conspicuous and appear to be much longer than those found in many other species. Although their function has not been determined, they may aid in grasping prey or brood. In the case of brood, this idea is an attractive one, because the workers commonly carry their larvae to the freshly captured prey, once the prey has been dragged into the nest. Analogous tubercles or teeth are present in other species of ants and are not restricted to the clypeus. They appear, for instance, on the labrum of the amblyoponine, *Apomyrma stygia* Brown, Gotwald, & Lévieux.

The stipites of *A. pluto* have strongly developed transverse stipital grooves. When the mouthparts are withdrawn, the labrum closes, and its distal margin fits snugly into these grooves. Together, then, the labrum and stipites securely close the oral cavity and protect the softer mouthpart components. The transverse stipital groove is well developed in the Dorylinae, Cerapachyinae, and Pseudomyrmecinae. However, it is not present in *A. pallipes,* which unlike *A. pluto,* possesses paraglossae. However, in most respects the mouthparts of *A. pluto* and *pallipes* are quite similar.

The workers of 1 colony sample of *A. pluto* (AA104), consisting of 2 workers and 1 queen, are smaller than other specimens examined. The 2 workers have total lengths of 5.66 and 5.79 mm, while the range for all other workers is 5.98–6.52 mm. The queen of this sample is 6.61 mm long and falls within the range for the other queens (6.43 and 6.78 mm). The lengths of the heads, alitrunks, and petioles of these 2 workers represent the lowest measurements in the ranges for the species, while the gaster lengths fall within the species range, although at the lower end. The eyes of these 2 workers are reduced and are represented by only a change in the pigmentation of the integument. They may well consist of a single facet. This reduction in eye size appears to be allometric. In all other respects, this colony sample conforms to those characteristics which distinguish this species. Evidence suggests that polymorphism is not well developed within the colonies examined, and this condition is true as well for other species in the genus (Brown 1960). There is little doubt that the colony of smaller individuals is the same species, but we have yet to explain why they are smaller.

Perhaps *A. pluto* is most interesting in its apparent conspicuousness. It is a moderately sized ant and is clearly a new species, but its cryptobiotic existence has seemingly hindered its discovery. It may be that other "conspicuous" species of *Amblyopone* remain to be discovered in the Ethiopian Region, and that their apparent absence from this Region may be a reflection more of collecting technique than of actual abundance.

BIOLOGY OF THE SPECIES

This species was discovered in the humid savannas of central Ivory Coast. Indeed, the distribution of this species is limited, so far as is known, to savannas that have not been burned for several years (Fig. 27). Neither foraging workers nor nests have been observed in those parts of the savanna burned annually.

Unlike other *Amblyopone* found in the same habitat (*A. muticum, A.* near *normandi,* also *Apomyrma stygia*), this species has not been found in the forest. However, like other species of the same genus, it is possible that it extends into the savanna from the neighboring forest, but its density, while modest (several nests per hectare), is at least higher in savanna.

The collected nests were situated at a mean depth of 20 cm in black clay soil with a thick cover of litter derived from several years' accumulation of grass. Microclimatic recordings showed that in this environment conditions (light, temperature, relative humidity, etc.) at soil level are like those found in the humus of gallery forests.

Adult males and females as well as sexual brood have been collected from nests during March and April. It is therefore probable that, as with *A. mutica,* the time of mating for the species is correlated with the beginning of the rainy season. No sexual forms of the species were collected at UV light, despite persistent UV collecting within its area of distribution.

It is impossible to determine times of foraging activity or the full extent of the foraging range for *A. pluto* or for the other species of Amblyoponini observed. The ants belonging to the genus *Amblyopone* never forage, from what we have been able to observe, on the surface of the ground, even on the humus of areas as well covered by vegetation as the unburned savanna. Australian *Amblyopone* sometimes come to the surface of the soil, but do not normally forage there (R. W. Taylor, personal communication; Brown 1960). There are no stones on the savanna that might serve to cover near-surface nests or nest fragments.

Isolated workers are encountered foraging at a depth of 15 cm or more in the ground. The radius of activity from the nest is significant; the workers have been observed foraging up to 6 m in a straight line from the nest. That these workers belonged to the colony under consideration was verified by observing the absence of reciprocal hostility when they were placed in the presence of workers from the nest.

Isolated wingless queens were found moving about in the soil several meters from the colony. It would not be astonishing to find that queens forage in this species, because ponerine foundress queens often do. Haskins and Haskins (1951) observed, in *A. australis* Erichson, that during rearing the queens continue, for a long time after nest foundation, to participate in provisioning the nest concurrently with the workers. Because the observations on *A. pluto* were carried out in March, i.e., during the species' reproductive period, it could be that the females collected were foundresses in search of a nesting site or practicing progressive provisioning (Wheeler 1932; Haskins and Enzmann 1938; Haskins and Haskins 1950, 1955; Le Masne and Bonavita 1969).

Prey were gathered in 2 of the 3 nests opened in