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研究论文

水杨酸诱导烟草基因表达cDNA文库的构建及初步分析

李文正[1] ，董霞[2]，黄夸克[2]，陈学军[1]

1. 云南省烟草科学研究所，云南 玉溪 653100；2. 云南农业大学，云南 昆明650201

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摘要　利用水杨酸（SA）诱导烟草抗病相关基因表达，以此为目标样本，以清水喷施为对照样本，进行抑制差减杂交，构建烟草抗病基因表达文库。结果显示，插入片段主要集中在200－500bp之间。随机挑选12个克隆进行测序，结果有7条与已知的系统获得性抗病基因同源，1条与病程相关蛋白PR1a同源，1条与光系统II的促氧蛋白一个亚基有较高同源性，1条与水通道蛋白基因（aquaporin 1）同源， 1条与ert13基因有关，1条未找到同源序列，是新的cDNA片段。

关键词　水杨酸；cDNA文库；烟草

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Construction of cDNA Library and Analysis of the SA–Stimulated Tobacco

LI Wen–zheng[1]，DONG Xia[2]，Huang Kua–ke[2]，CHENG Xue–jun[1]

1.Yunnan Tobacco Research Institute, Yuxi 653100，China;
2.Yunnan Agricultural University, Kunming 650201, China

Abstract

The SSH library of differently expressed cDNA was constructed, in which the tobacco with salicylic acid stimulated served as the tester, and one with water sprayed as the control. Analysis showed that most of the inserted fragments were 200~500bp. Twelve clones were selected randomly and sequenced. The BLASTN homology analysis on GenBank revealed that seven clones had homology with tobacco resistance genes, one clone was homologous with PR1a, other three were homologous with oxygen–evolving protein, aquaporin 1 and ert13 gene, only one was a new cDNA with no homologous sequence.

Key words SA cDNA Library Tobacco

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通讯作者