Study on the biodiversity of plant parasitic nematodes belonging to Trichodoridae, Thorne, 1935 in Tabriz area

Trichodorid nematodes are polyphagous and migratory ectoparasites of root of various plants especially perennial and woody plants. These nematodes feed on elongation zone of root tips and cause stubby root symptoms. Furthermore, these nematodes transmit a group of plant viruses (Tobraviruses) and cause more damage on infected plants. In order to identify plant parasitic nematodes belonging to Trichodoridae a total of 100 soil samples collected from rhizosphere of various plants in Tabriz area during different seasons of the year 2006. The samples were processed using Jenkins (1964) method to extract nematodes and transferred to anhydrous glycerin following De Grisse (1969). method Permanent microscopic slides were prepared from the nematodes and studied based on morphological, morphometrical and anatomical characters using light microscope BX-41 provided by a drawing tube. The results were compared with original as well as other descriptions of the identified species. Finally, three species namely Trichodorus orientalis, Trichodorus arasbaranensis and Paratrichodorus tunisiensis were identified. The two species T. orientalis and P. tunisiensis have already been reported from Iran and other countries by different researchers. T. arasbaranensis is reported for the first time from Iran and it is a new species for plant parasitic nematodes fauna of the world.