

植物诱变育种 · 农业生物技术

大豆绥农14突变体库构建及株高性状分析

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**摘要:** 应用甲基磺酸乙酯(EMS)对绥农14大豆种子进行诱变,并构建大豆突变体库。结果在M<sub>2</sub> 分别获得120份茎、叶、花、种子等性状变异的材料,其中38份是株高突变体。用100个SSR分子标记分别对120株突变体进行遗传背景鉴定。结果表明:120份突变体中有5株与对照绥农14有超过9个标记的差异,10株与对照有少于3个标记的差异;另外利用前人定位的与株高相关的46个标记对其中38份株高突变体进行鉴定,发现只有高突变体E790在Sat\_168位点有差异。本研究获得的突变体可以作为新的种质资源,同时构建的突变体库也有助于大豆功能基因组研究的发展。

**关键词:** 大豆 EMS诱变 突变体 绥农14

Construction of SuiNong14 Mutant Library and Analysis of Soybean Height Mutant

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**Abstract:** A primary soybean mutant library was constructed by treating the seeds of cultivar ‘SuiNong 14’ with EMS. In M<sub>2</sub> generation, 120 mutants with phenotypes of stems, leaves, flowers, and seeds were obtained, including 38 plant height mutants. All mutants were identified by 100 SSR markers. The results showed that among 120 mutants, there were 5 mutants with more than 9 polymorphic markers and 10 mutants with less than 3 markers. In addition, for the 38 height mutants were identified by 46 SSR markers related to soybean plant height trait. Only mutant E790 showed difference from wild type ‘SuiNong14’ on Sat\_168 marker. These mutants could be used as new breeding resource and will be helpful for the further research on soybean functional genomics.

**Keywords:** Soybean EMS Mutant SuiNong 14

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扩展功能

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