TO DEVELOP SUPER RICE HYBRID STUDIES ON COMBINING ABILITY OF NPT LINES OF RICE (ORYZA SATIVA L.)

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Abstract : Combining ability in NPT lines of rice for Super hybrid rice breeding programme has been carried out in line x tester mating design involving 3 stable CMS lines and well adapted 9 testers of different eco-geographic origin in rice. It revealed presence of predominance of non additive gene action for the characters under study. Among the lines IR 79156A was identified as a good general combiner followed by APMS 6A and IRS8025A and within the tester ET 1-13, IRFAN-115, and ET 1-12, was found to be good combiner for grain yield per plant. Promising hybrids based on per se performance, SCA, GCA and Heterosis for grain yield per plant are IR79156A/ET-1-10, APMS6A/ET1-12, IRS8025A/IRFAN-115, IR79156A/ET-1-land IR79156A /TOX 981-11-2-3. These promising hybrids offer greater scope for further exploitation of hybrid vigour commercially.

Keywords : New plant type, Hybrid rice, CMS, Combining ability

REFERENCES


