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[1]孙华,段玉玺,陈立杰,等.大豆根际促生菌Sneb207对不同种类线虫毒性的研究[J].大豆科学,2009,28(04):683-686.
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摘要: 从大豆根瘤中分离到1株根际促生菌Sneb207, 经鉴定为巨大芽孢杆菌 (Bacillus megaterium)。室内测定结果表明: 其发酵产物对豆苗生长促生效果显著, 发酵液灭菌后仍具有促生活性, 具有广泛的应用价值。用该菌发酵液测定了对各种线虫的作用, 结果表明毒力作用具有差异, 大小顺序分别为大豆胞囊线虫、北方根结线虫、水稻干尖线虫和腐烂茎线虫。不同浓度发酵液对大豆胞囊线虫均有较好的防治作用, 与无菌水对照处理有显著差异。说明细菌菌株Sneb207是控制大豆胞囊线虫病且促进大豆生长的有效因子。

Abstract: Strain Sneb207 was isolated from soybean nodule and identified as Bacillus megaterium. It is proved the fermentation filtrate, even the sterilized fermentation filtrate of Sneb207 could promote soybean seedlings growth significantly. The virulence effect of Sneb207 fermentation filtrate to different nematodes was tested. The result indicated Sneb207 had poisonous effect to nematodes. And significant virulence to different nematodes was detected, the sequence of virulence from high to lower was Heterodera glycines, Meloidogyne hapla, Aphelenchoides besseyi, Ditylenchus destructor. The virulence of different concentrations of Sneb207 fermentation filtrate to Heterodera glycines was also tested. It proved bacteria Sneb207 was an effective biological agent to control soybean cyst nematode (SCN) and promote soybean growth.

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