

A New Leaf Blight Disease of Chiku (*Achras sapota* L.) Incited by *Pestalotia sapotae* in Gujarat

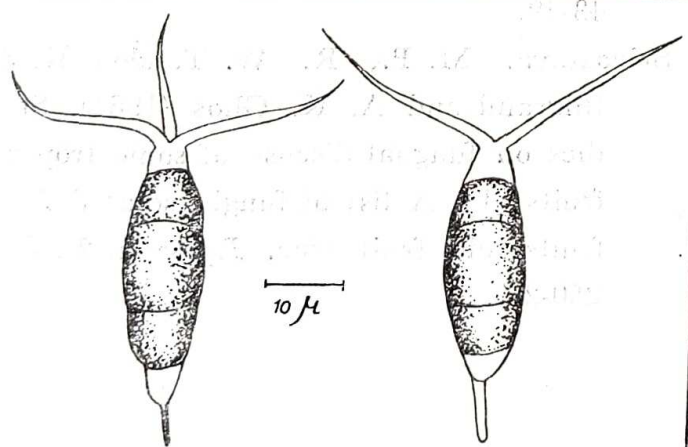
J. G. Patel¹ and A. J. Patel²

Department of Plant Pathology, Gujarat
Agricultural University, Anand
Campus, Anand

Chiku (*Achras sapota* L.) is one of the major fruit crops grown in south Gujarat and other parts of India. The orchards are concentrated in the suburbs of cities and towns mainly due to easy marketing facilities. The pathogenicity of *Pestalotia sapotae* P. Henn. on chiku fruits was established for the first time in India by Mehta and Bose (1951) and subsequently by Shrivastava *et al.* (1964). Leaf blighting was reported by Agarwal and Agnihotri (1970) and

Rajendran (1971). Chiku leaf blight is hereby reported for the first time in Gujarat.

The disease was first noticed as a fairly widespread leaf spot disease in the chiku orchard, at the Institute of Agriculture, Anand during August, 1973. The infection on leaves varied from 2 to 5 per cent. It is initiated at the margin of green tender leaves and further advances on the leaf surface resulting into blighting and defoliation of leaves. The blighted portions vary from 7-25 x 4-7 mm in size (Fig. 1). The infected fruits would be small and shrivelled (Fig. 2). On the blighted portion of the leaf, minute black pinhead-like when dots were being seen. These dots observed under microscope were found to be well-developed acervuli of the fungus. Conidiophores are short and simple. Conidia are spindle shaped.



Pestalotia sapotae showing conidia

Fig. 1 Blight symptom

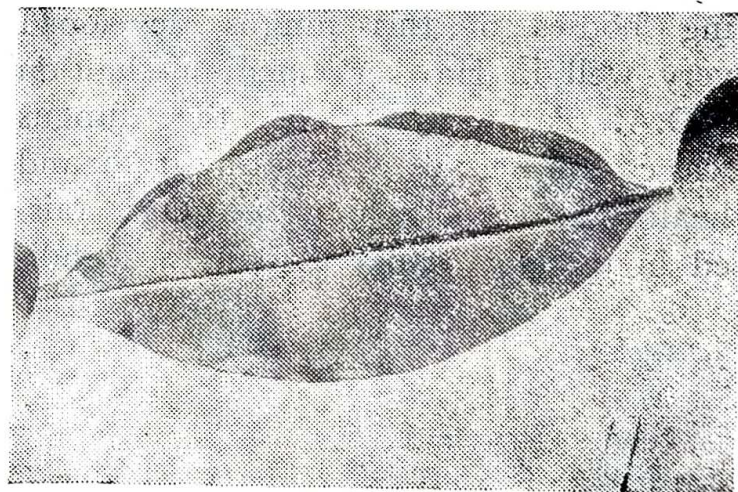


Fig. 2 Mummified fruit

1. Assistant Professor.
2. Professor and Head.

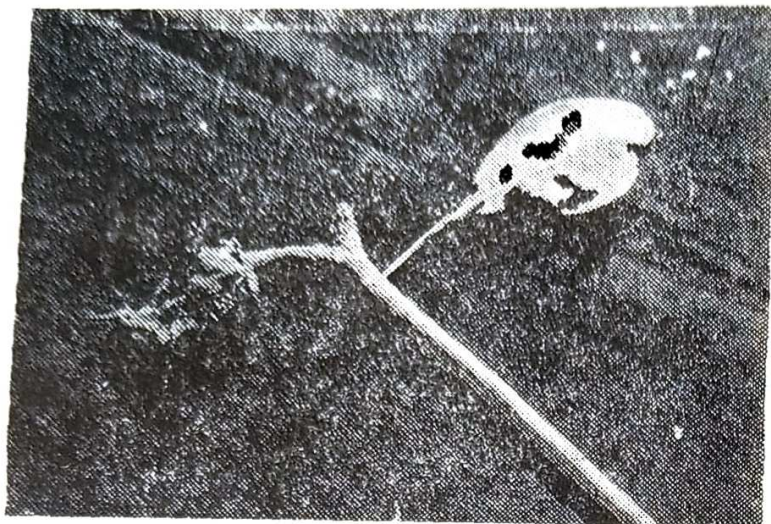


Fig. 3 Conidia of *Pestalotia sapotae*

ed with 3-4 septa and measure $23-31 \times 5-7 \mu$. At the tip, conidia bear thread like appendages, generally three in number (Fig. 3).

The fungus was isolated in pure form from freshly collected infected leaves and was maintained and multiplied on P.D.A. for pathogenicity trial. The fungus was also grown very well on Asthana and Hawker's medium as suggested by Purohit (1971). Fruiting bodies of this fungus developed very well in Hawker's medium than on P.D.A. Pathogenicity of the fungus was established, by inoculating fresh and healthy leaves of chiku seedlings raised in the pots under glass-house condi-

tions, with the suspension of 7 days old culture, as per the technique used by Roy (1965). Typical symptoms of the disease appeared after 6-7 days of inoculation. The pathogen was re-isolated from the lesions and was found to be the same.

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