Demonstration 3: Hot Water Treatment

Aim

- Identify postharvest diseases that cause rot on Cat Chu & Cat Hoa Loc
- Study effective HWT & Chitosan coatings on rot & fruit quality

Method

- Lab Identification of post harvest diseases on fruit collect from demo farms
- Trial HWT and Chitosan treatments simulating commercial chain conditions

Disease

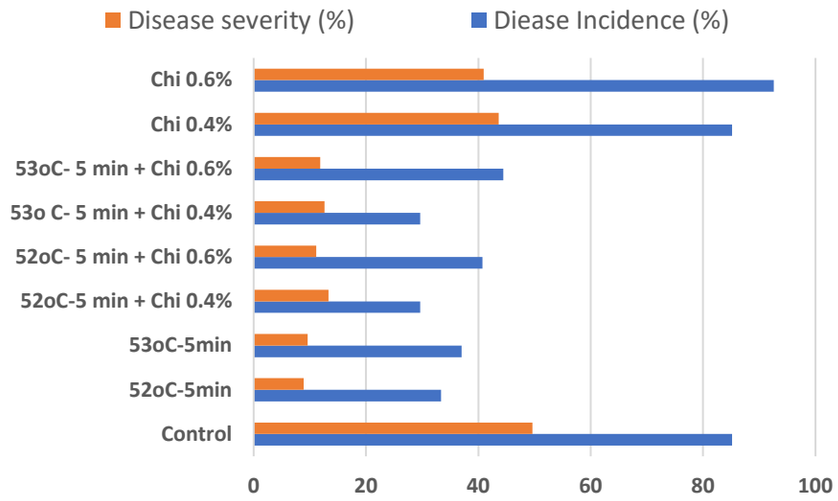
Colletotrichum gloeosporioides

Colletotrichum acutatum

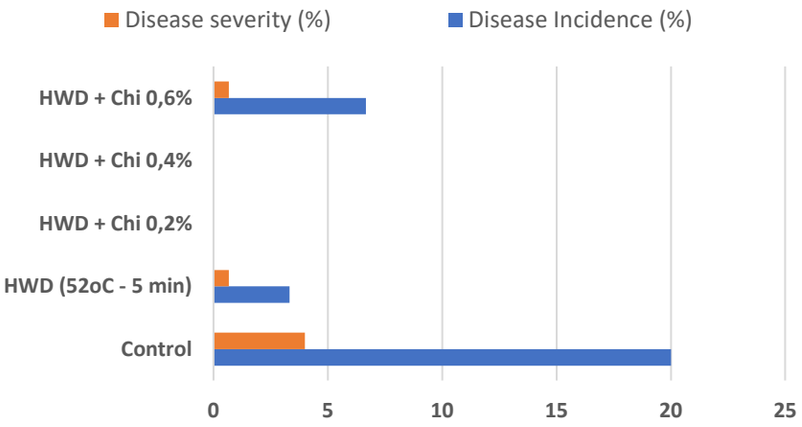
Phomopsis longicolla

Diaphorthesp.

Lasiodiplodia pseudotheobromae



Disease incidence & severity on Hoa Loc mango after 9 days at 22 °C



Disease incidence & severity of Cat Chu mango after 7 days at 22 °C

What we learnt

- HWT can significantly reduce disease levels. Suitable for short to medium distance markets
- Longer distance markets would require the use of fungicide in the HWT process
- Overall results, with the addition of Chitosan appear to be inconclusive but may suppress disease for medium storage durations

What we recommend

- Commercial testing of HWT plus Chitosan for short to medium distance markets such as Hanoi and China is required
- Trialing of HWT incorporating post-harvest fungicide for use in sea freight is needed

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