Evaluation of various sweet sorghum varieties and hybrids for resistance to major pests

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In randomized block design 25 sweet sorghum varieties and hybrids including checks were evaluated for their resistance to major insect pests in field at Akola during kharif 2013-14. The objectives were to determine the relative resistance of sweet sorghum varieties and hybrids to major pest of sorghum and to identify the new insect pest resistant sweet sorghum variety/hybrid. The plant stand and seedling glossiness score was recorded at 12 DAE and observations on dead hearts due to shoot fly were recorded by counting total plants and plant showing dead hearts due to shoot fly in each entry at 21st days after emergence. The stem borer leaf injury rating was recorded at 35 days after emergence in 1-9 scale. Plant population in treatments was ranging from 10.67 to 26.33 plants. Seedling glossiness score was lowest in resistant check IS 18551 (1.33) followed with 1.67 in IS 2205 and CSV 19 SS and was highest i.e., 5.00 in ICSV 745 and SPV 2267. Resistant check IS-2205 recorded significantly lowest dead hearts i.e, 29.17 % and was at par with IS 18555 (36.02%), CSV 19 SS (45.67%), and SPV 2270 (46.61%). The highest dead hearts (85.60%) was recorded in SPV 2201. These two varieties recorded less than 4.0 stem borer leaf injury ratings and the seedling glossiness score was also low for these two entries (< 2.0) and was positively correlated with shoot fly dead heart damage.

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