Table II. — Summary of the analysis of the social ethogram of *Aneuretus simoni*. The estimated repertory size, the 95 % confidence interval and sample coverage were calculated by fitting the observational data to a lognormal Poisson distribution.

Tableau II. — Résumé de l'analyse de l'éthogramme social chez *Aneuretus simoni*. La taille estimée du répertoire, l'intervalle de confiance 95 %, et champ d'application d'échantillon sont calculés en accord avec la méthode de FAGEN et GOLDMANN (1977).

Caste or subcaste	No. of acts observed	Observed repertory size	Estimated repertory size	95 % confidence interval	Sample coverage
Mature Minor Worker	3176	31	31.8	[29,34]	100 %
Callow Minor Worker	763	28	28.8	[25,30]	99,7 %
Major Worker	131	14	14.5	[13,15]	100 %
Queen	35	5	5.4	[5,6]	99.7 %

estimated repertory size is comparable to that of the worker caste of monomorphic *Leptothorax* species (Wilson and Fagen, 1974), and of the minor worker subcastes of *Zacryptocerus varians* (Wilson, 1976 a) and *Pheidole dentata* (Wilson, 1976 b).

Division of labor by physical caste

The worker caste of *A. simoni* is completely dimorphic (Wilson *et al.*, 1956). The primary morphological difference between the major and the minor is the major's proportionately larger and broader head, but the behavioral difference between *Aneuretus* majors and minors have not previously been studied. In seven queenright colonies collected, major workers ranged from only one to three in number per colony (1.7 ± 0.8, mean ± s.d.), whereas minor workers, ranging from 18 — 106 per colony (mean = 65.4 ± 28.7) comprised the majority of the worker caste and attended to the colony's labor requirements (Jayasuriya and Traniello, 1985).

The ethogram presented in *table I* shows that, consistent with results in other polymorphic species, *Aneuretus* majors have a more limited repertory (14 acts) than that of minor workers (31 acts).

The most prominent feature of the behavioral repertory of the major worker caste is the absence of brood care, a pattern similar to other completely dimorphic ant species of the more advanced subfamilies. However, unlike the major workers of other dimorphic ants,