D–39: A comparative morphological study and isozyme analysis of different isolates of *Colletotrichum* spp.

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Experiments were carried out to determine the genetic variation among different isolates of *Colletotrichum gloeosporioides* from avocado, mango and papaya fruits, *Colletotrichum musae* from banana, *Colletotrichum capsici* from egg plant and capsicum and unidentified *Colletotrichum* species from clove leaves. For each isolate, morphological characters of colonies and conidia were examined. Molecular characteristics were studied by analysing esterase, peroxidase, catalase, isocitrate dehydrogenase, malate dehydrogenase and shikimate dehydrogenase banding patterns in polyamide gels.

Colonies of *C. gloeosporioides* isolated from different fruits showed some variation in external morphology. They showed distinct differences from the colonies of *C. musae*. Conidial sizes and shapes did not reveal reliable parameters in differentiation of these isolates, except for *C. capsici*. The isozyme analysis indicated variations among different isolates of *Colletotrichum*. Among the isozymes investigated, esterase and dehydrogenase gave a good banding pattern. However, esterase gave a better resolution compared to the other.