

TO ESTIMATE THE COMBINING ABILITY OF SOME MALE, FEMALE LINES OF SHORT GROWTH DURATION TWO LINES HYBRIDS

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Summary

This paper present the genneral combining ability and specific combining ability of the 7 charecters of 5 female lines (TGMS lines) and 5 male lines. Results of the research showed that T256S have high GCA on actual yield, number spikelets/panicles, rate of filled grains, low GCA on growth duration as well as plant height. Having these traits, T256S is suitable for breeding very short growth duration, high yielding rice hybrid and TH17S-16 have high GCA on actual yield, spikelets/panicles, however, it have low GCA on panicle number/hill, rate of filled grains as well as 1000 grain weight. And 2 male lines RT201, RT205 with high GCA on yield, spikelets/panicles, rate of filled grains. Results of the research also indicated the 8 hybrids have high value of SCA on actual yield, 14 hybrids have low SCA about plant height, 10 hybrids have low SCA on time from sowing to heading. Among 8 hybrids have high SCA on actul yields, only two hybrids viz. T256S/RT201 and T256S/RT205 have two parents have high GCA. For very early short growth duration hybrid rice breeding purpose, two hybrids viz. T256S/ RT201, T256S/RT205 have specific combining ability on actual yield as well as high yield in this experiment have been selected for yield trial in next season.

Keywords: *Genneral combining ability, specific combining ability, characters, hybrid combinations.*