include São Paulo, Missiones, Espiritu Santo, Matto Grosso, Bahia, and Pará in Brazil, as well as "Pérou." For the present study, the authors selected a single, restricted population of the typical form, not far from Pará, which they have intermittently had under independent field observation since 1937. Some 30 "workers," together with more than a dozen cocoons and larvae, were taken from a typical colony by one of us (PAZ) in December, 1969, and brought to Washington, D. C., where they were housed in observation nests and the recorded observations made over a period of somewhat more than a year.[3]

## *Methods and Observations*

The colony was approximately evenly divided, and the fractions housed in glass-and-plastic earth-containing Lubbock nests, 45.7 cm × 28.5 cm, and 3.0 cm in depth. Two of these were stacked in each of 2 aquaria of dimensions 61 cm × 29.0 cm × 22.5 cm, to serve as foraging arenas. These aquaria were covered at all times with 2 glass plates, with an aperture of 1.0 cm, through which was inserted the stem of a Weston Mirroband recording thermometer. Room temperature was kept constant at 75° F. Since the entrances to the Lubbock nests were kept open at all times, and soil was excavated and carried into the arena fairly continually by the ants, humidity usually approached saturation.

### *A. Breeding Pattern*

The eggs of *D. grandis* are comparatively large (approximately 2.5 mm in length) and unusually elongate. They cohere in packets, usually of approximately 6 to 15 ova, and are assiduously tended by the workers. Indeed, the nurses spend much time in the nest at rest with such packets held in the mandibles. Shortly before hatching, single eggs are detached from the packet, licked and tended individually, and commonly deposited separately on the nest floor. Immediately after hatching the larvae are separately attended and frequently carried about. We believe (though it is not yet proved) that for the first, and possibly the second, instar they are fed ingluvially by the nurses. Older larvae are given partially dissected arthropod prey in typical ponerine fashion, the fresh prey being commonly deposited on the ventral surface. The larvae develop rapidly through this stage. When about to spin, they are temporarily covered with earth in the typical ponerine manner. The cocoons of

[3]The authors wish to express their great appreciation to the National Geographic Society for its support of certain aspects of the 1969 field work in Brazil.