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HETEROTIC STUDIES FOR SOME LODGING RELATED TRAITS IN WHEAT

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ABSTRACT

The performance of 18 F1 hybrids of spring wheat was studied in relation to 11 parents for estimation of heterosis. There existed highly significant differences among the entries studied for all the traits contemplated except the root pulling force in which the variability was non significant statistically. The cross combination Dirk X L.U 60 possessed the best specific combining ability for the traits like weight, length and thickness of the second basal internode. The hybrid C' 273 × C 271 was the best specific combiner for the trait breaking strength. The parent L.U 60 was the best general combiner for all the traits examined. The cross combination Dirk X L.U 60 generated the highest magnitude of heterosis and heterobeltiosis for all characters studied except the root pulling force.

INTRODUCTION:

Genetic engineering, somatic hybridization or hybridization and tissue and embryo cultures have weakened the interspecific barriers and opened new vistas in the realm of crop improvement. But, the scientists are still not very enthusiastic for the exploitation of these methods in the improvement of major crops. Among the conventional methods of plant breeding, the exploitation of heterosis has shown its wonders. The success of all plant breeding programmes depend primarily on the selection of suitable

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