object was encountered, the workers usually opened their slender, plier-shaped mandibles about 30 degrees and seized the prey without hesitation. A stinging motion followed immediately. When victims thrashed free at this point, the ants became much livelier, rushing back and forth over short distances in an attempt to seize the prey again. The venom was quite potent, taking effect from about 5 s to about a minute or somewhat longer. One centipede remained mostly paralyzed but still alive for a period of a full day.

The Basiceros evidently feed on a moderately wide range of small arthropods. We retrieved mostly consumed remains of two beetle larvae, one a possible cucujoid and another belonging to a different, unknown family (determined by Margaret THAYER), from the mandibles of a halfgrown larva when the third nest was first discovered. In the laboratory at La Selva we offered mixed sets of the following arthropods in 4 " cafeteria" experiments, in which the ants were allowed to choose prey from a variety available from the vicinity of their nests in the field: small snails (2 species), isopods, spiderlings (several families), phalangids, amblypygids, millipedes (several families), geophilomorph centipedes, entomobryomorph collembolans, campodeid and japygid diplurans, lepismatid thysanurans, hemipteran nymphs, zorapteran nymphs and adults, kalotermitid and nasutitermitine workers, earwig nymphs, cricket (grillid) nymphs, beetle larvae (3 families, including Ptilodactylidae), staphylinid and chrysomelid beetle adults, moth larvae and pupae (1 family), ant adults and brood (Camponotus sp.), and tabanid and chironomid fly adults. The ants readily accepted termite workers, a moth caterpillar, scarabaeid and elaterid-like beetle larvae, and centipedes. A zorapteran nymph was retrieved to the nest chamber, but its subsequent fate was not observed. The other organisms were consistently ignored. The ants appeared to accept termites more quickly than the other prey, but our records were too few and the conditions of the experiments too variable to permit a firm generalization. In the laboratory at Harvard the Basiceros colony thrived on Drosophila adults fed them as prey, rearing numerous brood over a period of 6 months.

Our findings are consistent with a single record by Weber (1950) of a B. singularis worker carrying a dead termite in Guyana during the day, and the discovery by Brown (1974) of 3 headless termites in the nest chambers of a B. singularis colony in northern Mato Grosso State, Brazil. Brown also induced the colony to feed on crushed housefly pupae in the laboratory, and the workers reared two eggs to a mid-larval stage during 6 months.

Division of labor

We found it convenient to recognize four stages in coloration and accumulated body deposits that were correlated with age and hence useful in the study of temporal division of labor (see fig. 2, 4).