

Abstract

Ultraviolet (UV) radiation especially low doses of UV-C induce disease resistance in some crops. An experiment was carried out to determine the effect of UV-C on resistance of mango fruit to anthracnose disease. One side of a sample of mango (cv. 'Kensington Pride') fruit were exposed to UV-C light for 2.5, 5 or 10 minutes. After UV-C treatment, the fruit were then for 24 hours at 23°C and 70% r. h. Fruit were then inoculated with *Colletotrichum gloeosporioides* (1×10^7 spores/mL), and inoculated fruit were incubated in plastic trays at 25°C and 90% r. h. for 24 h. The fruit were then transferred into boxes and allowed to ripen at 22°C and 70% r. h. Disease severity was recorded as lesion diameter (mm). The results showed that UV-C light reduced fungal growth and disease severity. Fruit that were exposed to UV-C for 10 minutes had the lowest level of disease compared with 2.5 or 5 minutes exposure or the untreated control fruit. Interestingly, whilst the exposed sides contained less disease than the unexposed sides, the latter, in fact, had less disease than the untreated control fruit. UV treatments seem to trigger induced systemic resistance to anthracnose on Kensington Pride mango fruit