

Latent infection of *Colletotrichum gloeosporioides* Penz. in Mahajanaka mango was studied by field inoculation on attached fruits and leaves is reported for the first time. Development of disease was followed up from 6 hours to 45 days after inoculation. Microscopic observation on the surface of inoculated fruit showed that the fungus germinated the germ tube and produced dark brown appressorium within 12 hours. Septations between spore and germ tube and between germ tube and appressorium were observed 6 hours later. Penetration of cuticle by an infection peg, about 5 μm long, was found germinated from an appressorium in 24 hours. Longer infection peg was observed at the area very close to the epidermal layer within 36 hours. All the appressoria observed had produced infection pegs and primary hypha developed from the infection peg was seen at hour 48 in the cuticular layer and stayed there quiescently with no further growth. Neither the intercellular nor the intracellular hypha was seen in the intercellular space in the host cells on day 7, 14 and 45 after inoculation until the fruit was harvested and incubated in moist chamber where 100% of anthracnose symptom was evident.

On the leaf surface, germ tube germinated and appressorium was produced at hour 12. Germ pore at the middle part of the appressorium was clearly seen 6 hours later. Infection peg developed from appressorium was seen 24 hours after inoculation. Necrotic spots were observed at 48 hours and tissue disruption was found on the 7th day after inoculation with hypha growth within the cells. Many appressoria were seen on the surface during symptom development. When the leaves were incubated in a moist chamber for 7 days, acervuli were found to develop on the surface of the wounded area.