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VERTICAL AND HORIZONTAL DISTRIBUTION OF THE NEMATODES ASSOCIATED WITH*MATRICARIA CHAMOMILLA* AND *JASMINUM GRANDIFLORUM* UNDER FLOOD IRRIGATION SYSTEM IN EGYPT

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Abstract

Under flood irrigation regime, the vertical and horizontal distributions of the coinhabitant nematodes associated with chamomile and jasmine were investigated. Generally, the highest population density of nematodes viz. *Helicotylenchus* sp., *Tylenchorhynchus* sp., *R. reniformis* and *Tylenchus* sp., on chamomile were concentrated at soil depth layers of 0-15 cm and 16-30 cm at the horizontal distance of just beneath the plant base (zero cm) and 5 cm from the plant stem. Also, the highest density of *R. reniformis, Tylenchus* sp., and *M. incognita* were found at soil depth layers of 0-15 cm and 16-30 cm at the horizontal distances of zero cm and 30 cm from the jasmine trunk. However, the highest population of *Helicotylenchus* sp., on jasmine trees was found at the same two soil depths at only a distance just beneath the plant trunk. These sites should be considered as the standard or best sampling points for such co-inhabiting nematodes.