

The pupae were concentrated in chambers I - III and V indicating that these served as brood chambers. Larvae as well were concentrated in chambers I - III. The number of larvae was low and the absence of eggs unexpected. It is possible, although we feel improbable, that other chambers remained undiscovered.

Each chamber in the nest contained millipede eggs which appeared to constitute the exclusive diet of the *P. lygaria* colony at the time it was found. No other prey or prey debris were found. Chambers VII and VIII served to contain only booty. The presence of millipede eggs confirms Lévieux's (1972) observation that *P. subterranea* (i.e. *P. lygaria*) feeds primarily on millipedes. Other ants of the subfamily Ponerinae, to which *P. lygaria* belongs, are also known to prey on arthropod eggs. The eggs are often stored in the nests in large numbers, and species of the genera *Proceratium* and *Discothyrea* have specialized in egg predation (Brown 1957, 1958). *P. lygaria*, if not specialized as an egg predator, may at least have a dietary preference for millipede eggs. It is possible that the larger species of *Plectroctena* feed upon adult millipedes while the smaller species prey upon eggs or newly emerged young. Presently only the large species (*P. minor* Emery, *P. conjugata* Santschi, and *P. mandibularis* F. Smith) are known for certain to prey on the adults.

The foraging behavior of this colony was not observed, although Bolton (1974) reported that the workers of *Plectroctena* forage singly or in small groups of 2 or 3 individuals. Arnold (1915) noted that the workers of *P. mandibularis* forage singly.

### Summary

*P. lygaria*, a new species from West Africa, is the 17th member of its genus to be described and is closely related to *P. subterranea*.

Observations on the biology of *P. lygaria*, in the habitat and season in which the investigation occurred, may be summarized as follows:

1. The nest is relatively shallow in the soil and consists of numerous chambers, some of which are specialized to house brood and prey.
2. The developmental energies of the colony may be channeled at times to produce broods consisting primarily of reproductive individuals.
3. Colonies may be relatively large and contain in excess of 300 adults.
4. *P. lygaria* specialized primarily as a predator of millipedes, particularly of millipede eggs.

### Résumé

*P. lygaria*, nouvelle espèce de l'Afrique occidentale, dix-septième représentant du genre à être décrit est un proche parent de *P. subterranea*.

Les observations concernant la biologie de *P. lygaria*, au lieu et à l'époque de nos recherches, peuvent se résumer comme suit:

1. Le nid est relativement peu profond dans le sol, il comprend plusieurs