INTERPRETATION OF HURDA SORGHUM [*SORGHUM BICOLOR* (L.)] GENOTYPES-ENVIRONMENT-SOWING DATE INTERACTION IN SUMMER SEASON

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ABSTRACT

Sorghum (*Sorghum bicolor* (L.) Moench) is important dual purpose crop food & fodder for a considerable number of people in Marathwada region. Also it is important crop for rainfed and farmers. However, Most of the farmers are demanding fodder from sorghum crop for animal purpose and hurda as addition source of income. An experiment was carried out in a split plot design by sowing 4 sorghum varieties on 08th Jan, 16th Jan, 24th Jan and 02 th Feb at Sorghum Research Station, VNMKV, Parbhani for the year 2018-19,2019-20 & 2020-21. The objective of the study was to find out suitable sowing dates for hurda sorghum during summer season & the effect of sowing dates on p on yield potential of hurda sorghum genotypes during summer season. From the experiment found that sowing of hurda sorghum genotype upto 8th Jan recorded significantly highest hurda and fodder yield and GMR, NMR & B:C ratio over the rest of three sowing dates. As date of sowing increases yield of hurda sorghum drastically decreases. Among the genotypes PVRSG-101 recorded highest hurda yield, GMR, NMR as followed by Phule Madhur. During study it has observed that after the first fourth night of Jan temperature increases and its affect on germination to flowering due to late sowing and high temperature at flowering stage is adversely affect on grain setting.

Key words: Hurda Sorghum genotypes, date of sowing, fodder yield & hurda yield

CONCLUSION

The study revealed that heat stress during flowering has damage during flowering. Sorghum at fertilization found sensitive to heat stress and it adversely affect on seed setting. The improved hurda sorghum varieties perform well when sown first fourth night of January and yield declines as the sowing is delayed the case is true for the grain yield but for store yield hurda sorghum can planted up to 2nd fourth night of January. The early planted crop escape bird damage and high temperature at grain filling stage as compared to the late planted crop which matures early and fail to set grain.

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