

setts west through Illinois to Minnesota and Oklahoma, and south into North and South Carolina, Georgia, Mississippi and Louisiana (Smith, 1979). A large range exists but local populations are spotty and this irregular pattern is particularly evident in the South. Misdeterminations between *D. mariae* and *D. pustulatus* in the South largely motivated this study and a closer examination of their southern distributions is appropriate. Carter (1962a,b) and Smith (1918) reported the species as common in both North and South Carolina respectively while only Wheeler (1913) records it from Georgia. Those records were from Stephens and Rabun Counties in the northeastern upland terrain. Smith (1924) reported the species in northeastern Mississippi, Lowndes County, and I have been unable to trace the Louisiana record. All records known to the author for the southern Coastal Plain were misdeterminations of *D. pustulatus*.

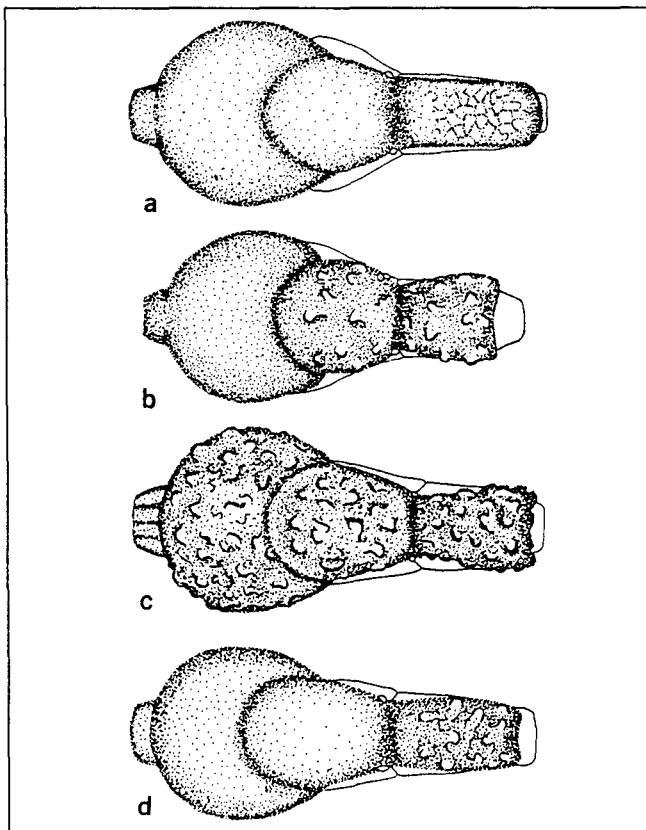


Figure 1. Dorsal views of the alitrunk for (a) *Dolichoderus mariae*, (b) *D. taschenbergi*, (c) *D. plagiatus* and (d) *D. pustulatus*.

Dolichoderus plagiatus

Worker Diagnosis: This ant has a mottled color pattern compared to the other species. The mandibles and head are dark brown to near-black, paler in callow specimens. The antennae, alitrunk, legs and petiole are brown-orange; dorsum of the alitrunk becoming dark brown in older specimens. There are laterally-spaced spots of pale brownish-orange on the first and second segments of gaster; the remainder of gaster is dark brown.

Structurally, head and complete dorsum of alitrunk are sculptured with well-defined depressions or foveolae. The pronotum is sculptured as strongly as the mesonotum, a definitive feature for this species. Granulation of the alitrunk occurs within the depressions and the surface is essentially opaque; the reflectivity of cuticle broken into small, disjunct regions. A fine granulation occurs on the petiole, and the integument of the gaster is smooth and shining. Erect hairs are numerous on head and alitrunk; a few scattered erect hairs occur on gaster, and there are short, fine erect hairs on scapes. In dorsal view, length of propodeum exceeds its width, Fig. 1c. Lateral profile of the alitrunk as in Fig. 2c. Integument within concavity of the declivous face of propodeum is smooth and highly reflective.

Geographic Distribution: The type locality is "Illinois" and the species has been reported from New Brunswick westward through Ontario, Manitoba, and North Dakota. Southward in the eastern U. S., the species reaches North and South Carolina and Georgia (Smith, 1979). The southern records show a preference for upland habitats and the species has not been documented in the southern Coastal Plain.

Dolichoderus pustulatus

Worker Diagnosis: This species is bicolored in the South, a feature enhancing its similarity to *D. mariae* in that region. Specifically, southern specimens have brownish-orange mandibles, head, antennae, legs, alitrunk and petiole; antennae and legs becoming darker with age. The gaster is dark brown to black and occasionally with small, laterally-spaced, light colored spots on the first and second segments. In the North, mature specimens are often concolored with dark brown, near black or pale orange bodies. Distinctly bicolored specimens from the North appear to be young specimens.

Structurally, a fine granulation sculpts the head behind the eyes and faint indications of shallow foveolae exist. The surface of the pronotum is impressed with a delicate punctation, though both