Earthworm Diversity in Tripura- Present Status

ABSTRACT : The present paper reports on the occurrence of thirty eight species of earthworms based on the survey work conducted during 1997-1998 and 2006 onwards in Tripura. The study highlights the distribution, diversity and ecological requirements of different earthworm species from low land pastures, cow dung pits, sewage systems, rubber plantations, mixed forests and pineapple agro-ecosystem. Earthworms were collected by conventional digging (25x25x30 cm) and hand picking method and they were identified. Soil pH, temperature, moisture, organic carbon and texture from the habitat soil of the worms were analysed. A total of thirty eight species of earthworms belonging to fifteen genera and six families were recorded: Megascolecidae (*Metaphire posthuma, M.peguana, M.planata,M.houlleti, Lampito mauritii, Perionyx excavatus, P.macintoshi, Amynthus alexandri, Polypheretima elongata Kanchuria sumerianus, Kanchuria sp1. Kanchuria sp2 Nelloscolex burkilli,*), Octochaetidae (*Eutyphoeus gammiei, E.comillahanus, E.turaensis, E.scutarius, Eutyphoeus.sp, Eutyphoeus sp1. E.festivus, E.callosus, E.gigas, E.assamensis, Dichogaster modiglianii, D.bolaui, D.affinis, Octochaetona beatrix, Lennogaster yeicus, L. chittagongensis*), Moniligastridae (*Drawida nepalensis ,D.assamensis, Drawida sp. D.limella, D. papillifer papillifer*), Almidae (*Glyphidrilus spelaeotes, Glyphidrilus sp (*near *gangiticus)*) and Glossoscolecidae (*Pontoscolex corethrurus*), Ocnerodrilidae (*Gordiodrilus elegans)*. From the study it appeared that out of thirty eight species nine species were exotic and the rests are endemic. Most of the earthworm species preferred acidic soil, a moisture level of 10-40% and soil temperature of 22-28^{0}C. *Pontoscolex corethrurus* is the most dominant species in the rubber plantation and this species is present in all the sub-divisions surveyed. The family Octochaetidae had the largest number of species of which the genus *Eutyphoeus* was the most dominant group consisting ten species.

Key words: ***Earthworms, Distribution, Diversity, Ecological factors, Soil types, Habitat***