

APFIP Certification Demonstration Blocks

As a part of the introduction of plant certification into the Australian apple and pear industry, APFIP identified the need to show the benefits of planting certified nursery trees (ie. Tested negative for specified viruses) against non-certified nursery trees. A HAL-funded project (AF11002) commenced in 2011 and will continue for 5 years. The aim is to demonstrate to industry the benefits of planting certified trees in a non-scientific trial using a current commercial cultivar and rootstock.

Site design and management

Three demonstration sites have been established in the Huon Valley, Tasmania (Hansen block), Stanthorpe, Queensland (Rizzato block) and Lenswood, South Australia (Brockoff block). Each site consists of a minimum of 500 trees, half certified and half non-certified, planted directly beside each other. All sites are the same cultivar Alvina® Gala and M26 rootstock. The trees are grown as central leader, with two sites in a single row and one site with a V-trellis. The sites are managed to reflect pruning and training based on existing local practices. Irrigation and fertilizing are the same for both certified and non-certified.

Data collection

Data will be collected annually on vigour, crop load and packout. APFIP plans to report this data annually as well have the blocks open to inspection once in production.

Definitions

Trunk cross sectional area (TCSA) - the cross sectional area of the trunk measured in cm².

Leader extension – the amount of growth in millimetres from last season's terminal bud.

First year observations – 2013

As these sites were only planted in 2012 and have completed their first year of establishment and growth, data collection has only been on vigour comparisons.

Data collected has revealed what we should expect from certified trees – all leader extension growth was greater than non-certified. The Stanthorpe site is showing 35% greater leader extension than non-certified. One recorded observation showed no difference in the TCSA in the first year at Stanthorpe. This may be due to the excellent tree quality planted in that site and will be observed again after the 2013-2014 season.

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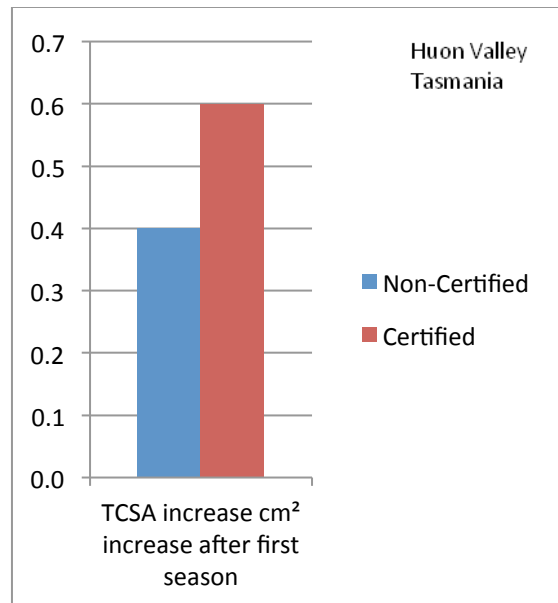
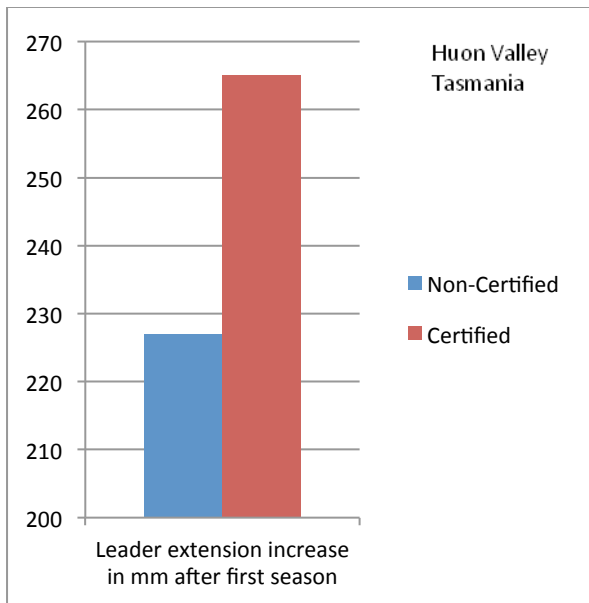
Evaluation Results Hansen Certified Demo Block

notes *September 2012 planting*

Ground- replant fumigated, gray mudstone

Trellis- no trellis for the first growing season

Tree quality- budded combination of grade 1 & 2



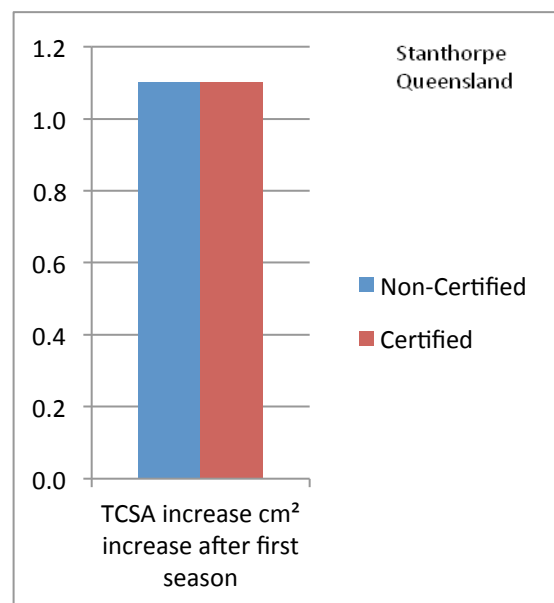
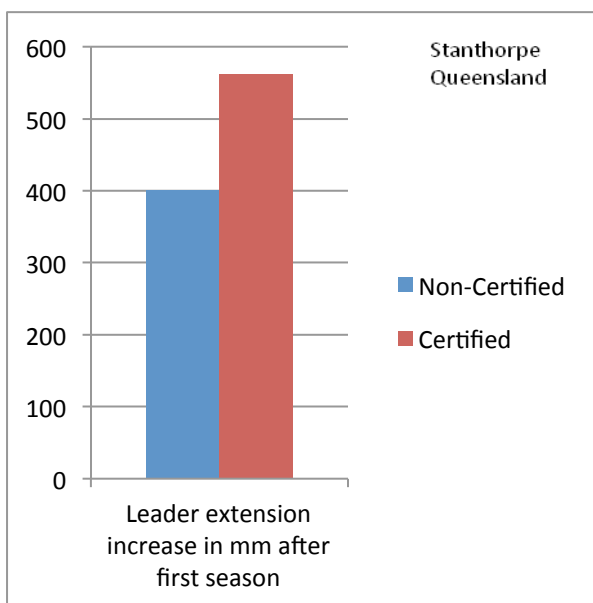
Evaluation Results Rizzato Certified Demo Block

notes *September 2012 planting*

Ground- replant fumigated, light gray

Trellis- installed during first growing season Vee trellis

Tree quality- Very good combination of both budded and 2yld grafts



Evaluation Results Brockoff Certified Demo Block

notes *September 2012 planting*

Ground- Replant, red loam/clay

Trellis- Installed during first growing season

Tree quality- combination of 2 & 3 grade rods all headed at 900mm

