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关键词： 大豆 (KeySearch.aspx?type=KeyWord&Sel=大豆)； 大豆胞囊线虫 (KeySearch.aspx?type=KeyWord&Sel=大豆胞囊线虫)； PPO (KeySearch.aspx?type=KeyWord&Sel=PPO)； POD (KeySearch.aspx?type=KeyWord&Sel=POD)； PAL (KeySearch.aspx?type=KeyWord&Sel=PAL)； SOD (KeySearch.aspx?type=KeyWord&Sel=SOD)； β-1 (KeySearch.aspx?type=KeyWord&Sel=β-1)； 3葡聚糖酶 (KeySearch.aspx?type=KeyWord&Sel=3葡聚糖酶)

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摘要： 为研究大豆胞囊线虫胁迫下不同大豆品种保护酶活性的变化与抗性的关系，以五寨黑豆和合丰35两个不同抗性大豆品种为材料，接种大豆胞囊线虫3号生理小种，测定根内多酚氧化酶(PPO)、过氧化物酶(POD)、苯丙氨酸解氨酶(PAL)、超氧化物歧化酶（SOD）和β-1,3葡聚糖酶活性变化。结果表明：大豆胞囊线虫胁迫下，抗、感品种根内PPO、POD、PAL、SOD、β-1,3葡聚糖酶活性均明显高于对照，但抗病品种五寨黑豆中5种酶活性增加值大于感病品种合丰35。证明大豆品种抗性与根内上述5种酶活性的变化密切相关。

Abstract: For the purpose of studying the relationship between change of protect enzyme activity and the resistance of different soybean varieties under the stress of soybean cyst nematode(SCN),Wuzhaiheidou and Hefeng 35 were inoculated by race 3 of SCN,changes of PPO, POD PAL SOD and β-1,3 glucanase activities were determined.The results showed that under the stress of SCN,PPO,POD,PAL,SOD,of the two varieties were all higher than those of the control,the increment activity values of the resistant variety were higher than the susceptible variety.It proved that under the stress of SCN,there was closed relationship between resistance and PAL,POD, SOD and β-1,3 glucanase activities of different soybean.

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