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## 生物种衣剂防治大豆胞囊线虫药效研究

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作者: 杜春梅<sup>1</sup> (KeySearch.aspx?type=Name&Sel=杜春梅); 李海燕<sup>2</sup> (KeySearch.aspx?type=Name&Sel=李海燕)<sup>4</sup> (KeySearch.aspx?type=Name&Sel=4</sup>); 李晓明<sup>1</sup> (KeySearch.aspx?type=Name&Sel=李晓明)<sup>3</sup> (KeySearch.aspx?type=Name&Sel=3</sup>); 王彦杰<sup>2</sup> (KeySearch.aspx?type=Name&Sel=王彦杰); 刘惕若<sup>2</sup> (KeySearch.aspx?type=Name&Sel=刘惕若); 平文祥<sup>1</sup> (KeySearch.aspx?type=Name&Sel=平文祥)

1. 教育部农业微生物工程技术研究中心, 微生物学黑龙江省高校重点实验室, 黑龙江大学 生命科学学院, 黑龙江 哈尔滨 150080;
2. 黑龙江八一农垦大学 植物科技学院, 黑龙江 大庆163319;
3. 黑龙江省农业科学院 齐齐哈尔分院, 黑龙江 齐齐哈尔 161000; 4. 沈阳农业大学 植物保护学院, 辽宁 沈阳110161

Author(s): DU Chun-mei<sup>1</sup> (KeySearch.aspx?type=Name&Sel=DU Chun-mei); LI Hai-Yan<sup>2</sup> (KeySearch.aspx?type=Name&Sel=LI Hai-Yan)<sup>4</sup> (KeySearch.aspx?type=Name&Sel=4</sup>); LI Xiao-ming<sup>1</sup> (KeySearch.aspx?type=Name&Sel=LI Xiao-ming)<sup>3</sup> (KeySearch.aspx?type=Name&Sel=3</sup>); WANG Yan-jie<sup>2</sup> (KeySearch.aspx?type=Name&Sel=WANG Yan-jie); LIU Ti-ruo<sup>2</sup> (KeySearch.aspx?type=Name&Sel=LIU Ti-ruo); PING Wen-xiang<sup>1</sup> (KeySearch.aspx?type=Name&Sel=PING Wen-xiang); Ministry of Education (KeySearch.aspx?type=Name&Sel=Ministry of Education); Key Laboratory of Microbiology (KeySearch.aspx?type=Name&Sel=Key Laboratory of Microbiology); College of Life Sciences of Heilongjiang University (KeySearch.aspx?type=Name&Sel=College of Life Sciences of Heilongjiang University); Harbin 150080 (KeySearch.aspx?type=Name&Sel=Harbin 150080); Heilongjiang;  
2. Plant Science and Technology College of Heilongjiang August First Land Reclamation University (KeySearch.aspx?type=Name&Sel=Heilongjiang; <div>2. Plant Science and Technology College of Heilongjiang August First Land Reclamation University) (KeySearch.aspx?type=Name&Sel=Daqing 163319; ]</div><div /> (KeySearch.aspx?type=Name&Sel=Daqing 163319; ]</div><div />)

3. Qiqihaer Sub-academy of Heilongjiang Academy of Agricultural Sciences, Qiqihaer, 161000; <sup>4</sup>Plant Protection College of Shenyang Agricultural University, Shenyang 110161, Liaoning, China

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摘要: 采用厚垣轮枝菌HDQ18活性产物制备的生物种衣剂HND1原液、稀释5×、10×、20×、50×处理大豆胞囊线虫J2, 研究其对大豆胞囊线虫的防效。结果表明: HND1对J2有较高的毒性, 其死亡率分别为94.0%、83.3%、61.0%、54.3%、29%。用不同剂量的75% HND1生物种衣剂包衣大豆种子, 在大豆出苗1个月, 调查大豆根系胞囊线虫数量。结果表明: 施用HND1种衣剂的3种不同处理的平均防效分别为45.5%、57.5%、60.5%, 均好于对照药剂35%多克福种衣剂。对大豆株高和根瘤数等的调查结果表明, HND1种衣剂对大豆的生长和发育安全。

Abstract: Soybean cyst nematode is the most serious soybean disease in Heilongjiang province. The biological seed dressing agent HND1 is prepared with the activity metabolite produced by *Verticillium chlamydosporium* HDQ18, its control effect on soybean cyst nematode was investigated and discussed by toxic test and field experiment. The fatality rate of the original HND1 liquid and its dilution at 5, 10, 20, 50 times with water on juvenile of *H. glycines* was tested, the result showed HND1 was toxic to J2, and lethality rate was 94.0%, 83.3%, 61.0%, 54.3%, 29%, respectively. Soybean seed was coated with 75% HND1 at different coating dose, while 35% Carbofendzim-Carboforum-Thiuram was used as control pesticides. The cyst number on soybean root was investigated after soybean seedlings emerged 30 days. Results showed the control efficiencies of the treatment T<sub>III</sub>, T<sub>IV</sub>, T<sub>V</sub> were up to 45.5%, 57.5%, 60.5%, respectively, which were better than that of 35% Carbofendzim-

CarbofuremThiuram seed coating agent(T<sub>1</sub>).The HND1 seed coating agents were safe to soybean cultivation based on the investigation on plant height and root nodules.

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第一作者简介: 杜春梅(1972-), 女, 副教授。研究方向为植物病害生物防治研究。E-mail: duchunmei1972@sohu.com。

通讯作者: 平文祥, 教授, 博士生导师。E-mail: wenxiangping@yahoo.com。

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