

Cross-infectivity of oil palm by *Phytophthora* spp. isolated from perennial crops in Malaysia

ABSTRACT

Bud rot disease or “Pudricion del cogollo” (PC) of oil palm is a major constraint on production in Colombia and neighbouring countries such as Brazil, Costa Rica, Ecuador, Nicaragua, Panama, Peru and Surinam. To date, there are no documented reports of *Phytophthora* disease of oil palm in South-East Asia. This research, therefore, was conducted to determine the pathogenic potential of *Phytophthora palmivora* and *Phytophthora nicotianae* on oil palm using both in vitro and nursery inoculation experiments. In vitro inoculation of both *P. palmivora* and *P. nicotianae* on immature oil palm leaflets caused discoloration within 2 days of inoculation and incubation at $25 \pm 1.5^{\circ}\text{C}$, 100% RH. Similarly, in nursery trials, lesions formed on the buds (unopened leaflets) 3 days after inoculation with *P. palmivora* or *P. nicotianae* zoospore suspensions. No lesions developed on untreated leaflets in either in vitro or nursery inoculation experiments. *Phytophthora* spp. were re-isolated from leaflet lesions and confirmed as the inoculated pathogens.