

研究论文

通过直接引入外源DNA育成高产、 优质、 高蛋白大豆新品种黑生101

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摘要 本文报道了利用花粉管通道技术, 将野生大豆DNA直接导入受体栽培大豆。经分析、鉴定、选择、育成了集高产、优质、高蛋白于一体的新品种黑生101, 并经RAPD(Random Amplified Polymorphic DNA)分子验证, 证明供体DNA片段确已进入受体。经连续7年分析, 黑生101蛋白质含量超过45%, 平均比受体高1.76个百分点; 球蛋白总量比受体高近10个百分点, 11S球蛋白超过了70%; 产量比标准品种提高9.8%, 已于1997年正式推广。

关键词 [大豆](#) [外源DNA](#) [RAPD](#) [高蛋白](#)

分类号

Breeding of a High-yielding, High-quality and High-protein Content Soybean Cultivar-Heisheng 101 through Direct Introduction of Alien DNA

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Abstract This paper describes that an alien DNA of wild soybean was directly introduced into a cultivated soybean by "Pollen Tube Path". According to the result of analyzing, appraising and selecting, a new cultivar with high-yielding, high-quality and high-protein content Heisheng 101 was developed. Moreover, it was confirmed that the alien DNA sequence from the wild soybean had been introduced into the acceptor. Based on the analysis for the past seven years, the protein content of Heisheng 101 was over 45% and average was 1.76% high than that of its acceptor. The total content of globe proteins was 10% higher than that of its acceptor. The 11S-globe protein was more than 70%. The yielding of Heisheng 101 raised 9.8% compared with standard cultivars. This new cultivar was named as and expanded formally in 1997.

Key words [Soybean](#) [Alien DNA](#) [RAPD](#) [High protein content](#)

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