

Physiological basis of growth and yield variation in sorghum genotypes under shallow medium soils

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ABSTRACT

A field experiment was conducted on shallow and medium deep soils at Regional Agricultural Research Station, Bijapur, University of Agricultural Sciences, Dharwad (Karnataka). In general all the genotypes gave higher grain yield when they were grown in medium deep black soil compared to that grown under shallow soil. The production and translocation of photosynthates from source to sink was efficient in case of high yielder when compared to medium and low yielder. Days to 50 per cent flowering and maturity, leaf dry weight, LAI, relative water content (RWC), panicle dry weight, harvest index and other parameters have favoured in high yielders. Less number of parameters in moderate and only few in case of low yielders have favoured the yield.

Key words : Sorghum, Dry matter production, Harvest index

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