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Determination of susceptible age/stage of seedlings, leaves and fruits of papaya to anthracnose disease caused by *Colletotrichum gloeosporioides* (Penz.) Penz. and Sacc

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Papaya fruits and leaves representing four developmental stages (¼ normal size, ½ normal size, ¾ normal size, and normal size or fully matured leaf/fruit size) were spot inoculated with 10^6 spores/ml spore suspension of *Colletotrichum gloeosporioides* isolated from papaya, to determine the susceptible stage of the fruit and leaf to the pathogen. Disease development at seven days after the spot inoculation was recorded as lesion size and percentage of fruits/leaves infected. Ten papaya seedlings of different ages were also inoculated with 10^6 spores/ml spore suspension of *C. gloeosporioides* by carefully spraying over the seedlings to study the seedling susceptibility to the disease. Per cent seedlings with anthracnose symptoms were recorded.

Fruits at all test stages developed characteristic anthracnose lesions. Disease incidence and the size of the lesions of fully matured and ¾ normal size fruits were significantly (P=0.01) high compared to less developed fruits. All inoculated leaves showed anthracnose symptoms. Disease incidence of ¼ normal size and ½ normal size was found to be significantly (P= 0. 01) higher than the normal size leaf. The ¼ normal size leaves had significantly higher lesion size compared to the rest of the leaves representing different developmental stages. Susceptibility of seedlings to *C. gloeosporioides* was noticed only up to the tenth week after the seed germination. Seedlings at first and second week after the seed germination found highly susceptible for the pathogen.

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