

Rhizobacterium Bacillus cereus induces root formation of pepper (*Piper nigrum* L.) stem cuttings

ABSTRACT

Rhizobacteria have been widely reported with beneficial properties, able to promote growth and yield of various agricultural crops. In the present study, two strains of rhizobacterium *Bacillus cereus* were tested on its ability to induce and elongate roots of pepper stem cuttings after inoculation. Results showed that *B. cereus* UPMLH24 inoculation on fresh pepper stem cuttings stimulated root number (55% increase over control), length of longest root (25% increase over control), total root length (87% increase over control), root fresh weight (28% increase over control) and root dry weight (112% increase over control). Present study recommends *Bacillus cereus* UPMLH24 as a potential candidate in a formulation of a biostimulant for organic and sustainable nursery for pepper production.

Keyword: Inoculation; *Piper nigrum*; Rhizobacteria; Root induction; Stem cutting