

MORPHOMETRIC CHANGES IN *MELOIDOGYNE INCOGNITA* ROOT-KNOT NEMATODE UNDER VARYING LEVELS OF MOISTURE STRESS

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Abstract

Survival of second stage juveniles of *Meloidogyne incognita* root-knot nematode, at five moisture levels ranging from 0.08 to 32.4 bars in sandy loam soil for up to 900 days in absence of host, showed a decline in population during initial period of 180 days than subsequent period to 900 days. It indicates that once the nematodes entered into anhydrobiotic state there was no significant difference due to variation in moisture stress. The body length 'a' value and ratio of dorsal/ventral sides of annules were consistently correlated to the soil moisture tension. The nematode body showed longitudinal contraction under moisture stress. The dorsal sides of annules in nematodes kept at higher moisture tension were wider than the ventral annules due to ventral coiling of body and compaction of the annules. The dorsal annules were shallow than the ventral ones.