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Screening of sorghum genotypes against charcoal rot using tooth pick inoculation technique

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ABSTRACT : Thirty two breeders promising sorghum genotypes were screened against charcoal rot during *rabi* 2013 and 2014 by toothpick inoculation. Disease reaction of the genotypes was recorded by using standard disease scoring scale. Observations on charcoal rot disease parameters *viz*., lodging per cent, mean length of spread (cm) and mean number of nodes crossed were recorded. GS-23 genotype recorded minimum lodging of 15.50 per cent, followed by GS-11 (18.50%), GS-22 (19.00%). Whereas in resistant check DSV-4 recorded 14 per cent of lodging and in susceptible check SPV-86 maximum of 48 per cent lodging. Mean nodes crossed by the pathogen were Grade I was recorded by JP-1-5 (M3) and IS-2312 genotypes, Grade II was recorded by GS10, 11, 22, 23, E36-1XM35-1 and DJ-6514 genotypes, Grade III was recorded by GS1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 24, 25 and M-35-1 genotypes. However DSV-4 and SPV-86 received Grade 1 and Grade IV, respectively. Least MLS of infection (cm), was noticed in GS-23 (9.40 cm) followed by GS-11 (11.50 cm). In DSV-4, MLS infection was 11.0 cm and MLS infection was 30 cm in SPV-86.

Key Words: Sorghum, charcoal rot, mean length spread and mean node crossed.