Studies on life cycle of root-knot nematode, *Meloidogyne incognita* on fennel (*Foeniculum vulgare* Mill.)

Kailash Kumar, M.K. Sharma, B.S. Chandrawat, A.S. Srivastava and Garima Thagaria

Received March 25, 2016 and Accepted May 28, 2016

ABSTRACT: Life cycle studies revealed that J_2 of root-knot nematode, M. *incognita* was the infective stage and penetration into the zone of root elongation was recorded after 12 h of inoculation. After penetration, second moult was observed on the 7^{th} day of inoculation. The J_3 and J_4 stage were observed on 11^{th} and 15^{th} day of inoculation, respectively. Adult and egg laying females were observed on 22^{nd} and 25^{th} day of inoculation, respectively. Thus, the life cycle of root-knot nematode, M. *incognita* was completed within 25 days of inoculation on fennel during August-September, 2014 at a temperature range of 23.5^{0} C- 32.4^{0} C under Udaipur conditions.

Key Words: Root-knot nematode, Meloidogyne incognita, life cycle, fennel.