

A Note on the Preliminary Screening of Safflower Genotypes against *Alternaria* Leaf Spot in Northern Karnataka

Safflower (*Carthamus tinctorius* L.) is an important rabi oilseed crop extensively cultivated under rainfed condition in Northern Dry Zone-3 (Region-II) of Karnataka. This zone is characterised by 56 per cent coverage by rabi crops with an aerable area 3.46 million ha. receiving lowest average rainfall of 574 mm (Anon., 1996). Several reports have been made on the economic importance and seed borne nature of *Alternaria* species infecting on safflower (Rajagopalan and Shanmugam, 1993; Jackson *et al.*, 1986 and Zad, 1993). Lukade and Indi (1985) screened 209 lines of safflower against *A.ternaria* leaf spot (*Alternaria carthami* Choudhary) and reported that JLA-1753 as resistant genetic stock. Smilarly, Patil (1989) reported the tolerance of NS-133 and Co-1 against *A. helianthi* of safflower and Annigeri-1 and Bhima varieties were suceptible. In the present study an attempt was made to screen

the available breeding material of safflower genotypes against *A. carthami* under conditions of natural infection during 1993-94 rainfed situation in Northern Dry Zone-3 of Karnataka. Adequate disease pressure occurred during 1993-94 which was probably due to continuous depression effects in the Zone. Disease scoring was done using 1-9 scale. The per cent disease index was calculated seperately for the breeding material grouped in three trials (MLVT, MLT and AVHT). The disease index in MLVT, AVHT and MLT trials ranged from 17.67 to 75 per cent, 27.5 to 63.25 per cent and 24.25 to 75.75 per cent, respectively.

From the results it was found that genotypes CTV Nos. 251, 248, 209, 252, 257 and 258 and 19-185, 343-12-4 and HUS-305 have tolerance for *Alternaria* leaf spot disease as compared to the recommended varieties viz., Annigeri-1 and Annigeri-2 (398-9-15).

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