

Research Note

Screening of brinjal varieties for eco-friendly control against little leaf disease

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Brinjal (*Solanum melongena* L.) is an important Solanaceous vegetable crop grown all over country, but its productivity in India is only 20-35 t/ha (Veeraragavathatham, *et al.*, 1998) due to incidence of various pests and diseases. Leaf hopper vector, *Cestius phycitis*, *Hishimonus phycitis* and *Empoasca devastans*, causing little leaf disease of brinjal, is one of the major limiting factors affecting the production of brinjal in this area. Crop losses due to little leaf disease have been recorded upto 64.0% in brinjal (Verma *et. al.* , 1969, Verma, 2003). The use of host plant resistance is an

economic and eco-friendly pest control measures. The present investigation is an attempt to evaluate the most resistant among the eighteen varieties of brinjal against little leaf disease under natural condition.

An experiment was conducted to see the varietal susceptibility, and to findout the most resistant among eighteen varieties. Different varieties were procured from Indo-American seed company, Lucknow, Local seed company, Faizabad and National seed company, Delhi. The brinjal varieties were grown in a randomized block design during 2005-2006 at M.L.K. P.G. College, Research

Table 1 : Susceptibility of some brinjal varieties to natural infection with little leaf disease (MLO).

S.No.	Brinjal varieties	No. of Plants examined plants (MLO)	Exp. Ist		Exp. IInd		% mean infection	
			Little leaf infected	% infection	Little leaf infected plants (MLO)	% infection		
1	Swetha	140	15	10.71	13	9.28	9.99	
2	Surya	140	12	8.57	12	8.57	8.57	
3	Pusa kranti	140	19	13.57	18	12.85	13.21	
4	Pusa purple round	140	29	20.71	34	24.28	22.49	
5	Pusa purple long	140	30	21.42	25	17.85	19.63	
6	Pusa purple cluster	140	17	12.14	19	13.57	12.85	
7	Brinjal supriya	140	6	4.28	7	5.00	4.64	
8	Pragathy	140	20	14.28	22	15.71	14.99	
9	Brinjal suphal	140	12	8.57	10	7.14	7.85	
10	Arka kusumkar	140	5	3.57	5	3.57	3.57	
11	Poomkulam local	140	5	3.57	6	4.28	3.92	
12	CO ₂	140	3	2.14	5	3.57	2.85	
13	Vellayani local 1	140	10	7.14	9	6.42	6.78	
14	Vellayani local 2	140	10	7.14	12	8.57	7.85	
15	Kalliyoor local	140	14	10.00	13	9.28	9.64	
16	Nedumangad local 1	140	2	1.42	2	1.42	1.42	
17	Nedumangad local 3	140	1	0.71	1	0.71	0.71	
18	Local - var	140	54	38.57	45	32.14	35.35	
				SEm±	2.11		1.87	
				CD at 5 % level	3.67		3.25	

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