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## 大豆种间杂交异黄酮含量的杂种优势分析

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摘要: 选用野生大豆、栽培大豆按异黄酮含量不同(高、中、低)配制杂交组合, 对33个组合进行杂种优势分析。结果表明: 中亲优势为正向优势的组合为15个, 占全部组合的45.5%。具有超亲优势的组合为12个, 其中高异黄酮含量母本组合5个, 占全部正向超亲优势的41.7%, 说明高异黄酮亲本杂种优势明显。18个栽培与野生杂交组合中超亲优势正向优势组合为11个, 中亲优势正向优势组合为13个, 说明栽培与野生杂交组合的杂种优势明显, 但14个栽培×野生杂交组合F<sub>2</sub>优势降低, 表现为自交衰退, 因此获得高异黄酮的后代材料仍需进一步选择。

Abstract: In order to analyze heterosis of isoflavone content in interspecific hybridization, 33 hybridized combinations were obtained by 15 accessions of Glycine max and Glycine soja which were different in isoflavone content (high, middle and low). Isoflavone concentrations of F<sub>1</sub>, F<sub>2</sub> as well as their parents were determined by high performance liquid chromatography. Fifteen combinations which accounted for 45.5% of total had positive mid-parent heterosis. Twelve combinations showed positive over-parent heterosis, among which, five combinations had higher isoflavone content in female parent. Among 18 combinations between Glycine max and Glycine soja, 11 had positive over-parent heterosis and 13 had mid-parent heterosis. Results suggest heterosis of isoflavone content were obvious when parents with higher isoflavone content were selected or interspecific hybridization were conducted. Heterosis of isoflavone content in 14 interspecific hybridization combinations showed inbreeding depression in F<sub>2</sub> generation. Therefore, it is essential to do further selection in following generations for high isoflavone breeding.

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