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Host Range of *Alternaria alternata* (Fr.) Keissler Causing Leaf Spot of Papaya

D. S. Mistry, D. G. Vala and S. T. Patel

Department of Agricultural Meteorology,
B. A. College of Agriculture, Gujarat Agricultural University, Anand Campus, Anand-388 110

Twelve different plant species belonging to various families commonly found in South Gujarat area (Table 1) were tested for their suitability as host of *A. alternata* during 1991.

The healthy respective test plants were raised under glass house conditions in pots filled with autoclaved field soil. Plants were inoculated after 30 days of seedling by spraying the spore suspension of the fungus (125-150 conidia/100 x micro field). Inoculated plants were covered with polythene bags for 48 hrs. in order to create congenial conditions for infection. One set of each test plant was kept uninoculated as check. Final observations regarding symptom development were recorded 15 days after inoculation.

The results revealed that out of 12 plant species belonging to family Areceae, Cruciferae, Malvaceae, Solanaceae, Cucurbitaceae, Papilionaceae and Musaceae, *A. alternata* infected only 3 plant species viz.,

TABLE 1

Infection test of *Alternaria alternata* on different plants.

Sr. No.	*Plant species*	*Family*	*A. alternata*		*Per cent infected*
			No. of plant inoculated	*No. of plant infected*	
1.	Okra (*Hibiscus esculentus* L.)	Malvaceae	2	0	0
2.	Cabbage (*Brassica* oleracea *Var. capitata*)	Cruciferae	2	0	0
3.	Cauliflower (*Brassica oleracea* var. *cauliflora* L.)	Cruciferae	2	0	0
4.	Bottle gourd (*Lagenaria siseraria* (Mol.) standi	Cucurbitaceae	2	2	100
5.	Cotton (*Gossypium herbaceum* L.)	Malvaceae	2	2	100
6.	Brinjal (*Solanum melongena* L.)	Solanaceae	2	2	100

1.	2.	3.	4.	5.	6.
7.	Tomato (*Lycopersicon esalantum* L. (Karst.)	Solanaceae	2	0	0
8.	Cluster bean or Guar (*Cyamopsis tetragonaloba* L.)	Papilionaceae	2	0	0
9.	Potato (*Solanum tuberosom* L.)	Solanaceae	2	0	0
10.	Pegion pea (*Cajanus cajan* L.)	Papilionaceae	2	0	0
11.	Banana (*Musa cavendishi* L.)	Musaceae	2	0	0
12.	Elephant's foot (*Amorphophalus campanulatus* Blume)	Araceae	2	0	0

bottle gourd, cotton and brinjal (Table 1). Fungus produced characteristic leaf spot symptoms similar to the spots observed on papaya after 15 days of inoculations. No symptoms were developed on rest of the plant species tested. Kapoor and Hingorani (1958) reported *A. tenuis* causing leaf spot and blight of brinjal. Madan and Chand (1986) reported bottle gourd as a host *A. alternata* while cotton is also a known host of this fungus (Faulwetter, 1918; Presley, 1954; Patel *et al.* 1983 and Singh *et al.*, 1984). Thus, *A. alternata* can survive on cotton, brinjal and bottle gourd besides papaya. Brinjal and bottle gourd are grown round the year. Cotton is a long-season crop. Therefore, they harbour the pathogen as well as provide primary source of inoculam for other susceptible field crops.

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