NEMATODE ASSEMBLAGES OF A RAPESEED FIELD IN THE VICINITY OF PLOVDIV DISTRICT

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Terrestrial nematodes are among the key groups organisms in soil and contribute significantly to its functioning. In the frame of STACCATO project they will be used as bioindicators for assessing ecosystem functions/services in rapeseed (*Brassica napus* L.) related to the different share of surrounding semi-natural grasslands. Here we present some preliminary results about nematode diversity in one out of the 11 selected rape fields located in the vicinity of Kostievo village. Multiple core samples were collected twice – during the flowering and before harvesting of the rape at three distance from the field edge. Nematodes were isolated from 100 g of soil by decanting and sieving method, fixed, dehydrated and mounted on permanent slides. Taxonomic structure and spatial distribution of nematode assemblages were evaluated and discussed. Overall 56 genera were identified, nematode diversity and abundance being lower before harvesting. The most abundant genera were *Filenchus*, *Aporcelaimellus* and *Irantylenchus*. Distribution of trophic groups was similar for both sampling periods: overall dominance of plant parasitic nematodes which were the most diverse group (22 genera), followed by omnivorous nematodes (9 genera) and bacterial feeders (12 genera); fungal feeders (7 genera) were more abundant during the flowering period; predatory nematodes were represented by 5 genera occurring in very low numbers. Plant parasitic nematodes were represented by five families: Pratylenchidae, Hoplolaimidae, Dolichodoridae, Belondiridae and Tylenchidae. The genera *Sicaguttur* and *Pseudaulolaimus* (*P. anchilocaudatus*) represent new geographical records for Bulgaria.

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