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COMPARATIVE RESISTANCE OF CERTAIN VARIETIES OF  
CHILLIES TO THE BACTERIAL WILT CAUSED BY  
*PSUEDOMONAS SOLANACEARUM* SMITH

The bacterial wilt caused by *Psuedomonas solanacearum* is a wide spread disease of chillies in Kerala. No information is available on the relative susceptibility of the different varieties of chillies to this disease. Some of the varieties commonly grown in the State were hence screened for their relative resistance to the disease under field conditions.

Nine varieties of chillies viz. Chinese giant, Bholar, Cherry Red, Hungarian Wax, Dark Purple, Pungent Pride, Kandhari (a local variety) and Vattal (a variety commonly available in local markets) were used in the studies. The plants were grown in  $1.8 \times 0.5 \times 4.5$  m plots adopting a Randomised Block Design for the experiment. The results were assessed in terms of the percentage of plants wilted due to the bacterial attack till harvest.

The mean percentage of diseased plants in Kandhari, Pungent Pride, Cherry Red, Vattal, Dark Purple, Long Red, Hungarian vax, Bholar and Chinese giant were 0.85, 6.37, 10.25, 14.32, 16.28, 17.33, 35.20, 35.38 and 66.80 respectively. It is seen that the varieties showed significant difference in their relative susceptibility to the disease. Kandhari in which the percentage of disease incidence was less than 1 may be treated as the most resistant variety. Pungent Pride, Cherry Red, Vattal, Dark Purple and Long Red, the varieties in which the incidence of disease was below 20 per cent may be treated as moderately resistant and the remaining varieties may be treated as susceptible ones.

സംഗ്രഹം

സ്യൂഡോമോണോസ് *Psuedomonas solanacearum* എന്ന ബാക്ടീരിയയുടെ ആക്രമണം കൊണ്ടുണ്ടാകുന്ന ചീയൽ രോഗത്തിന് 9 ഇനം മൂലകചെടികൾക്കുള്ള പ്രതിരോധശക്തി നോക്കിയതിൽ 'കാന്താരി' എന്ന ഇനത്തിനാണ് ഏറ്റവും കൂടുതൽ പ്രതിരോധശക്തിയുള്ളതെന്നു കണ്ടു. 'പഞ്ജൻറ്റ് പ്രൈഡ്' 'ചെറി റെഡ്' 'ഡാർക് പർപ്പിൾ' 'ലാങ്ങ് റെഡ്' എന്നീ ഇനങ്ങൾക്കു സാമാന്യം പ്രതിരോധശക്തിയുള്ളതായി തെളിഞ്ഞു.

College of Agriculture  
Vellayani 695522

A. RAHIM  
J. SAMRAJ

(M. S. received: 4-1-1975)