

Types. None in this country

Range. Gulf States

P. metallescens (fig. 16) is a small species usually with reddish brown head and thorax and black gaster, although completely dark to black specimens have been found. It differs from *P. greggi* n. sp. and *P. moerens* by the distinct lateral connules on the postpetiole. It also differs from *P. floridana* and *P. anastasii* by the strong reticulation posteriorly on the head and from *P. dentigula* by having a reticulo-punctate propodeal base. The workers display strong, metallic, iridescent bluish reflections over most of the body.

Discussion

P. metallescens is very common in Florida. The preferable habitat seems to be under the shade of trees or any high vegetation. Usually it is easy to find several small craters connected to a central vertical tunnel to the main chamber, rarely over 40 cm deep in the ground. It is a monogynous species. The majors usually forage along with the workers. They feed on small grass seeds and also scavenge dead arthropods.

15. *Pheidole moerens* Wheeler

P. moerens Wheeler, 1908. Bull. Amer. Mus. Nat. Hist. 24:136. - Smith, 1936. Puerto Rico Univ., Jour. Agr. 20:842-843. - Smith, 1967. Cat. Hym. Amer. No. of Mex. U.S.D.A. Mon 2 (Suppl. 2):354. - Wheeler and Wheeler, 1972. Ga. Ent. Soc., Jour. 7:244. - Kempf, 1972. Studia Ent. 15:196. - Wojcik, Banks, and Buren, 1975. Coop. Econ. Ins. Rpt. U.S.D.A. 25:906.

P. moerens dominicensis Wheeler, 1913. Bull. Amer. Mus. Nat. Hist. 32:241. - Kempf, 1972. Studia Ent. 15:197. NEW SYNONYMY.

Type locality. Antilha Culebra

Types. M.C.Z.

Range. Southern Alabama, Florida, West Indies

P. moerens (fig. 22) is a small reddish yellow to almost black species closely related to *P. greggi* n. sp., differing from it by the absence of the heavily punctate scrobe and in having a carinated shining clypeus. It differs from *P. dentigula*, *P. anastasii*, *P. floridana* and *P. metallescens* by the absence of distinct lateral connules on the postpetiole.

Discussion

P. moerens is a common species in north Florida. Its color was observed in lab colonies to vary from reddish yellow to almost black due possibly to variation in the diet. Colonies fed with honey and seeds retained a lighter color than those fed with freshly killed house flies. Wheeler's subspecies *dominicensis* appears to represent only a color variant often found among the normal population. I have examined the types of *dominicensis* and they appear identical with the types of *moerens* except in color. I do not consider *dominicensis* a valid taxon.

This species was found nesting in various places such as under boards, at base of oak trees and fence posts, along roots, under palm leaves, inside wall crevices, and rarely in the ground. Usually small chambers are constructed. It is a monogynous

species which has a small blackish female. Its main flight is usually in July. Several queens may start founding a nest, but before the first brood emerges, the dominant female will have killed the others.

The chambers usually are built with small soil or debris particles and have small openings. A colony may have over 100 majors and over 500 workers. They feed on seeds and scavenge and prey on small dead or live arthropods. They forage very close to the nesting sites and sometimes a major is found foraging along with the workers.

16. *Pheidole morrisi* Forel

P. morrisi Forel, 1886. Soc. Ent. Belg., Bul. 30:46. - Mayr, 1887. Verh. Zool. - Bot. Ges. Wien 37:568. - Forel, 1901. Soc. Ent. Belg., Ann. 45:350. - Wheeler, 1904. Amer. Mus. Nat. Hist., Bul. 21:380. - Wheeler, 1908. Amer. Mus. Nat. Hist., Bul. 24:461. - Smith, 1918. Ent. News 29:21. Davis and Bequaert, 1922. Brooklyn Ent. Soc., Bul. 17:8-9. - Smith, 1924. Ent. News 35:53. - Smith, 1930. Fla. Ent. 14:3. - Wheeler, 1932. N.Y. Ent. Soc. 40:7. - Cole, 1940. Amer. Midland Nat. 24:44-45. - Creighton, 1950. Bull. Mus. Comp. Zool. 104:183-184. - Smith, 1951. Cat. Hym. Amer. No. of Mex., U.S.D.A. Mon 2:803. - Gregg, 1958. N.Y. Ent. Soc. 66:24. - Wheeler and Wheeler, 1960. Ent. Soc. Amer., Ann. 53:12.

P. morrisi var. *vancea* Forel, 1901. Soc. Ent. Belg., Ann. 45:351. - Wheeler, 1904. Amer. Mus. Nat. Hist., Bul. 20:302. Wheeler, 1908. Amer. Mus. Nat. Hist., Bul. 24:461. - Smith, 1924. Ent. News 35:53. - Smith, 1951. Cat. Hym. Amer. No. of Mex., U.S.D.A. Mon. 2:803-804.

Type locality. Vineland, New Jersey

Types. None in this country

Range. Southern New Jersey, south to Florida and eastern Gulf states.

P. morrisi (fig. 27) is a pale to darker yellowish species differing from *P. dentata* and *P. vinelandica* by the absence of distinct propodeal teeth or spines. It is larger than *P. vinelandica* and has a transverse mesonotal impression.

Discussion

P. morrisi is another common species in Florida. It always nests in the ground and the colonies are quite large. It is a monogynous species and is primarily a scavenger.

Several nest founding females displayed singular habits in the laboratory which may not have been noted previously in this genus. In constructing the claustral chamber each female used the soil dug from the bottom of the vertical passageway to form a continuous plug of the passageway above her rather than bringing the soil particles to the surface. The claustral chamber at the 20 to 30 cm level below ground thus is entirely sealed from the surface by a long plug. I interpret this habit as a defense mechanism against various predators during the claustral period. The first workers are reared in about 30 days and the first majors in about 50 days.

The colony increases in size rapidly. In 8 months it can have several hundred workers and majors. The workers forage alone, although the majors can help to bring food back to the