

Waihi Orchard: Gold9 Block – 9th September 2014.

Background: This Gold9 block is being retained for cropping this season. Only three male plants remain and suckers within the block have been grafted to Gold3. Cut-out of infected material is continuing as infection is seen. This block is at budburst.

Observations: Exudate was observed on trunks, leaders and canes and dieback was seen in a number of canes



Figure 1: Red exudate - Gold9 leaders.



Figure 2: Red exudate - Gold9 trunks.

Waihi Orchard: Hayward with Chieftan males – 9 September 2014.

Background: Some Psa-V infection of males had been seen in this orchard in previous seasons but at a much lower incidence than this season. Symptoms were found during a monitoring round – 80% of males and < 10% of females showed exudate

Observations: For males - Exudate was seen on cane joints, sometimes associated with pruning cuts, and also on buds. Late high growth was often desiccated or discoloured, with removal of bark revealing rotten buds and associated red exudate. This late growth had been frosted in late autumn with the frost occurring one week following harvest. This frost had defoliated the canopy.

For females – Occasionally end buds on canes showed red exudate and some red exudate was seen on cane joints within the canopy.



Figure 3: Exudate - chieftan male



Figure 4: Exudate - chieftan male



Figure 5: Cane exudate -chieftan male



Figure 6: Cane exudate -chieftan male



Figure 7: Cane infection - chieftan male



Figure 8: Bud and cane infection -late growth -chieftan male



Figure 9: Exudate on Hayward.

Waihi Orchard: 2013 grafted Gold3 - 9th September 2014

Background: This block is in conversion from Hayward to Gold3. In 2013, every second row was stump-grafted to Gold3. Gold3 canes were subsequently grown above the Hayward canopy. Last Spring the Hayward canopy became heavily spotted with Psa-V and approximately 30% of flower buds were lost through infection. The Hayward canopy has now been removed with the balance of the block is grafted to Gold3.

Observations: Many of the 2013 grafted plants had cane die-back or canes were dis-coloured indicating the presence of infection. Leaders on a high proportion of the plants, and also some trunks, were exudating and in need significant cut-back to remove infection. It is expected some of these scions will require removal and re-graft.



Figure 10: Hayward block transitioning to Gold3 over two seasons.



Figure 11: Dehydrated canes off Gold3 leader.



Figure 12: Red exudate at cane joint - 2013 grafted Gold3



Figure 13: Discoloured and infected canes - 2013 grafted Gold3



Figure 14: Discoloured and infected Gold3 trunk.



Figure 15: 2013 grafted Gold3 showing recent exudate



Figure 16: 2014 grafted Gold3 within the conversion block.