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[1]申宏波,胡志凤,丁俊杰,等.Harpins诱导苯丙氨酸解氨酶(PAL)活性防治大豆疫霉根腐病研究[J].大豆科学,2011,30(03):526-528.[doi:10.11861/j.issn.1000-9841.2011.03.0526]
SHEN Hong-bo,HU Zhi-feng,DING Jun-jie,et al.Harpins Protein Alleviate Phytophthora megasperma by Adjusting PAL Enzyme Activity in Soybean[J].Soybean Science,2011,30(03):526-528.[doi:10.11861/j.issn.1000-9841.2011.03.0526]
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# Harpins诱导苯丙氨酸解氨酶(PAL)活性防治大豆疫霉根腐病研究

《大豆科学》 [ISSN:1000-9841 /CN:23-1227/S ] 卷： 第30卷 期数： 2011年03期 页码： 526-528 栏目：
出版日期： 2011-06-25

Title: Harpins Protein Alleviate Phytophthora megasperma by Adjusting PAL Enzyme Activity in Soybean

文章编号： 1000-9841(2011)-0526-03

作者： 申宏波[1] (KeySearch.aspx?type=Name&Sel=申宏波)； 胡志凤[1] (KeySearch.aspx?type=Name&Sel=胡志凤)； 丁俊杰[2] (KeySearch.aspx?type=Name&Sel=丁俊杰)； 于永梅[1] (KeySearch.aspx?type=Name&Sel=于永梅)； 顾鑫[2] (KeySearch.aspx?type=Name&Sel=顾鑫)； 杨晓贺[2] (KeySearch.aspx?type=Name&Sel=杨晓贺)
1.黑龙江农业职业技术学院，黑龙江 佳木斯 154007；
2.农业部佳木斯作物有害生物科学观测实验站/黑龙江省农业科学院佳木斯分院，黑龙江 佳木斯154007

Author(s): SHEN Hong-bo[1] (KeySearch.aspx?type=Name&Sel=SHEN Hong-bo)； HU Zhi-feng[1] (KeySearch.aspx?type=Name&Sel=HU Zhi-feng)； DING Jun-jie[2] (KeySearch.aspx?type=Name&Sel=DING Jun-jie)； YU Yong-mei[1] (KeySearch.aspx?type=Name&Sel=YU Yong-mei)； GU Xin[2] (KeySearch.aspx?type=Name&Sel=GU Xin)； YANG Xiao-he[2] (KeySearch.aspx?type=Name&Sel=YANG Xiao-he)
1.Heilongjiang Agricultural Vocational and Technical College, Jiamusi 154007;
2.Ministry of Agriculture, Harmful Biology of Crop Scientific Monitoring Station Jiamusi Experiment Station/Jiamusi Branch, Heilongjiang Academy of Agricultural Sciences, Jiamusi 154007,Heilongjiang, China

关键词： 大豆 (KeySearch.aspx?type=KeyWord&Sel=大豆)； 疫霉根腐病 (KeySearch.aspx?type=KeyWord&Sel=疫霉根腐病)； Harpins蛋白 (KeySearch.aspx?type=KeyWord&Sel=Harpins蛋白)； PAL酶 (KeySearch.aspx?type=KeyWord&Sel=PAL酶)

Keywords: Soybean (KeySearch.aspx?type=KeyWord&Sel=Soybean)； Phytophthora megasperma (KeySearch.aspx?type=KeyWord&Sel=Phytophthora megasperma)； Harpins protein (KeySearch.aspx?type=KeyWord&Sel=Harpins protein)； phenylalnine ammonialyase (PAL) (KeySearch.aspx?type=KeyWord&Sel=phenylalnine ammonialyase (PAL))

分类号： S565.1

DOI: 10.11861/j.issn.1000-9841.2011.03.0526 (http://dx.doi.org/10.11861/j.issn.1000-9841.2011.03.0526)

文献标志码： A

摘要： 为明确Harpins蛋白对大豆疫霉根腐病的抗病机制，对抗感不同大豆品种幼苗喷施Harpins蛋白，并测定喷施后120 h内大豆根系中苯丙氨酸解氨酶(PAL)的动态变化。结果表明：大豆喷施harpins蛋白后，根中PAL活性较对照增加，其中感病类型品种增加幅度较大；在喷施Harpins蛋白后120 h内，感病品种的PAL活性呈先增加后降低的趋势,并于喷施后72 h达到峰值，而抗病品种的PAL活性呈缓慢增加趋势。

Abstract: The soybean resistance to Phytophthora megasperma could be significantly improved by spraying Harpins protein. In order to make clear the resistance mechanism of Harpins protein to Phytophthora megasperma, we sprayed Harpins protein on soybean seedling of different resistance soybean varieties, and measured the dynamic changes of phenylalnine ammonialyase (PAL) in soybean root after spraying within 120 hours later. The results showed that Harpins protein increased PAL activities of tested varieties at 72 h after spraying, with those in susceptible ones significantly higher than resistant ones. For susceptible varieties, PAL activity showed increasing-and-then-decreasing trend and peaked at 72 h after spraying Harpins protein; while the PAL activity showed slowly increasing trend in susceptible varieties.

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**备注/Memo** 基金项目：黑龙江省教育厅高职高专院校科研资助项目(11555059)；全国农业技术推广与服务中心品种安全性监测项目（2010203）。

第一作者简介：申宏波（1974-），女，副教授，主要从事大豆病害研究。E-mail：shenhongbo708@126.com。
通讯作者：丁俊杰（1974-），男，博士，副研究员，主要从事大豆病虫害研究。E-mail：me999@126.com。

更新日期/Last Update: 2014-09-12