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Taxonomical Description of One Species of Soil Nematode Fauna in Bilara

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ABSTRACT

Cervidellus cervus N. Sp. is described and illustrated based on morphological, morphometric, and data. In this species robust body that tapers only slightly towards the front. Cuticle transversely striated only. Lip region about ½ as wide as mid body width. Labial probolae slender, fucate, "Y shaped", occasionally with a few branches. Cephalic probolae thin, flap like, inward pointing with plain or serrate cuticularized borders. Small species generally less than 0.5 mm long. All species are inhabitants of soil or humans and are probably microbivorous though nothing is known as to the nature of their food. Samples were collected from agriculture fields, in Bilara region. (Goodey, 1963).

Keywords: Nematodes, Soil, Family, genera, new, species, taxonomy.

INTRODUCTION:

Nematodes are among the most plentiful and boundless of all creatures possessing the soil, framing one of the significant gatherings of living creatures. These slim, dynamic, vermiform creatures are found in soil and roots as well as in crisp and salt water. They use straightforwardly or by implication, the living materials of plants as wellsprings of sustenance and regularly as habitat and locales for proliferation. These little worms are outfitted with a protrusible empty stylet which is pushed into plant tissues for getting nourishment after the disintegration of the cell substance.

MATERIAL AND METHODS:

Soil samples were collected from farming fields so as to examine the population dynamics of soil nematode. Some intriguing discoveries were noted during the investigation of Bilara. Soil samples were collected during the period for instance 2020-2021 under report. Soil samples around fundamental establishments of host plants were collected with the help of a showel from significance (5-15 cm) contingent on the moistness in the field. The soil collected in polythene packs and their open completions were suitably closed with versatile gatherings, brought to research center and put away in a cooler to avoid dissemination. Each relevant datum with respect to host, an area, etc were recorded at the hour of grouping Body estimations were taken for explicit species identification.

OBSERVATION:

Family: *Cephalobidae*

Genus: *Cervidellus*

Two female and two male nematodes were recoverd from soil around roots of rape seed (Brassica juncea) procured from Bilara, Jodhpur, and Rajasthan.s

Cervidellus cervus N.Sp.

Measurements:

Females (2): L = 0.70 mm, a = 17.45, b = 3.58
c = 11.32, v = 61.00

Males (2): L = 0.85 mm, a = 18.22
b = 4.12, c = 14.00

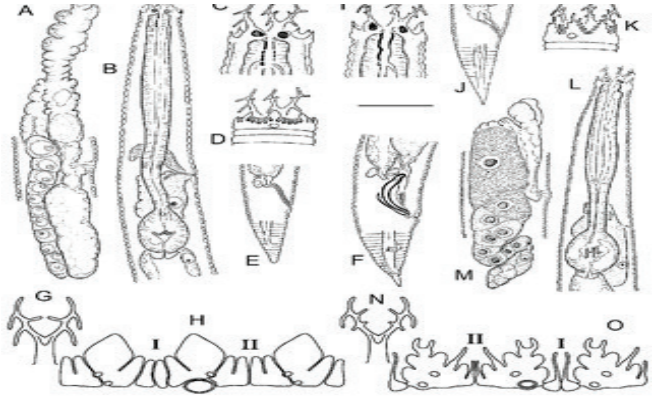

Fig.: *Cervidellus cervus N.Sp*

Robust body that tapers only slightly towards the front. The diameter at the base of the esophagus is approximately twice the width of the lip area. Cuticle with transverse strands at a distance of about 1.5 micron in the middle of the body, which are further apart anteriorly. Lateral field about 1/10 body width, bordered by two fine lines. Cephalic probolae forming a serrate, refactive fringe about the head, indented by the axis. Labial probolae bifurcate one half their length, Y shaped, with prongs each bearing three brnches.

Two branches project outwards and one inward. Promesorhabdions fused, equal in length toremainder of stoma. Stomatal rhabdions well delineated the meso, meta and telorhabdions equal in combined length to that of the prorhabdions. Corpus of esophagus slender, cylinderoid. Isthmus longer than body width. The nerve ring surrounds the posterior end of the body. The extensive pore is located at the anterior end of the isthmus. Hemizonid immediately behind the excretory pore, a long ring. Large lumen, well-celled intestine with tiny dark granules. Tail convex-conoid, acute with phasmid near the middle. Female gonad extending forward ¾ the distance to esophagus, then refleed to midway between vulva and rectum. Vulva small and slightly elevated.

Male, spicule slender, arcuate, slightly cephalated, one preanal and two postanal submedian papillae and one sub dorsal near terminus.

Type habitat : Soil around roots of Rape seed.

Type locality: Bilara region.

DESCRIPTION:

The nematodes were present in ten out of the twelve soil samples gathered from the damp site of rape seed field. They were present in normal range. The soil was sandy with pH 8.6, available calcium and potassium low, phosphorus and also nitrogen contents medium. Carbon was 0.1% and soil conductivity 0.24.

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Declaration: *We also declare that all ethical guidelines have been followed during this work and there is no conflict of interest among authors.*

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