

COMMUNITY ANALYSIS OF NEMIC FAUNA AROUND THE RHIZOSPHERIC ZONE OF *MANGIFERA INDICA*

Harish Kumar and Heera Lal*

Deptt. of Zoology, J.V.College, Baraut, Distt. – Baghpat – 250611 (U.P.)

Email: hlbharti73@gmail.com

Received-09.08.2015, Revised-21.08.2015

Abstract: The plant Nematodes are microscopic animal and interact with other living and non-living components of soil environment for their energy requirement. Apart from the numerical superiority of nematodes, the species numbers are also unbelievable very high, close on the heels to that of insects. The latter; as is commonly known, make up nearly 80% or about 8,00,000 known species out of a total of a little over one million species of all groups of animals. The remaining 20% or about 2,00,000 species also include nematode species, that are known so far. (Jairajpuri, 1990). The study of population dynamics of all those types of nematodes. Parasitic, free living and predatory held on to analyse number of different nematodes at a definite distance. Plant parasitic and predatory nematodes found mostly in deep zone, around soft roots but more number of free-living nematodes present in 20-30 cm depth and take part in the decomposition of dead organic materials. Hence the choice of specific depth that taken in this study because-free-living found abundantly in 20-30 cm depth and concerned with the study of those types of nematodes population.

Keywords : Mango Orchard, Nemic Fauna

REFERENCES

- Barker, K.R., and Campell, C.L.** (1981). Sampling nematode population, pp 451-473. In : Plant Parasitic Nematodes, Vol. III (B.M., Zuckerman and R.A., Rohde eds.). Academic Press, New York, p. 508.
- Beare, M.H., et.al.,** (1992). Microbial and faunal interaction and effects on litter nitrogen and decomposition in agro-ecosystem. *Ecol. Monoger*; 62: 569-591.
- Brad Ford, M.A., Jones, T.H., Bardgett, R.D.,** (2002). Impact of soil faunal community composition on model grassland ecosystem. *Science*, 298 : 615-618.
- Chitwood, B.G., and Chitwood, M.B.,** (1950). An introduction to nematology. Monumental Printing, Baltimore.
- Cobb, N.A.,** (1918). Estimating the nemic population of soil. U.S. Dept. Agr. Bur. Plant Ind. Agr. Tech. Cri. 1:1 – 48.
- Flegg, J.J.M.,** (1968a). The occurrence and depth distribution of *Xiphinema* and *Longidorus* spp. in South Eastern England. *Nematologica*, 14 : 189-264.
- Jairajpuri, M.S.,** (1900). Taxonomy in environmental management and modern biology : A overview In : Taxonomy in environment and Biology (Ed. M.S. Jairajpuri). *Zool. Surv. India*, 1-14.
- Koen, H.,** (1966). The influence of seasonal variations on the vertical distribution of *Meloidogyne javanica* in sandy soils. *Nematologica*, 12 : 297-301.
- Malhotra, S.K., and Chaubey, A.K.,** (1990). Spatial nemic distribution patterns and environmental regulatory processes in nematology in India. In : *Ecosegregation in Parasitocoenosis* (S.K., Malhotra, ed), pp. 34-42.
- Mc. Sorley, R., Parradok, J.L., and Webber, S.G.,** (1981/1982). Plant parasitic nematodes associated with mango and relationship to tree condition. *Nematropical*. 11: 1-9.
- Noe, J.P., and Barker, K.R.,** (1985). Relation to with in field spatial variation of plant parasitic nematode population densities and edaphic factors. *Phytopathology*. 75 : 247-252.
- Overgood, N.C., and Neilson,** (1949). Studies on the soil microfauna-II. *Nature* *Jutl.* 2:1-131.
- Popovici, I.** (1984). Nematode abundance biomass and production in a beech forest ecosystem. *Pedobiologica*. 26 : 205-219.
- Wordle, D.A., and Yeates, G.W.,** (1993). The dual importance of competition and predation as regulatory forces in terrestrial ecosystem evidence from delomposens food web. *Ocologia*, 93 : 303-306.

*Corresponding Author