

## Some of the potential doner parents for development of drought tolerance in *Rabi* sorghum

■ R.B. GHORADE, V.V. KALPANDE, S.A. BHONGLE AND P.A. BAND

### SUMMARY

Using the line x tester design, combining ability analysis was done to study the drought tolerance in *Rabi* sorghum using five lines and 12 testers to generate total 60 hybrids. The estimates of gca effects revealed that among the five lines, the line MS 104A showed positively significant gca effect for grain yield per plant along with eight drought tolerance traits. Among the testers, M 35-1 was the best tester with significant gca effects for grain yield along with seven drought tolerance traits. Other promising testers sowing significant gca effects for grain yield and some of the other drought tolerance parameters were SPV-504, CSV-216 R, Ringni, Parbhani Moti and AKSV-13 R. Considering the results, the line MS 104 A and testers M 35-1, SPV-504, CSV-216 R, Ringni, Parbhani Moti and AKSV-13 R may be considered in the further breeding programme for the development of drought tolerant and high yielding hybrids in *Rabi* sorghum.

**Key Words :** Combining ability, Drought, GCA, *Rabi* sorghum

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