

MATERIAL AND METHOD

The author has been associated with the general survey of the plant and soil nematodes of India which is being made by the Department of Zoology of this University from September, 1960 to September, 1965. During this survey the present author was able to collect a large variety of samples from plants including grasses, weeds, vegetables, crop-plants and fruit trees as well as jungle plantations. The major part of this collection is from U.P. and M.P.

Samples of roots and soil were collected by digging around the plant roots upto a depth of about 8 inches. These samples were put in polythene bags which were later sealed for checking evaporation and tagged with information regarding the name of the host and locality etc. The soil samples were processed for the recovery of nematodes by making their suspension in a bucket full of water and then screening it twice or thrice through sieves with meshes of 120 and 66 microns. The residue on both the screens was then washed under a running tap, and the clear nematode suspension was collected in a glass trough and examined for the nematodes under a stereoscopic microscope. The root samples were chopped into small pieces and sub-merged in water in glass troughs over night. The nematodes that left the roots were later collected, killed and processed for examination.

For the present study the nematodes were relaxed by gentle heat and fixed for at least 24 hours in Franklin's F.A. 4:10 (Formaline 10 parts, Acetic acid 10 parts and distilled water 80 parts). The worms thus fixed were processed gradually into dehydrated glycerine and

mounted in the same medium. Pieces of glass wool of adequate thickness were always placed between the slide and the cover glass to check the pressure on the specimens. En face studies were made by cutting the nematode head according to Basir's (1949) technique.

The measurements and sketches were made under camera lucida as suggested by Thorne (1961). The measurements of the nematodes are represented in the formula used by de Man (1934).