

# *Colletotrichum*: host specificity and pathogenicity on selected tropical and subtropical crops

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## Abstract

*Colletotrichum* and its teleomorph *Glomerella* are considered major fungal plant pathogens worldwide. They cause significant economic damage to fruit crops in tropical, subtropical and temperate regions. Several *Colletotrichum* species or biotypes are known to cause disease in a single host such as *C. acutatum* and *C. gloeosporioides* on apple, avocado, mango, papaya, passiflora, strawberry and tamarillo. It is also common to find a single species infecting multiple hosts such as *C. gloeosporioides* on apple, avocado, mango, papaya, peach, strawberry, and other hosts. Cross-infection potential was shown for two species, *C. gloeosporioides* from limonium and *C. acutatum* from strawberry, when inoculating peach, pear, mango, nectarine and strawberry. Molecular analyses including species-specific PCR amplification and ITS sequencing was reliable for identification of *Colletotrichum* isolates infecting apple, avocado, mango, papaya, passiflora, peach, strawberry and tamarillo fruits. Sub-populations within *C. acutatum*, *C. gloeosporioides* and *C. boninense* were characterized using ITS sequence analysis, while the latter appears to be a diverse and emerging new species infecting multiple fruit crops.