

SCREENING FOR RESISTANCE TO *MACROPHOMINA* ROOT ROT IN ADVANCED BREEDING LINES OF SESAME

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Abstract: Root rot caused by *Macrophomina phaseolina* is the serious disease in sesame. The incidence of *Macrophomina* rot leads to great problems at such magnitude so that the area under sesame cultivation is declined gradually. Twenty four advanced breeding lines were screened for *Macrophomonia* root rot under sick plot conditions. The disease severity of root rot ranged from 17.4% to 41.6%. Advanced breeding lines viz., VS 16 004 and VS 16 008 recorded less disease incidence of 17.4% and 17.6% respectively, whereas the susceptible check VRI Sv 1 recorded the maximum disease incidence of 41.6%. However most of the lines were found to be moderately susceptible to root rot.

Keywords: Sesame, Screening, Root rot, *Macrophomina*

REFERENCES

- Buldeo, A.M. and Rane, M.S.** (1978). Fusarium wilt of *sesamum*. J Maharashtra Agric Univ. 3: 167-170.
- Chattopadhyay, C. and Kalpana Sastry, R.** (1998). Important diseases of sesame and their management options. In: IPM systems in Agriculture, (Oilseeds), RK Upadhyay, KG Mukerjee, RL Rajak (eds.), Oxford and IBH Publ., New Delhi.
- Dinakaran, D. and Naina Mohammed, S.E.** (2001). Sesame and Safflower Newsl. 16: 68-71.
- EL-Shazly, M.S., Abdul Wahid, O.A., EL-Ashry, M.A., Ammar, S.M. and EL-Bramawy, M.A.** (1999). Evaluation of resistance to Fusarium wilt disease in sesame germplasm. International Journal of Pest Management. 45: 207–210.
- Foolad, M.R., Ntahimpera, N., Christ, B.J. and Lin, G.Y.** (2000). Comparison of field, greenhouse, and detached-leaflet evaluations of tomato germplasm for early blight resistance. Plant Disease. 84: 967-972.
- Maiti, S., Hegde, M.R. and Chattopadhyay, S.B.** (1988). Handbook of Annual Oilseed Crops. Oxford and IBH Publ. Co. Pvt. Ltd., New Delhi.
- Rangaswami, G.** (1972). Diseases of crop plants in India. Prentice Hall of India Pvt. Ltd. New Delhi, 520p.
- Riker, A.J. and Riker, A.S.** (1936). Introduction to research on plant diseases. John. S. Swift, C.M.C., New York, 117p.
- Vyas, S.C., Kotwel, T., Prasad, K.M.V. and Jain, A.C.** (1984). Notes on seed-borne fungi of sesamum and their control. Seed Res. 12: 93-94.

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