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[1]王大刚, 卢为国, 马莹, 等. 新育成大豆品种对SMV和SCN抗性评价[J]. 大豆科学, 2009, 28(06): 949-953.
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新育成大豆品种对SMV和SCN抗性评价

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摘要: 在接种我国大豆产区主要流行SMV株系SC-3及SC-7和SCN 1号生理小种的条件下, 对新育成的参加2004~2007年国家及江苏、北京、山东等省市大豆区试的品种分别进行了抗性评价。结果表明: 在抗SMV鉴定的334个品种中, 对SC-3抗性较好(高抗和抗病)的品种数有148个, 占参试品种数的44.31%; 对SC-7抗性较好的有71个, 占参试品种数的21.26%。同时对2个株系抗性表现较好的有55个, 占参试品种数的16.47%。这些抗性较好的品种既可用于大豆生产, 也可作为抗源用于抗病品种选育和与抗性相关的研究。研究还显示, 来自于西北和黄淮海大豆产区的参试品种一般抗性较好。抗SCN鉴定的193个大豆品种中, 未发现高抗品种, 中抗品种有25个, 占12.92%。汾9877-10、邯601、蒙9793-1、沧豆九号等7个品种兼抗SMV和SCN 2种病害。

Abstract: The Soybean Mosaic Virus (SMV) and Soybean Cyst Nematode (SCN) are two important diseases which affect the improvement of soybean yield and quality. The resistance to SMV and SCN of 334 and 193 cultivars from the soybean regional test in 2004-2007 was evaluated after inoculation with two SMV prevalent strains, i.e. SC-3 and SC-7 and SCN Race 1. The results showed that 148 (44.31%) and 71 (21.26%) cultivars were resistance to strains SC-3 and SC-7 respectively, 55 (16.47%) cultivars were resistance to both SC-3 and SC-7. These resistance cultivars can not only be used directly in soybean production, but also be used as resistance resources in breeding programs. The study also showed that the cultivars from Northwest China and Huang-Huai-Hai valleys were more resistant to SMV than those from the other regions. The evaluation of resistance of 193 cultivars from Huang-Huai-Hai valleys to SCN was conducted, 25 cultivars were moderate resistance, accounting 12.92% of the total. Resistance of 95 soybean cultivars from Huang-Huai-Hai valleys to SMV and SCN was evaluated in 2007. The results showed that 9 cultivars such as Jiyi 43, He 99-35, BN102, Cangdou 9 were found to have a better resistance to the two diseases.

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