

农学—研究报告

Reid系*PN系培育玉米自交系配合力分析

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摘要:

采用NC II 设计方法, 按不完全双列杂交设计组配25个杂交组合, 分析了株高、穗高、穗长、穗粗、结实长、穗行数、行粒数、小区产量、百粒重、出籽率10个性状的GCA和SCA。结果表明: 用PN群系改良Reid系, 随5003遗传基础增加, 改良新系配合力有所增高; 采用相同的选育方法, 选育玉米自交系的配合力主要取决于该自交系选育的基础组材; 优中选优(优系×优系)能够使玉米自交系的配合力效应累加、超亲。

关键词: 玉米; Reid群自交系; PN群自交系

Analysis on Combining Ability of Reid*PN Corn Inbred Lines

Abstract:

For 2 types, 10 inbred lines, 25 hybridized combinations were made by using incomplete dual cross. The GCA, SCA of plant height, ear length, ear length, ear diameter, length of forming kernel, ear rows, per row kernels, plot yield, forming kernel rate, 100-kernel weight, forming kernel rate has been analyzed in this paper. The result indicated that with the adding of 5003 inbred lines genetic material, combining ability of new inbred lines which from Reid inbred lines*PN inbred lines has been increased; using the same breeding method, combining ability of new inbred lines is dependent on the basic materials of this inbred lines; selected the excellent from the excellent basic materials (excellent*excellent), it can make the combining ability effect of new inbred lines exceeded its parent and accumulated in new inbred lines.

Keywords: corn, Reid inbred lines, PN inbred lines

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