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## Sunflower Necrosis Disease: Screening germplasm/cultivars for resistance

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Sunflower (*Helianthus annuus* L.) is an important edible oilseed crop in the country next to groundnut and soybean. One of the major factors for reduction in area of the crop is being attributed to the occurrence of sunflower necrosis disease (SND) resulting in yield loss up to 90 per cent in most of the sunflower growing regions of Southern India. In Andhra Pradesh, SND has been reported to occur in almost all the popular sunflower hybrids grown during kharif, rabi and summer seasons with varied intensity. 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 & 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 the 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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