end of the nest arena and adding, about 20 cm away, part of the original nest material (rotting plant material) or an artificial nest constructed of aluminum foil and moist absorbent paper. In all cases the queen and some of the workers began immediately to roam about the arena and within minutes discovered the shelter. The queen remained, while the workers returned to the colony. Some began to transport brood to the new site, while others induced nestmates to move by pulling them on various of their appendages. The latter action induced workers to explore on their own. On 9 occasions adult transport was observed, a relatively uncommon event : the transporter grasped its nestmate by the head and lifted it so that its body was slung overhead and came to be oriented in the same direction as that of the transporter. All three age stages (shiny, partially encrusted, fully encrusted) participated in transport of brood and pulling of nestmates, but only the older, fully encrusted individuals were seen to engage in adult transport. The duration of the 3 emigrations lasted 40, 55, and 75 minutes respectively.

Nestmate recognition

In 3 experiments we introduced an alien worker into a laboratory nest. In each of these exchanges we observed mandible gaping by the host workers and in one instance a stinging motion, which however was not carried through.

In order to test more closely for nestmate recognition we marked individual workers from the two mature colonies with differently colored spots of enamel paint (Testor PLA©). For control we removed a worker from a nest, marked it in the same way, and returned it briefly to the same nest. For the experiment we removed a worker from the nest, held it briefly, and placed it in the other nest. Two such exchanges were conducted (with controls), one from nest A to nest B with a fully encrusted (older) wolker, and the other from nest B to nest A with a shiny (younger) worker. Again, the alien workers evoked gaping behavior and in one instance nipping on the gaster ; none of this was observed in the case of the controls. However, after 1-2 mins the aggression ceased, and the experimentals were eventually accepted as apparently full members by the adoptive colonies. They were later seen to assist in brood transport during a colony emigration, and 3 months later were still apparently behaving as ordinary colony members. We concluded that there is a colony-specific recognition, but one that is weak in its effects compared to that in many other ant species.

DISCUSSION

The *Basiceros* are even more sluggish and cryptically colored than *Smithistruma* and other dacetine ants, as well as the more closely related