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Screening of Chilli Varieties Against Fusarium Wilt*

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Wilt of chilli caused by *Fusarium solani* was observed in moderate to severe form in some talukas of Rajkot district (Gujarat) during *kharif* and *rabi* season of 1996-97. Fusarium wilt is a soil-borne disease and the organism persists in the soil for several years. Hence the cultivation of resistant varieties is the most economic and feasible method of control. Earlier Camino *et al.* (1987) identified Keystone cultivar as resistant and California Wonder as susceptible to capsicum wilt caused by *F.solani.*

TABLE 1

Reaction of different chilli cultivars against *Fusarium solani* under artificial incoulation in the green house.

Sr. No.	*Reaction**	*Cultivars*
1.	Immune (I)	None
2.	Resistant (R)	GC-1, GC-2
3.	Moderately resistant (MR)	Jwala, HC-9, HC-1, PBS-86-1, PBS-86-2
4.	Susceptible (S)	HC-4, HC-10, HC-12, HC-5, HC-7, HC-13, HC-15, HC- 11, HC-2, HC-3, HC-6.
5.	Highly susceptible (HS)	Reshampatto, Gholar.

* Based on per cent mortality :

I = 0%

R=1-10%

MR = 11-30%

S = 31-70%

HS = Above 70%

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Twenty varieties of chilli were screened against the most virulent isolate. The evaluation was done in post filled with sterilized soil. Culture of the pathogen (*F.solani)* multiplied on soil maize medium was added in the ratio of 1:10 five plants of each variety were kept per pot and replicated thrice.

Observations were recorded regularly and the disease reactions were calculated based on the per cent mortality following Gaur and Sharma (1988).

None of the varieties tested here was free from infection (Table - 1). However GC-1 and GC-2 were resistant. Five varieties viz, HC-9,HC-1, PBS 86-1, PBS - 86-2 were moderately resistant. Eleven varieties namely HC-4, HC-10, HC-12, HC-5, HC-7, HC-13, HC-15, HC11, HC-2, HC-3 and HC-6 were suceptible. While the two varieties Reshampatto and Gholar were highly susceptible.

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