ISBN: 978-85-66836-25-7

OCCURRENCE OF *Helicotylenchus dihystera* AND *Criconemella* sp. IN SUGARCANE CULTIVARS UNDER IRRIGATION SYSTEMS. Cultivares de cana-de-açúcar submetidas a regimes hídricos e ocorrência de *Helicotylenchus dihystera* e *Criconemella* sp. Guireli, G.H.[1]; Alves, T.L.[1,2]; Nascimento, D.D.[1,3]; Ferreira Junior, R.[1]; Barbosa, J.A.[1,2]; Dalri, A.B.[1]; Zanini, J.R.[1]; Soares, P.L.M.[1]. [1]LabNema (Laboratório de Nematologia) UNESP. [2]PPG em Agronomia (Ciência do Solo), UNESP. [3]PPG em Agronomia (Entomologia Agrícola), UNESP. E-mail: gustavoguireli10@gmail.com Apoio: Capes 001.

Sugarcane suffers greatly from nematode attacks. In this study, we evaluated the occurrence of *Helicotylenchus dihystera* and *Criconemella* sp. in sugarcane cultivars under different irrigation regimes. The experiment was conducted on the experimental farm of UNESP (Jaboticabal, SP). Nematode analyses were performed at LabNema. A partially balanced incomplete block design was used, with 12 blocks and two factors: sugarcane cultivars (CTC 4, IACSP93-3046, RB86-7515, IACSP95-5000, and IAC91-1099) and irrigation regimes (rainfed, deficit irrigation, and supplemental irrigation). Nematode analyses in soil and root samples were performed 90 days after the third ratoon. Data were submitted to analysis of variance followed by Student's *t*-test using SAS®. In soil samples, spiral nematode (*H. dihystera*) populations were highest in non-irrigated RB86-7515. In root samples, *H. dihystera* populations were highest in RB86-7515, regardless of irrigation regime, and lowest in crops under supplemental irrigation. *Criconemella* sp. populations were higher in soil samples under CTC 4 and IACSP93-3046 cultivation and under rainfed conditions. In root samples, the highest population of *Criconemella* sp. was observed in CTC 4 under deficit irrigation. Lack of irrigation favored multiplication of both nematodes. RB86-7515 and CTC 4 had the highest populations of *H. dihystera* and *Criconemella* sp., respectively.