

have been preserved and one of these was examined by Emery (1893), who thus succeeded in establishing the identity of the species. Forel (1886) had previously seen specimens of a different *Myrmecocystus* taken in Texas (Collection de Saussure) and Mexico (Museum of Lyons) and had described it as *M. melliger*, believing that it was the species described by both Llave and Wesmael and that only one species existed. It is therefore necessary, as Emery has shown, to cite Forel and not Llave as the authority for *melliger*. Until the existence of two species had been established, the synonymy was in great confusion, and is still in that condition in Dalla Torre's 'Catalogus Hymenopterorum' (VII, 1893, pp. 217, 218). I give

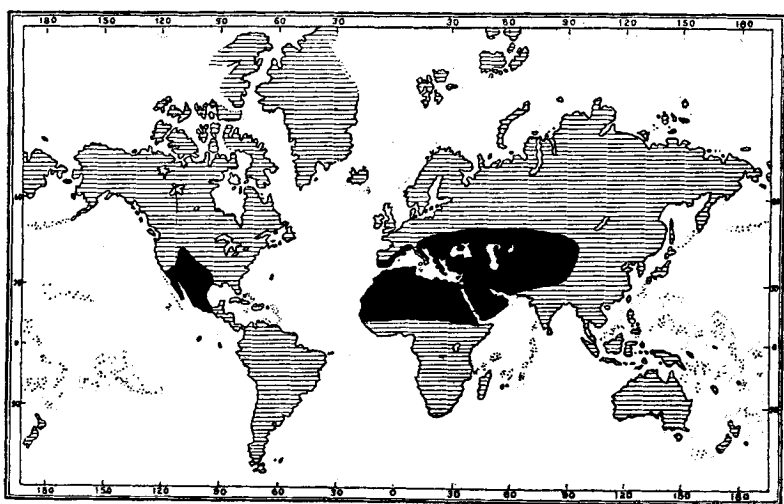


Fig. 1. Map showing (in black) the distribution of *Myrmecocystus sensu stricto* in North America and of the subgenus *Cataglyphis* in the Old World.

my interpretation of the references in connection with the following brief descriptions of the different forms, but many of the allusions of the earlier authors, especially those to Llave's *Formica melligera* must forever remain doubtful. Good specimens of the typical *melliger* and *mexicanus* seem to be rare in collections, and the males and females of these particular forms are still unknown. Nor have any full and accurate observations been published on their habits. For the present, therefore, we shall have to be content with the old accounts of Llave, Lucas and Wesmael, with McCook's much more satisfactory observations on a variety of *mexicanus*, and with my field notes on several of the forms of both species observed in the southwestern states.