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Isolation and identification of indigenous *Bacillus* spp. associated with vegetables grown in Tamil Nadu, India

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ABSTRACT : In an attempt to identify indigenous isolates of endophytes effective against root knot nematode, *Meloidogyne incognita*, fungus *Fusarium oxysporum* f.sp. *lycopersici* and their complex disease twenty five isolates were collected from different plant parts of vegetables grown in Tamil Nadu, India. Ten isolates collected from stem and leaves of tomato and leaves of chilli were identified as genus *Bacillus* based on morphological and cultural characters besides biochemical tests and confirmed through molecular characterization. Further the partial sequencing of the ten isolates of genus *Bacillus* confirmed their species identify as *B. weihenstephanensis, B. cereus, B. licheniformis, B. subtilis, B. tequilensis* and *B. thuringiensis*.

Key Words : Antimicrobial property, *Bacillus* spp, Endophytic, isolation, pour plate technique.