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Bioclimatological study on termite fauna of Iran

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ABSTRACT

Phenotype and genotype of populations are affected by ecological factors and are main components of the process of speciation. Therefore, bioclimatological studies are used in taxonomy researches. On the basis of these studies the range of distribution of insects and also the factors which influence their distribution can be discussed. Thus their possible distribution to other places could be forecasted. The bioclimatological study of termite fauna of Iran has been carried out using De Martanne's modified system of climatic classification. The climatic parameters used in this classification were obtained directly from data base bank of meteorology of irrigation Dept. (Collage of Agriculture, Tehran University) or obtained from equation which correlated these parameters to geographical coordinates (e.g. Long. Lat. and Elevation) for 82 site samples. So the main factors P (mean annual precipitation,), T (mean annual temperature)and m (mean of min. temperatures in the coldest month of the years) and finally the Aridity Index (I_A) were obtained for 82 sites. The plotting position of each region on modified De Martanne's climogram were plotted and as a result the ecological niches of the 20 species of termites were well identified. The importance of ecological niches in taxonomy of termites, specially differentiation of near species was discussed.
Key words: Bioclimatology, Termite, Population, Speciation.

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