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Host Range of *Drechslera hawaiiensis* Bougn. Causing Leaf Blight of Papaya

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Preliminary survey carried out for the diseases of papaya in papaya growing areas of Surat and Valsad districts, papaya crop was found severely affected by leaf spot and leaf blight diseases in certain pockets. Isolation and subsequent identification of pathogens revealed to be *Alternaria alternate* (Fr.) Keissler and *Drechslera hawaiiensis* Bough. Pathogenicity test carried out on cv. Madhubindu showed that *A. alternata* caused leaf spot while *D hawaiiensis* caused leaf blight of papaya.

In order to study host range of *D. hawaiiensis*, twelve plant species commonly found in South Gujarat (Table 1) were tested for host range under glasshouse condition. The plants were raised in pots filled with autoclaved soil and inoculated by spraying the spore suspension (125-150 conida/100 x micro field)

TABLE 1

Infection test of *Drechslera hawaiiensis* on different plant species.

Sr. No.	Plant species	Family	D.hawaiiensis		Per cent infection
			No. of plant inoculation	No. of plant infected	
1.	Okra (*Hibiscus esculantus* 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 siserarla* (Mol.) Stanli.	Cucurbitaceae	2	2	100

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1.	2.	3.	4.	5.	6.
5.	Cotton (*Gossypium herbaceum* L.)	Malvaceae	2	2	100
6.	Brinjal (*Solanum melongena* L.)	Solanaceae	2	0	0
7.	Tomato (*Lycopersicon lycopersicum* 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.	Pegionpea (*Cajanus cajan* L.)	Papilionaceae	2	0	0
11.	Banana (*Musa cavendish* L.)	Musaceae	2	0	0
12.	Elephant's foot (*Amorphophalus campanulatus* Blume).	Araceae	2	0	0

of *D. hawaiiensis* cultured on PDA for ten days. Suitable checks for each plant species were kept uninoculated. Plants were watered regularly.

Final observation on development of symptoms recorded after 15 days of inoculation revealed that *D. hawaiiensis* infected only 2 plant species i.e. bottle gourd (*Lagenaria siseraria*) and cotton (*Gossypium herbaceum*) belonging to family cucurbitaceae and malvaceae producing the characteristic leaf blight lesions similar to papaya (Table 1). No symptoms developed on rest of the plant species tested.

Though *D. hawaiiensis* has been reported to infect many plant species including bermuda grass (Mishra *et al.* 1971), pineapple (Cheeran and Sasikumaran, 1972). Commelina (Narendra and Rao, 1973) rhodesgrass (Sonoda, 1974), pearl millet (Misra and Singh, 1975), maize (Shukla and Shukla, 1974) and Sorghum (Pandey and Shukla, 1979), bottle gourd for this fungus.

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