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Influence of *Bacillus* spp. on attraction and penetration of *Meloidogyne incognita* towards tomato root

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ABSTRACT : Experiments were conducted to study the behavioural mechanism of ten different indigenous isolates of endophytic *Bacillus* spp. on root knot nematode, *M. incognita*. The results of the study on attraction and penetration of *M. incognita* towards roots of tomato *in vitro* and under plant growth chamber respectively indicated their effectiveness to reduce the rate of attraction and penetration of nematodes. The highest per cent reduction in attraction and penetration of *M. incognita* was registered by the isolate TSB4 of *B. weihenstephanensis*. Its effect of per cent reduction in attraction is getting decreased with increase in the period of exposure. Similarly the per cent reduction in root penetration by second stage juveniles of *M. incognita* showed inverse relationship with increase in days after inoculation. In this regard the effect of other isolates of *Bacillus* spp. is in the order of *B. cereus* (CLB2D), *B. subtilis* (TSB5), *B. cereus* (TSB4D), *B. licheniformis* (TSB3), *B. tequilensis* (TLB2), *B. weihenstephanensis* (CLB3), *B. subtilis* (TLBRE1) and *B. thuringiensis* (TLBRE2).

Key Words: Attraction, *Bacillus* spp., behavioural mechanism, *Meloidogyne incognita* penetration.