

To assess the influence of different bio-pesticides on growth and yield of okra plants infested with root-knot nematode *in vitro* and *in vivo* conditions

B.K. Dwivedi, Ashutosh Tripathi, Himanshu Dwivedi and Soumya

Received January 17, 2017 and Accepted March 15, 2017

ABSTRACT : Pratapgarh district is well known for better production of okra and farmers obtain good returns on their sale in market but due to infection of most devastating root-knot nematode, *Meloidogyne incognita* its production decreased to very low level, hence a field survey was conducted in 12 growing villages of Pratapgarh district during the year 2014-15 for assessment of population and severity of root-knot nematode and other plant parasitic nematodes and out of 593 inspected fields, 471 fields were found with heavy infestation. It was found that 69-87% fields were infested with root-knot nematodes and other plant parasitic nematodes, while the 56-76% yield losses existed in the okra crops in their fields but farmers were unaware about their field infestation and losses caused by nematodes. The present studies were carried out at Bioved Research Farm to assess the effect of different botanical pesticides against root-knot nematodes viz. Bionema @38 kg /ha and @ 50 kg/ha, Achook, Nemani, Neemark and Nimbecidine at the concentration of 5 and 10% and Control 0 concentrations in the lab and field conditions. It was observed that the number of egg masses and number of galls reduced very significantly and yield has also been increased to 41% and 32% in lab and field conditions, respectively as compared to control.

Key Words : Okra, root-knot nematode, bio-active products, botanical pesticide, bionema.