EFFECT OF THE RATE OF SOIL MOISTURE LOSS ON THE SURVIVAL, INFECTIVITY AND DEVELOPMENT OF ROTYLENCHULUS RENIFORMIS, THE RENIFORM NEMATODE

M. SEHGAL AND H.S. GAUR

Division of Nematology, Indian Agricultural Research Institute, New Delhi-110012, India.

Abstract

The rate of moisture loss from soil was positively correlated with rate of development, infectivity, and mortality of *Rotylenchulus reniformis*. Soil moisture tension of 3.99, 25.6, 39.2, and 48.0 bars corresponded to *R. reniformis* mortalities of 32, 47, 52, and 76% respectively. Nematode mortality increased with increasing rates of soil drying. Infectivity of *R. reniformis* on green-gram (*Vigna radiate* cv Pusa 105) was also decreased from 49% in fresh samples to 18% in soil layers 3 cm thick. Increasing soil moisture tension also aused a delay of 5-6 days in female oviposition.