

Combining ability analysis for yield and grain mold resistance in *Kharif* sorghum [*Sorghum bicolor* (L.) Moench]

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SUMMARY

The development of grain mold resistance hybrids is one of strategy to mitigate grain mold disease. Utilization of host plant resistance is the best strategy in the management of grain mold disease. Thus, information on the combining ability of different lines and crosses is very pertinent to choose the best parents for yield and grain mold resistance. The *gca* effect revealed that parents DSV 6, DNB 4 GMRP 16, 108 and 97 were found to be good general combiners for yield and grain mold resistance traits. The hybrid DNB 4 x GMRP 950-285 had high *sca* effect for grain yield and mold resistance. DSV 6 x GMRP 97, DNB 4 x GMRP 108 and DSV 6 x GMRP 16 had high *per se* performance and moderate *sca* effect. These could be evaluated in multilocation testing for commercial exploitation.

Key Words : Combining ability, Grain mold, Yield

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