

PIGMENTS IN KOKKAN AFFECTED BANANA

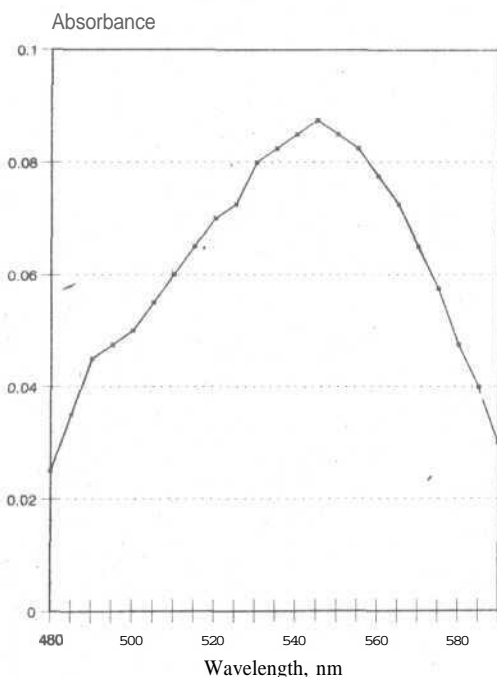
Kokkan, a dreadful disease of banana, has become a growing menace in Kerala, especially to Nendran, since 1966. The disease, formerly restricted to Trichur district and Nendran cultivar, has now invaded almost all the districts of Kerala and seen in all the cultivars.

Samraj *et al.* (1966) observed that the appearance of pinkish streaks/ discolouration in the pseudostem, leaf petiole and midrib of leaves, is a characteristic symptom of the 'kokkan' affected plants. Attempts were made to identify the pigment, using solvent extract method.

The study was conducted at the College of Horticulture, Vellanikkara, Trichur. Acetone, petroleum ether, chloroform, benzene, methanol, ethanol, xylene, formalin, butanol and water, at different concentrations and combinations, were used for the extraction of the pigment. One gram of the fresh plant material, collected from the outer layer of the pseudostem of kokkan affected plants, was utilised for the purpose. Of the different solvents tried, acidified ethanol (EtOH-HCl 1%) was found to be the best for the complete extraction of the pigment. The absorbance of the extract was read at different wave lengths, ranging from 480 nm to 590 nm, to locate absorption maximum of the pigment using Spectronic 20 spectrophotometer. The maximum was found to be at 545 nm. The colouring matter responsible for the pinkish streaks on kokkan affected Nendran plants was

identified as anthocyanins (Ranganna, 1977).

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Rg 1. Absorption spectrum of the colouring pigment from 'kokkan' affected Nendran plants

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