植物保护

复合菌剂防治马铃薯青枯病研究[*]

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摘要　通过室内生防菌株的亲合性、抑菌研究,筛选出复合菌剂1(C_3:Xa以1:1混配)和复合菌剂2(Ynb01:1J'以5:1混配),表现抑菌效果增强、稳定的2组生防制剂。温室试验中,复合菌剂马铃薯青枯病的防治效果高于各自复配的单一菌株。田间小区防效试验表明复合菌剂2防治效果最为显著,平均防效为83.3%,高于单菌剂Ynb01,1J',C_3,Xa和复合菌剂1及参试药剂3%克菌康WP,其防治效果分别为68.5%,54.3%,32%,39%,41.5%,31.6%。

关键词　马铃薯　青枯病菌　复合菌剂　灌根法　防治效果

分类号　S 435.32

Biological Control of Potato Bacterial Blight by Combining Bacterial Agents

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Abstract

 Different strains with complementary biocontrol activities were selected and combinations of biocontrol strains for enhance control effects of bacterial blight of potato were conducted in Greenhouse and in field test. The results showed combination of C_3:Xa(1:1)and Ynb01:1J'(5:1) was demonstrated to enhance suppression of pathogen of *Ralstonia solanacearum*. Inoculation of potato with mixture biocontrol agents significantly decreased disease severity. The disease control effect in the combined treatment was significantly higher than that achieved by single strain treatments, among them mixture 2 was better than other biocontrol agents, not only in pot experiments but also in field plot test. The control effect was higher than individual the Ynb01,1J',C_3,Xa,mixture C_3:Xa and the medicament 3% kejunkang wettable powder agent, their average disease control efficiencies were 68.5%,54.3 %,32%,39%,41.5%,and 31.6%,respectively.

Key words　potato　*Ralstonia solanacearum*　mixture　root-drenching method control effect

DOI: