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Spatio-temporal pattern of ants (Hymenoptera : Formicidae) in an oil palm ecosystem

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This study was conducted to identify the differences in abundance of ants and the spatio-temporal pattern in palm oil ecosystem in Endau Rompin, Pahang. Sampling was carried out for four consecutive months on three types of soil: clay, deep peat and shallow peat. Pitfall trapping was used as it is suitable because most of the Formicidae forage on the ground. A total of 3,968 individual ants were captured consisting 13 genera in four subfamilies. *Anoplolepis* were the most abundant with 1,692 individuals (45.75%) followed by *Pheidole* (862 individuals; 23.31%) and *Paratrechina* (228 individuals; 6.17%). In clay, *Anoplolepis* is the most abundant meanwhile in deep and shallow peat, *Pheidole* have the highest number of individuals compare to other genera. There were significant differences ($p < 0.05$) in the abundance of the eight genera which are *Anoplolepis*, *Oecophylla*, *Paratrechina*, *Odontomachus*, *Ponera*, *Crematogaster*, *Pheidole*, and *Tetramorium* in the interaction between soil, months and genus. In general, Subfamily Formicinae showed clustered pattern of distribution ($Ia > 1$) while, Subfamily Ponerinae, Myrmicinae and Aenictinae showed random distribution pattern ($Ia < 1$) in the sampling plots.