

**MORPHOLOGICAL AND PATHOLOGICAL VARIATION OF THE FUNGUS
Colletotrichum gloeosporioides FROM DIFFERENT VARIETIS OF MANGO IN
SRI LANKA**

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ABSTRACT

Anthranose caused by the fungus *Colletotrichum gloeosporioides* (Penz) Penz and Sacc. is the major post harvest disease of mango (*Mangifera indica*) in Sri Lanka and this fungus is extremely variable in its morphology. A study was done to evaluate and identify the variations in *Colletotrichum gloeosporioides* among the cultivated Mangoes in Sri Lanka, in which isolates were obtained from infected fruits of mango varieties viz: Villard, Selai.Petti, Neelam, Wal, Vellaikolumban, Karthakilumban, Kohu, Papal and Gira. After ten days on PDA at 28°C under continuous white light, morphological characters (colour, appearance and growth rate) of the culture were closely examined and were grouped as fast growing colonies (FGC) and slow growing colonies (SGC) based on the growth rate of colonies, determined by their diameters. The diameter of FGC ranged from 41.00 to 52.83 mm meanwhile that of SGC was 34.75 to 38.00mm at 14 days of incubation. The lengths of at least 30 conidia per isolate were measured microscopically and were subjected to ANOVA in SAS statistical package. Pathogenicity of each isolate was tested with the commercially available variety *petti amba*. Two different groups were identified with respect to colony characteristics. Isolates from *Karthakolumban*, *Vellaikolumban* and *Kohu* showed the slow growth rate meanwhile the rest of the isolates were fast growing colonies. There was significant variation among the mean lengths of spore of each isolates, ranged from 6.583 to 12.250 µm. The results indicated that the growth rate of colonies and the spore lengths are not related. The results of the pathogenicity tests for each isolate showed that there were variations in the lesion sizes developed by different isolates of *Colletotrichum gloeosporioides*; however, cross compatibilities of these isolates over the mango varieties have been noticed.

Key words : mango, varieties, isolates, morphological characters, pathogenicity