

Quality management in supply chains

Disinfestation updates

Maddison Clonan

Department of Primary Industry and Resources

17 May 2019

Summary of fruit fly disinfestation projects

- 3 trials
- 5 cultivars
- Irradiation, Vapour Heat Treatment (VHT) and Hot Water Treatment (HWT)



Australian Government

**Australian Centre for
International Agricultural Research**



Queensland Government
Department of Agriculture
and Fisheries

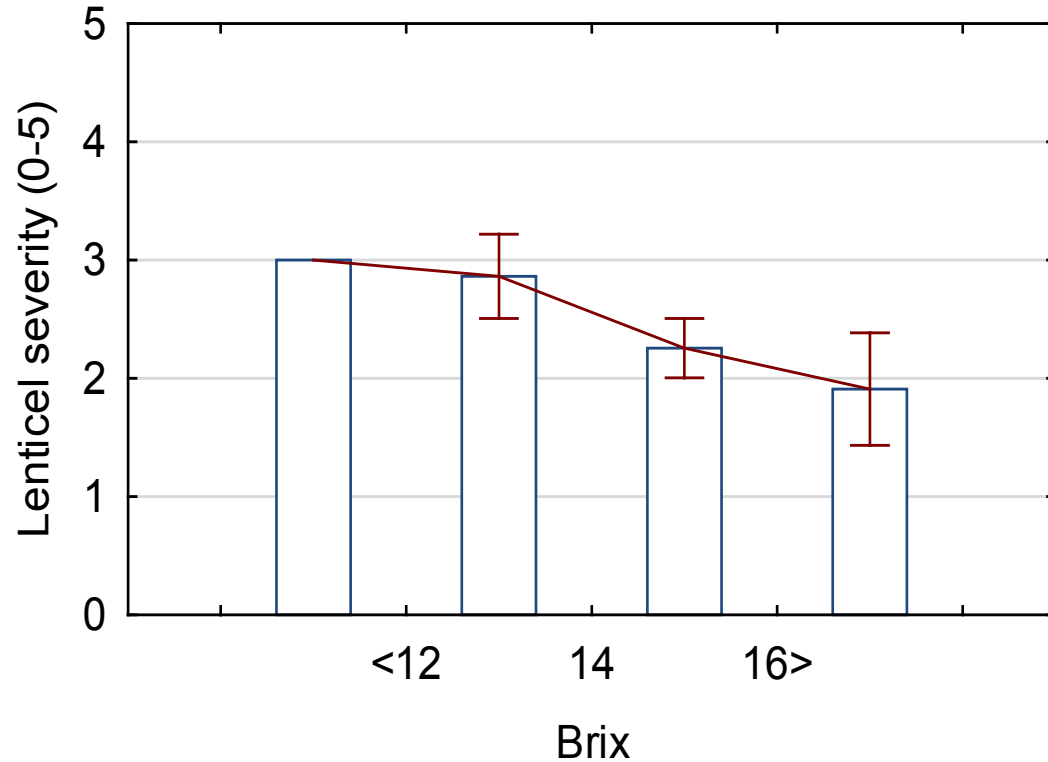


&

**Corporate
Partners**



Cultivar: 1243

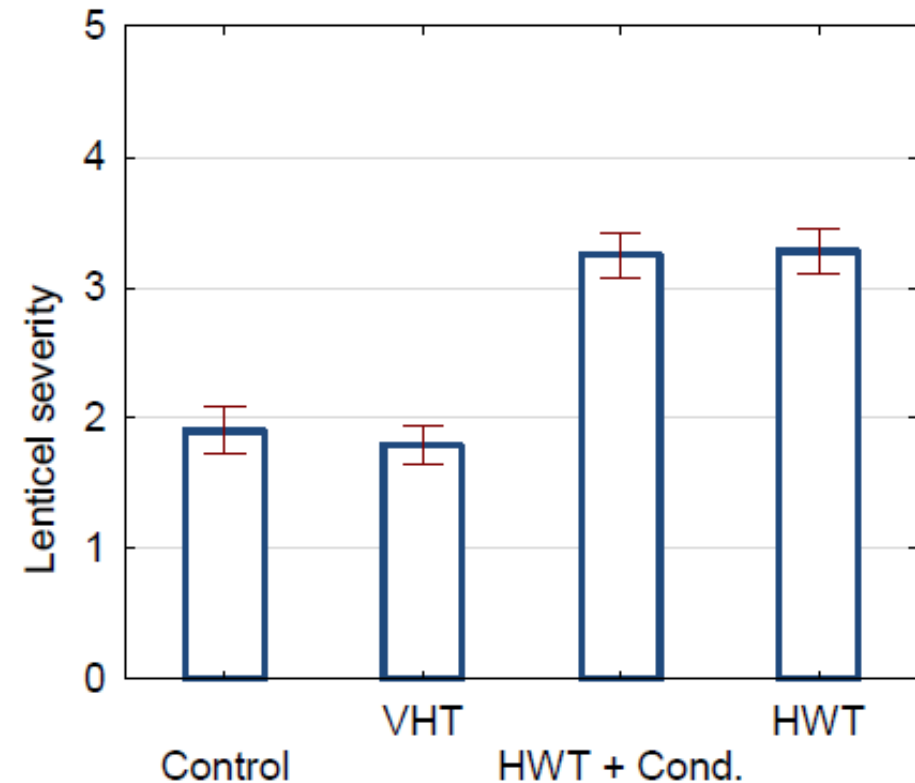


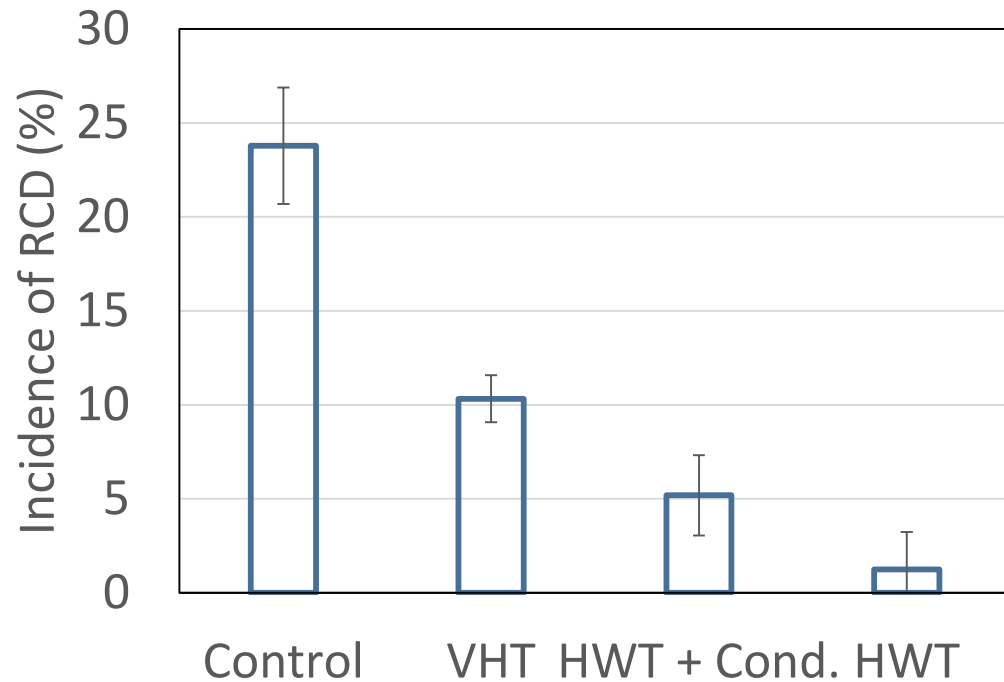
NMBP 1243 with higher brix* at ripe were found to have lower lenticel severity after gamma irradiation.

1. Maturity Matters!

2. Pre-treatment Quality

Lenticel severity increases after Hot Water Treatment and Gamma irradiation if lenticels are already present.

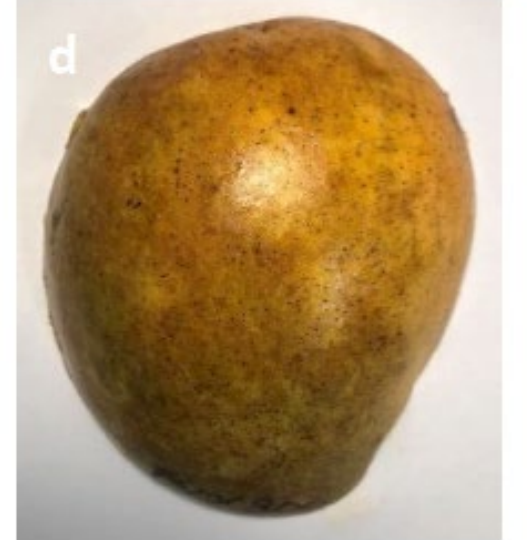
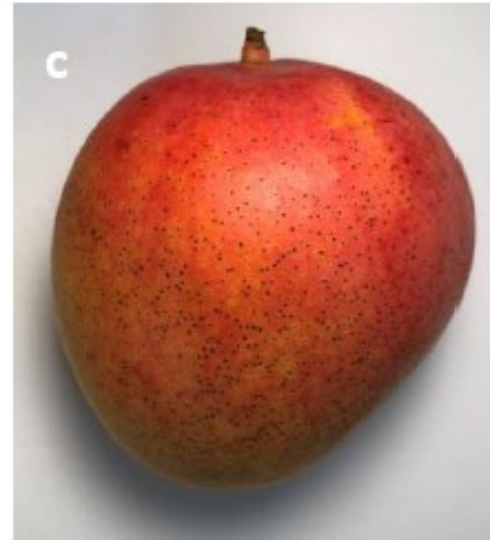
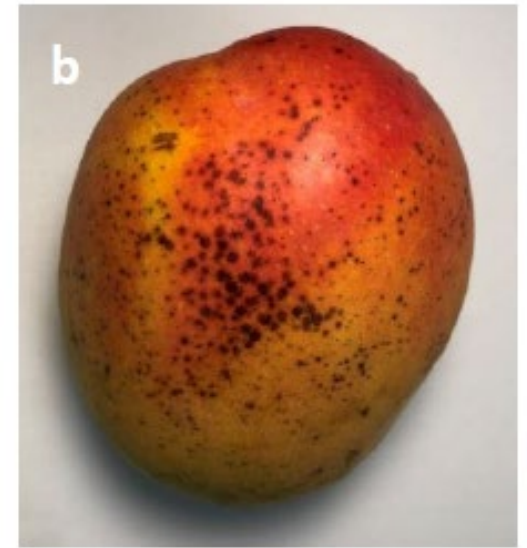


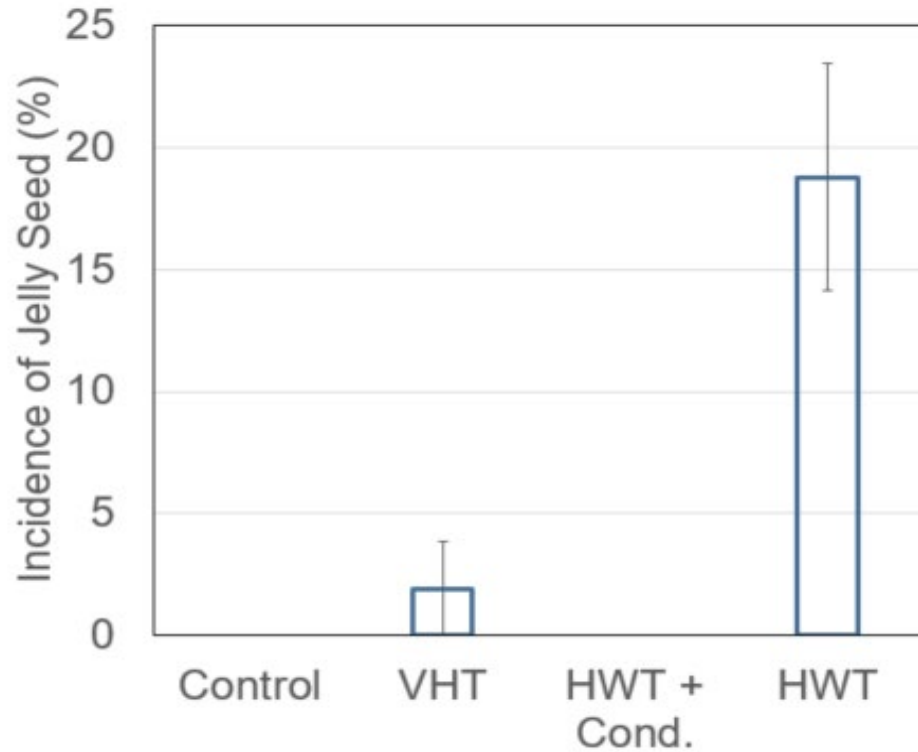


Fruit treated with VHT or HWT had significantly lower incidence of RCD and stem end rot across.

3. Fungal + Bacterial Blemish

4. Pre-ripening for Irradiation

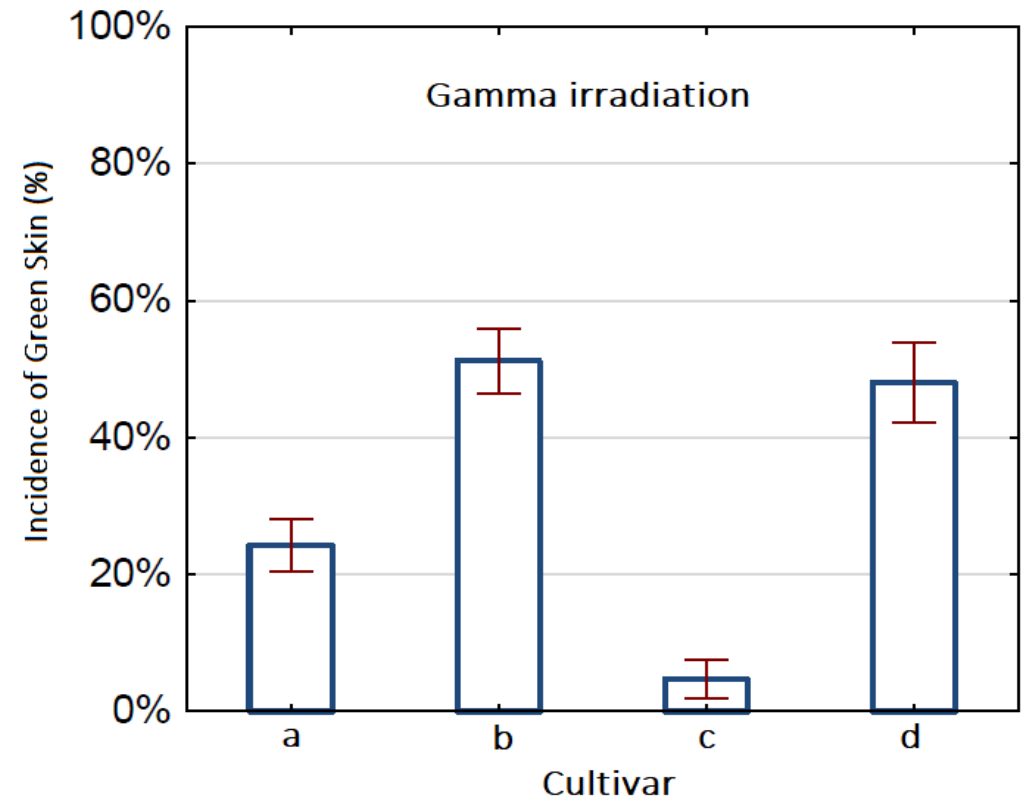




Fruit stored at 30°C for 12 hours prior to HWT reduced the incidence of jelly seed.

5. Conditioning for Hot Water

6. Cultivar Specific Treatment



Very different cultivar response to gamma irradiation treatment demonstrated by the incidence of green skin.

Thank you

For more information contact:

Maddison Clonan

Maddison.clonan@nt.gov.au

08 8999 2293