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作物遗传育种·生物技术

云南水稻品种对水稻白叶枯病的抗性遗传研究*

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摘要 对水稻白叶枯抗性较好的品种（IR66897B,Bg90-2,PSBRC28,滇屯502）和感病品种（大粒粳24号,粳香2号,南29,IRBB17）进行孕穗期接种；与已知抗性基因的鉴别品种比较,可以看出滇屯502可能携带*xa*5,*xa*13,*Xa*21抗病基因。并对5个杂交组合的4个抗病亲本进行抗性遗传分析,结果表明抗病品种滇屯502对Y5菌株的抗性是由一对显性基因控制的,抗病品种IR66897B对18号和Y3号菌株的抗性分别由一对隐性基因和两对隐性基因控制的,抗病品种Bg90-2对Y11菌株的抗性是由两对显性基因控制的,抗病品种PSBRC28对Y11菌株的抗性是由一对显性基因控制的。

关键词 水稻品种； 白叶枯病； 抗性基因

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Study on the Genetic Resistance of Rice Varieties to Bacterial Blight in Yunnan

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Abstract

The resistant rice cultivars（IR66897B,Bg90-2,PSBRC28 and Diantun502）and the susceptible rice cultivars（Dalijing24,Jingxiang2,Nan29 and IRBB17）were inoculated at the booting stage. The rice cultivars Diantun502 might carry *xa*5,*xa*13 and *Xa*21 resistance gene,compared with the resistance characteriztics of different varieties.Genetic studies on the resistance to bacterial blight in 4 parental rice cultivars,the results revealed that the resistance of IR66897B to strain No.18 and Y3 isolate of Xoo were respectively controlled by a single recessive gene and two recessive genes.The resistance of Bg90-2 to Y11 was controlled by two dominant genes,Diantun502 to Y5 and PSBRC28 to Y11 by one dominant gene,respectively.

Key words rice cultivars bacterial leaf blight resistance gene

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