TRENDS IN AGRICULTURE SCIENCE
Vol.3 Issue 09 September 2024, Page: 2187
Abstract

Exploitation of heterosis using L × T analysis in of sesame (Sesamum indicum L.)

R. S. Parmar and H. B. Gohil,
[1]Assistant Professor and Head, Dept. GPB., College of Agriculture, JAU, Mota bhanadariya
[2] M. Sc. Scholar, Dept. GPB., College of Agriculture, JAU., Junagadh
DOI:10.5281/TrendsinAgri.13839728

Abstract

The investigation was undertaken to estimate heterosis of 14 characters in 36 hybrids of sesame obtained by crossing nine lines and four testers in line × tester mating design was performed at Instructional Farm, Department of Agronomy, College of Agriculture, Junagadh Agricultural University, Junagadh during late kharif -2023. The analysis of variance revealed highly significant differences among the mean square due to genotypes, parents and hybrids for all the traits studied indicating a sufficient variability present in the material used to generated crosses. The three crosses *viz*., IC 43236 × AT 467, Zira 1 × G. Til-4 and JR 22 × AT 467 appeared to be most superior and recorded 33.83, 32.71 and 29.46 per cent higher yields, respectively over standard check. Two crosses *viz*., Zira 1 × G. Til-4 and JR 22 × AT 467 also exhibited higher heterotic response and sca effects in a desirable direction for yield attributing traits. Superior crosses may be further developed and used in upcoming breeding programs to boost seed yield production.

Published: 25 September 2024
ISSN: 2583-7850