

Report

***Odontomachus clarus* Roger (Hymenoptera: Formicidae) Reported in Kisatchie National Forest, Louisiana**

Adams, B. J.¹, X. Chen¹ and L. M. Hooper-Bùi^{2,3}

¹Louisiana State University, Department of Entomology, Baton Rouge, La 70803

²Louisiana State University Agricultural Center, Department of Entomology, Baton Rouge, La 70803

³To whom correspondence should be addressed Lhooper@agcenter.lsu.edu

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Introduction

The genus *Odontomachus* is easily identified due its large size, distinctive head features, and elongated linear mandibles (Wheeler 1910, Brown 1976, Deyrup *et al.* 1985). Four native species of *Odontomachus* are recorded within the United States: *O. brunneus* (Patton), *O. ruginodis* Smith, *O. relictus* Deyrup & Cover, and *O. clarus* Roger. Though the range of *Odontomachus clarus* Roger (Hymenoptera: Formicidae: Ponerinae) is reported to extend into the western part of Louisiana (Smith 1939), none have been collected within the state in recent surveys.

O. clarus (shown in Figure 1) has been reported in Mexico, Arizona, New Mexico, and Texas (Deyrup and Cover 2004). The species was first described in 1861 by Rogers. Junior synonyms include *O. texana* Buckley, *O. coninodis* Wheeler, *O. desertorum* Wheeler, and *O. clarionensis* Wheeler (Brown 1976). Nests are often found under rocks or in grasses associated with both arid and mesic habitats. They have also been located under downed trees in fine sand and gravel soils (Smith 1939, Cokendolpher & Francke 1990, Deyrup and Cover 2004).



Figure 1. Profile of *Odontomachus clarus* worker

Results and Discussion

On 11 August 2009 two head capsules were collected in the midden pile of a colony of *Dorymyrmex flavus* McCook on the road near the Corral Camp area of the Kisatchie National Forest in Central Louisiana (31°31.774'N 093°03.510'W Elev. 323'). The head capsules were missing the recognizable jaws but the converging dorsal furrows on the capsules matched the characters of *Odontomachus* (Deyrup et al. 1985, Brown 1976). Coloration and head size indicated a species other than the non-native *O. haematodus* (Linnaeus), already known to exist in southeastern Louisiana. Presence of the capsules within the midden pile indicate possible predation of *Odontomachus* by *Dorymyrmex*. Aggressive interaction between *Dorymyrmex bureni* (Trager) and *O. brunneus* has previously been reported by Wild (in Deyrup and Cover 2004). An *Odontomachus* colony was located on 26 March 2010 in the Kisatchie district of Kisatchie National Forest on the Long Leaf Vista trail (31°28.576'N 092°59.683'W Elev. 238'). Three workers were collected under a rock in sandy soil at the base of a rock bluff. Workers were hand collected and stored in ethanol. Another colony was located on 18 June 2010 near Corral Camp (31°32.105'N 093°03.403'W Elev. 270') under a large rock next to a rotting stump near the road. The entire colony was collected, including workers and male and female alates. Vouchers are deposited in the Louisiana State Arthropod Museum.

Specimens of *O. clarus* were identified by using the key of Deyrup and Cover (2004) based on workers and male alates. The following characters distinguished *O. clarus* from other species. Workers: fine appressed hairs distributed at least ½ their own length on the first gastral tergite; pronotum striated transversely on the posterior; petiole slightly rugose basally on sides while smooth on back; inner side of hind femur glabrous at base; reddish brown with a black gaster; and a smooth basalar lobe. Males: ocelli smaller than the space between lateral ocelli and eye; a finely striated pronotum and a dark brown head and body. (Deyrup et al. 1985, Deyrup and Cover 2004). The other species differ in the density of hair on the gaster, the smoothness of the posterior side of the petiole, and smoothness of the basalar lobe in workers. The identification of the ants was confirmed by Dr. Mark Deyrup (Archbold Biological Station, Lake Placid, Florida).

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