Current Nematology, **25**(1,2) : 11–19, 2014

In vitro screening of indigenous isolates of *Bacillus* spp., against *Meloidogyne incognita* and *Fusarium oxysporum f.sp. lycopersici*

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Received July 7, 2014 and Accepted October 3, 2014

ABSTRACT: Ten different indigenous isolates of endophytic *Bacillus* spp. collected from tomato and chilli grown in Tamil Nadu, India were screened *in vitro* for their influence on *M. incognita* and *Fusarium oxysporum* f.sp.*lycopersici*. All the isolates had effect to inhibit egg hatching and to cause mortality of juveniles of *M.incognita*, to arrest mycelial growth and development of *Fusarium oxysporum* f.sp.*lycopersici* and thereby proved their antinemic and antifungal property. The antimicrobial effect of culture filtrates of different ten isolates of *Bacillus* spp. showed positive correlation with their concentration and time of exposure. Among the ten isolates, *B. weihenstephanensis* (TSB4) is ranking first and it was followed by *B. cereus* (CLB2D), *B.licheniformis* (TSB3), *B. weihenstephanensis* (CLB3), *B.tequilensis* (TLB2) and *B. cereus* (CLB2) in this regard.

Key Words: Antifungal, antinemic, *Fusarium oxysporum* f.sp.*lycopersici*, Isolates, *Meloidogyne incognita*.