

玉米自交系间遗传距离与产量杂种优势、杂种产量的关系

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摘要 以13个玉米自交系及其按双例杂交配制的78个单交种为材料, 研究性状选择、亲本选择对遗传距离与产量杂种优势、杂种产量关系的影响, 结果表明: (1)当性状数较少时, 遗传距离与产量杂种优势、杂种产量的关系因性状的不同而异; 当性状数较多时, 遗传距离与产量杂种优势、杂种产量的关系为抛物线, 受性状影响较小; (2)当所选亲本材料的遗传差异较大时, 遗传距离与产量杂种优势的关系为抛物线; 当所选亲本材料的遗传差异较小时, 遗传距离与产量杂种优势的关系为直线或不相关。

关键词 [玉米](#), [遗传距离](#), [杂种优势](#)

分类号

The Relationship Between Genetic Distance and Yield Heterosis/Hybrid Yield in Maize

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Abstract

The relationship between genetic distance and yield heterosis/hybrid yield was investigated in maize. The materials consisted of 13 inbred lines and their 78 sin gle crosses in a diallel mating design, without reciprocals. The results are as fo llows: 1. When the number of characters was 1ess, the relationship between yield hete rosis/hybrid yield and genetic distance varied with the kinds of characters; When the number of characters was more, the relationship between the two was curvilinear, less influenced by the kinds of characters. 2. When the genetic divergence among parents was larger, the relationship betw een yield heterosis and genetic distance was curvilinear; When the genetic diverg ence among parents was small, the relationship between yield heterosis and geneti c distance was linear or non-correlated.

Key words [Maize](#) [Genetic distance](#) [Heterosis](#)

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