

RESEARCH PAPER

Identification of potential sources of resistance for wilt caused by *Fusarium oxysporum* f.sp. *ricini* in castor (*Ricinus communis* L.)

P. BINDU PRIYA¹, M.V. NAGESH KUMAR² AND V.GOURI SHANKAR³

Regional Agricultural Research Station (Pr. J TSAU), Palem, MAHABUBNAGAR (TELANGANA) INDIA

Email : bindupriya.gpb@gmail.com

Article Info : Received : 21.06.2016; Revised : 25.08.2016; Accepted : 12.09.2016

An experiment was carried out in wilt sick plot of Regional Agricultural Research Station, Palem to screen diverse germplasm accessions for evaluation of resistance to *Fusarium* wilt, a devastating disease in castor caused by *Fusarium oxysporum* f.p. *ricini* with an objective to identify new potential sources of wilt resistance. Observations were recorded as per cent disease infection in each entry periodically at thirty days interval upto 150 days after sowing. 'Kranthi' and 'Haritha' varieties were used as susceptible and resistant checks, respectively sown after every five test entries. Out of two hundred germplasm accessions screened, twenty nine accessions were found to be *Fusarium* wilt resistant with less than 20 per cent wilt incidence. Fifty accessions were screened for confirmation of wilt resistance out of which twelve accessions revealed resistant reaction. Further forty advanced lines were screened among which nineteen entries were found to be resistant. The identified resistant cultures serve as potential sources for developing diverse wilt resistant varieties/hybrids in castor.

Key words : Castor, *Fusarium* wilt, Sick plot, Germplasm screening

How to cite this paper : Priya, P. Bindu, Kumar, M.V. Nagesh and Shankar, V. Gouri (2016). Identification of potential sources of resistance for wilt caused by *Fusarium oxysporum* f.sp. *ricini* in castor (*Ricinus communis* L.). *Asian J. Bio. Sci.*, **11** (2) : 284-288. DOI : 10.15740/HAS/AJBS/11.2/284-288.