

REACTION OF SOME GINGELLY GENOTYPES
TO POWDERY MILDEW

GINGELLY (*Sesamum indicum* L.) is one of the important oilseed crops grown in northern Karnataka. The crop suffers from number of foliar diseases of which powdery mildew (*Oidium* sp.) affects at flowering stage and onwards and causes considerable loss of yield (Shadakshari *et al.*, 1989). Powdery mildew was observed in severe form since 1987 at Regional Research Station, Raichur.

Forty genotypes in advance and initial varietal trials were severely affected with powdery mildew during *kharif* 1989. Observations were recorded at capsule development stage by following 0-5 scale (where 0 = free and 5 = highly susceptible) on the basis of leaf area covered by the pathogen. All the leaves of randomly selected plants from each entry were scored for disease incidence. Per cent disease index was calculated by following Wheeler formula (1969), the relative reaction of the genotypes against powdery mildew is given in Table I.

The results indicated that (a) maximum 90 per cent disease index was recorded in RT-108, followed by BT-876 (86 per cent), TKG-9-86 (85 per cent) and JLS-198 (83 per cent). The genotypes found free are OMT 32, BAUT-1 and DSC-1 (Table I). Earlier, Gaikwad *et al.* (1977) reported only one genotype (194-5) as resistant among the 59 genotypes, Gangakisan *et al.* (1989) found the variety 'Rajeshwari' as tolerant and Shadakshari *et al.* (1989) reported the genotype ES-277 and IS-401 as resistant against powdery mildew. In the present study, of the forty genotypes screened, three were resistant, two moderately resistant, five moderately susceptible, fourteen susceptible and sixteen highly susceptible (Table I).

TABLE I

Reaction of sesame genotypes to powdery mildew

Per cent D.I.	Reaction	Genotype
0 - 10	R	BAUT-1, DSC 1, OMT 32
11 - 25	MR	VS 339, RT 15
26 - 50	MS	AT 66, BT 875, DSC 4, TNAU 12, OMT 26
51 - 70	S	AT 60, AT 61, AT 64, DSC 5, JLT 39, JLT 202, OMT 10, OMT 11, OMT 36, PT 229, TKG 21, RT 44, RT 54, RT 57
71 - 100	HS	AT 65, AT 67, BT 876, JLT 26, JLT 35, JLS 198, PY 57, TKG 20, TKG 9-86, TNAU 17, RT 49, RT 108, RT 105, TC 25, TC 359, VS 117

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