RESEARCH ARTICLE

SCREENING OF POWDERY MILDEW TOLERANCE IN LINSEED (*LINUM USITATISIMUM* L.)

Namrata Dhirhi, Nandan Mehta, and Satyapal Singh*

Department of Genetics and Plant Breeding, Indira Gnadhi Krishi Vishwavidyalaya, Raipur-492012 (Chhattisgarh)
Email: spsinghigkv@gmail.com

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Abstract: A set of one hundred fifty linseed germplasm accessions were evaluated for powdery mildew tolerance which was taken from AICRP on Linseed, Department of Genetics and Plant Breeding IGKV, Raipur (C.G.) during *Rabi* 2014-15 *and* 2015-16. In India and Chhattisgarh it has been observed that major limiting factors for higher production is powdery mildew. Particularly in Chhattisgarh the yield losses due to powdery mildew may be more than 60% when the disease is severe. Powdery mildew is the major cause in the linseed production during *utera* cultivation, It lows yield about 40%. The assessment of the disease per plant was obtained by observing the intensity of lesions present on the leaves. Keeping in this view, disease screening studies were made to understand the development of powdery mildew diseases. So, we need a high yielding linseed variety for late sown conditions with resistance to powdery mildew. With this objective, field screening of linseed genotypes for resistance to powdery mildew was initiated. Powdery mildew score ranged from 0 (free) to 5 (highly susceptible), 21 genotypes found highly resistant, 44 genotypes showed resistant, 47 genotypes comes under moderately resistant, 20 genotypes shows susceptible and only 8 genotypes showed highly susceptible. Despite being high susceptible, some test entries produced good yield and showed tolerance to powdery mildew disease. Highly resistant genotype could be utilized as donar parent for powdery mildew resistance breeding programme.

Keywords: ALA, Germplasm, Linseed, Powdery mildew, SDG

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*Corresponding Author