Fruit-rot of custard-apple (*Annona squamosa*) — a new disease from Burdwan, West Bengal

S. OJHA, M. R. CHAKRABORTY, J. CHAKRABARTI AND N. C. CHATTERJEE

Mycology and Plant Pathology Laboratory, Department of Botany, Burdwan University, Burdwan 713 104, West Bengal

During a local survey in Burdwan, West Bengal, a severe hitherto unrecorded fruitrot of custard-apple was not only noticed but also having its epiphytotic recurrence in an orchard in Tarabag under Burdwan University Residential Campus. *Annona squamosa* Linn. commonly known as custard-apple belonging to the family Annonaceae is one of the best tropical fruits and several products such as jelly, jam, conserves, sherbet, syrup, tarts and fermented

drinks are prepared from the fruits. The organism associated with infected fruits was isolated and identified as *Phoma* sp.

Symptoms of the fruit-rot were characterized by blackening of the entire fruit, which gradually became hard and stony with the progressive advncement of the disease posing a sight of hanging coal-tar balls ornamented in the greens of the plant

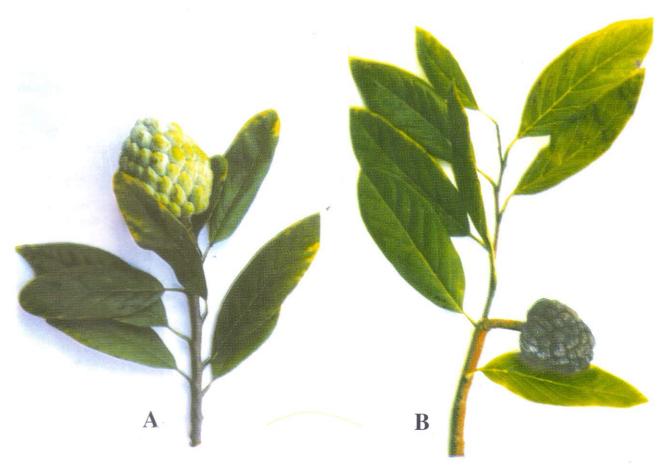


Fig. 1: A. Twig showing healthy fruit (X 1/4)

B. Twig showing healthy fruit (X 1/4)

(Fig. 1). The pulps of the fruit also became black in colour and dusty in nature. However, the branches of the plant where from the fruit hang remained unaffected and the pathogen was restricted only to the fruits and is topical in nature. Consecutive studies revealed that in the first year (2003), in plant about 70 per cent fruits get infected, but in the second year (2004) almost all fruits of the plant became infected. The size of the fruits was reduced and some were shedded from the branches.

The pathogenicity of the isolate was confirmed by various inoculation experiments of which the Koch's postulates were fully satisfied. The identification of the pathogen (ITCC No. 5864.04) has been confirmed by Indian Type Culture Collection Centre, Division of Plant Pathology, IARI, New Delhi, The authors fail to trace any early report of the disease from this fruit plant and is considered as a new of its kind in India.

(Accepted for publication February 15, 2005)