(1) Ecitonini-Cheliomyrmecini, (2) the Dorylini, and (3) the Aenictini. Furthermore, because army ants disperse poorly, the timing of certain geological events, such as the fragmentation of the supercontinents Laurasia and Gondwana and the appearance and disappearance of land bridges connecting the continents, supports the hypothesis that the army ants arose convergently at three separate tropical loci (Gotwald, 1979). However, additional comparative morphological studies of the army ants should provide an even better basis for understanding army ant origins.

The purpose of this paper is to describe certain morphological features of the workers of two populations of African driver ants, *Dorylus (Anomma) nigricans* Illiger and *D. (A.) molesta* (Gerstaecker), and to compare these features to those of other army ants, particularly *Cheliomyrmex morosus.* Most of the morphological features selected for study and comparison are those that have demonstrated greatest potential to taxonomic decision making and could be included in subsequent phenetic and cladistic analyses of the true army ants. This paper does not claim to be a definitive morphological description of the subgenus *Anomma.* Although the taxonomy of *Anomma* is unsettled, it is our opinion that the two forms studied here represent distinct species. These two species are clearly allopatric, with *molesta* ranging over much of East Africa and *nigricans* more or less confined to West Africa. *Anomma* (which is restricted in distribution to sub-Saharan Africa) is the only subgenus of *Dorylus* containing species that commonly forage on the surface of the ground and are thus more commonly encountered than are other African dorylines.

Methods

The specimens of *D. nigricans* were collected from a single colony (Gotwald field no. GC-002) on 1 June 1971 at Legon, Ghana. The *D. molesta* specimens that were sectioned for histological study were taken from two colonies in Tanzania by D. H. Kistner (nos. 1489 and 2310) on 20 April 1966 at Amani and on 17 June 1970 at Arusha National Park. Gross dissections were made in the field on numerous workers of *D. molesta* (Gotwald field no. KC-086) taken on 27 July 1971 at Karen, Nairobi, Kenya.

Specimens collected for sectioning were preserved in Bouin's fluid and were prepared with a modified methylsalicylate-parlodin embedding technique. Sections were stained with one of three preparations: (1) Delafield hematoxylin I (progressive method); (2) cresyl violet for Nissl substance; and (3) modified Gomoni paraldehydefuchsin stain (Lappano-Colletta et al., 1965). All sections were mounted in Permount.

The terminal segments of the gaster were examined with the scanning electron microscope.