

植物保护科学

葡甘聚糖等碳源对魔芋软腐病病原菌生长的影响

吴金平^{1,2}, 罗坤³, 宋志红¹, 刁英², 顾玉成¹, 胡中立²

1湖北省农业科学院经济作物研究所, 武汉430064; 2武汉大学生命科学院, 武汉430072; 3湖北省农业厅, 武汉430070

摘要:

魔芋软腐病主要由胡萝卜软腐欧文氏菌胡萝卜软腐亚种(*Erwinia carotovora* subsp. *carotovora*, E.c.c.)和菊欧文氏杆菌(*Erwinia chrysanthemi*, E.ch.)引起, 本研究通过稀释平板计数法, 明确了葡萄糖、淀粉、甘油、甘露醇、蔗糖、葡甘聚糖、麦芽糖这7种碳源对魔芋软腐病病菌两个亚种生长的影响。结果表明, 这两个亚种都能很好的利用蔗糖, 且在清水生长情况与在含魔芋粉、淀粉的培养液中生长情况之间没有显著差异, 但在葡萄糖培养液中生长情况还没有清水的好。

关键词: 碳源 软腐病原菌 魔芋

Effects of carbon source for glucomannan and so on for the growth of the soft rot pathogens in *Amorphophallus konjac*

Abstract:

Soft rot in *Amorphophallus konjac* was caused by *Erwinia carotovora* subsp. *carotovora* (E.c.c.) and *Erwinia chrysanthemi* (E.ch.). This study through the conventional plate count method knew that the effects for seven kinds of carbon sources (glucose, starch, glycerin, mannitol, sugar, glucomannan and maltose) on the growth of the two subspecies of soft rot bacteria in *Amorphophallus konjac*. The results showed that the two subspecies can be a very good use of sucrose, and there was no significant difference between growth in water and the growth medium in konjak glucomannan or starch, but the growth medium in glucose has not good water.

Keywords: carbon source soft rot pathogens *Amorphophallus konjac*

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通讯作者: 顾玉成

作者简介:

作者Email: gych119@yahoo.com.cn

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