

**USE OF CRUSTACEAN CHITIN AND PLANT GROWTH
PROMOTING BACTERIA FOR THE CONTROL OF
MELOIDOGYNE JAVANICA ROOT KNOT
NEMATODE IN CHICKPEA**

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Abstract

Soil amendment with shrimp, prawn, crab chitin @ 0.1% w/w or crab powder @0.5 g/100 g soil significantly ($p<0.05$) reduced infection of *Meloidogyne javanica* on chickpea. Shrimp or prawn powder @ 1% was phytotoxic. Plant growth promoting bacteria *Pseudomonas aeruginosa* or *Bacillus subtilis* also significantly reduced gall formation when used alone or with crustacean chitin. Greater plant height and maximum fresh weight of shoot was produced by *P. aeruginosa* respectively used with shrimp chitin and crab powder.