



® a registered certification trade mark of APFIP

## **Introduction of APFIP Certified Nursery Trees**

The commercial advantage of using certified pome fruit planting material has been overwhelmingly validated in every growing region where it's been implemented. The distribution of viruses of economic significance (apple stem grooving, apple stem pitting, apple chlorotic leaf spot and apple mosaic) in the Australian pome fruit industry is widespread. This was confirmed in the survey that was completed as part of a HAL project, where 94% of all samples taken were infected with one or more these viruses. APFIP has a registered certification trade mark which has been licensed to eight [8] nursery entities in Australia. Nursery trees and rootstocks bearing the trade mark are certified as testing negative for the viruses listed above, are pomologically true to type and meet minimum nursery tree standards. APFIP has been working closely with its trade mark licensees to establish commercial production of certified dwarfing rootstocks. The production of certified M26 rootstocks has reached commercial levels but there is still work to do to get M9 to this level. APFIP is the exclusive Australian licensee for the NAKB® M9T337 rootstock and its production has been licensed to APFIP's certification trade mark licensees. Certification of varietal propagating material is critical to providing certified nursery trees to the Australian industry. APFIP is not a variety manager or agent so it has to rely on those that are, to ensure that the commercial varieties they have meet the certification requirements. A heat treatment service for the elimination of viruses is available and testing protocols are in place for new varieties whilst they are in quarantine to test for the viruses listed above. APFIP is working with its licensees to facilitate increased availability of certified commercial varieties, this process is ongoing. Commercial pressure from the nursery customers (growers) is now a key component of the certification process. Nursery trees bearing the APFIP certification trade mark will become readily available in this next phase of certification Introduction.

## **What this means for the Fruit Grower**

The APFIP certification trade mark certifies that the propagules from which a nursery tree is constructed from are from sources that are certified as testing negative for the viruses and are true to type and the trees themselves meet minimum nursery tree specifications.

In the study reported below, heat-treated trees that tested negative for the viruses resulted in a 17% increase in yield over the 14-year life of the orchard.

*Wilhelminadorp Research Station in Holland evaluated the effect of virus on the production of Golden Delicious over 14 years by comparing virus-free and virus-infected trees in the orchard; the results are detailed below.*

*Virus-free: 327 kg per tree*

*Virus-infected: 279 kg per tree (17% less)*

*The difference in production per tree over 14 years = 48kg. Multiplied by 2300 trees per hectare = 110,400kg (110 tonnes) which = 7.8 tonnes per year less production from virus infected trees. The same loss in production was consistent in other varieties and also with pears. This trial looked at production only and did not take into account the fact the fruit quality (russet etc) was also affected by virus.*