a large chamber of about 50 cm deep. One mating pair that fell on the ground was collected in the late afternoon on July 15, 1974. The soil where this species nests usually has the first 30 cm predominantly sandy. Deeper there is a reddish clay where this species has its chambers.

This species usually forages in the morning or when there is no sunlight. Majors sometimes are found among debris with the workers. The pale yellow color of this species also could