IJPP

RESEARCH ARTICLE

Evaluation of sunflower germplasm/cultivars for resistance to sunflower necrosis disease

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ABSTRACT

Cultivation of resistant varieties is the most economical way of managing virus diseases of plants as the control of vector borne virus diseases is very difficult to contemplate. Twenty R lines, 12 CMS A and B lines, 100 germplasm lines and 12 cultivars of sunflower were evaluated against sunflower necrosis disease under artificial inoculated conditions using a six point scale. All R lines and CMS lines showed highly susceptible reaction. Of one hundred germplasm lines screened, 8 were moderately susceptible, 23 were susceptible and 69 were highly susceptible. Of the 12 sunflower cultivars screened, 5 and 7 cultivars exhibited highly susceptible and susceptible reaction, respectively. Based on the type of symptoms produced by the sunflower lines on artificial inoculation, they were classified into seven groups *viz.,* mosaic (twenty eight lines), local lesions (nine lines), necrosis (50 lines), chlorosis (12 lines), mottling or narrow leaves (14 lines), mosaic and local lesions (seven lines), while 36 lines exhibited mixed symptoms.

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