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SOIL MICRO-ARTHOPODS POPULATION IN ALLUVIAL AND COASTAL SOIL IN MIDNAPORE DISTRICT WITH SPECIAL REFERENCE TO RELATIVE ABUNDANCE

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INTRODUCTION

The earliest attempt to study the soil fauna was made by Diem (1930) in the alpine soil. There after a series of workers have published on taxonomy, ecology of collembola, Acarina (mites) of different ecosystem in India and abroad viz. Brown (1912-13) Imms (1912), Mitra *et al.* (1977), Hazra and Choudhuri (1981, 83). Although, considerable works have so far been made on soil fauna of West Bengal in general (1-8) but very little is known as to the relative abundance of soil arthropods in relation to different types of soil. Soil salinity has becoming a worldwide problem causing significant losses of arable land. Investigations of the effect of salinity have mainly been concentrated on the physical and chemical changes brought about by excess salts in the soil (1, 2). However the effects of salinity on micro arthropods components of the soil have not been examined in details. Present investigation has been under taken to record the occurrence and proportionate distribution as adjudged from the analysis of relative abundance from different soil types experiencing different salinity condition.

KEY WORDS : *Micro arthropods, Salinity, Relative abundance.*

Characteristic of study area :

Nayachar Island lies on the river Hooghly opposite to the port of Haldia in Midnapore district. The island is spindle shaped with total area of about 29.38 sq km. The climate in this island is of subtropical type. For the plantation programme of the island mangrove plant selected were *Sonneratia* followed by *Avicenia marina*, *A. officinalis*, *Nipa fruticans*, *Exocoecaria* sp.,

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