

Field reaction of Safflower advanced breeding lines to leaf spots caused by *Alternaria carthami*

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Safflower is an important rabi oilseed crop which has immense medicinal value for various ailments. Safflower oil is highly recommended for heart patients and the tea made of safflower petals cures various diseases. Leaf spots caused by *Alternaria carthami* is one of the major biotic stresses causing considerable yield loss. Fifteen advanced breeding lines including two checks were screened for tolerance to leaf spots caused by *Alternaria carthami* under natural conditions of high disease pressure during rabi 2009 at Agricultural Research Station, Annigeri, Dharwad, Karnataka, India. Significant differences were observed among the genotypes for per cent disease index (PDI) and seed yield except for oil content. High yielding advanced breeding lines ASA-07, AS-96-1-2 and AS-19 showed highly susceptible reaction to leaf spots with PDI > 90 per cent. A non spiny breeding line A-98-04 and two spiny genotypes AS-99-1-2-5 and AS-B-02-03 showed susceptible to moderately susceptible reaction as that of NARI-6 but were poor yielders. It is evident from the present study that the cultivated genotypes of *Carthamus tinctorius* show susceptible reaction to alternaria leaf spot disease under natural conditions of high disease pressure.

Biography

B.N. Harish Babu has completed his Ph.D. from Central Food Technological Research Institute, Mysore (University of Mysore, Mysore, Karnataka, India) has 10 years of Research experience in the field of Genetics, Plant Breeding, Biochemistry, Plant Biotechnology and Food allergy. He has published more than 10 research papers in peer reviewed journal of national and international repute and currently serving as Assistant Professor & Head of the Department of Crop Improvement & Biotechnology at the College of Horticulture, Hiriya (University of Horticultural Science, Bagalkot).

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