

NURSERY PAPERS

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Specifying tree stock for success

Purchasers of tree stock for landscapes are increasingly specifying high-quality tree stock.

Growing high-quality tree stock provides greater certainty to customers that trees are fit for purpose and will have a successful life in the landscape.



Arborvest Tree Farm, Western Australia.

This Nursery Paper looks at the new guide for growing high-quality trees, the **Tree Stock Specifications Appendix**, available in the latest **Nursery Industry Accreditation Scheme (NIASA)** manual.

SUMMARY

- Tree buyers, especially those making large or long-term investments, require high-quality trees to perform well in the landscape.
- The optional NIASA Tree Stock Specification provides certainty to clients that tree stocks adhere to a set of best practice standards.
- Growing high-quality tree stock is vital for production nurseries to remain competitive and to build their reputation as a leading supplier in the market.
- To become accredited under the appendix, growers must comply with core NIASA requirements and several other areas, such as tree health and quality, as well as above and below ground criteria.
- A NIASA auditor verifies compliance against the appendix before accreditation is awarded.

BACKGROUND

A greater focus on urban greening in recent years has prompted the Australian nursery industry to follow a set of standards that ensure increased tree quality, consistency and transparency for buyers.

High-profile urban greening initiatives, such as the City of Melbourne's plan to double its canopy cover by 2030 and Greater Sydney's ambition to plant five million trees by 2030, are lifting demand for tree stock.

For buyers overseeing these investments, such as government, landscape professionals and developers, ensuring these trees have a successful and long life once they leave the nursery is paramount.

Equally, production nurseries growing high-quality stock must ensure their products remain competitive in the market and continue to build the reputation of the business.

Together, these factors have helped inform the development of a new appendix to the industry's flagship accreditation program, NIASA.

The appendix is available to all NIASA accredited nurseries and purchasers of its guidelines. It is an easy-to-use guide and checklist for nurseries to complete when growing and assessing their tree stocks.

The appendix joins a suite of new guides for the NIASA manual, which focus on providing additional accreditation pathways for specific crop types. This includes the Avocado nursery stock specifications, as well as upcoming Banana and Macadamia nursery stock specifications in late 2019.



An introduction to specifying tree stock

The following section of this Nursery Paper includes an overview of the requirements a NIASA nursery would need to meet in order to achieve accreditation against this appendix.

It details the key areas for growers and production staff to examine including good tree health, above and below ground aspects, as well as consistent record keeping.

For more information, or to purchase the manual, please visit www.nurseryproductionfms.com.au

GENERAL QUALITY

True to type stock

Tree stock must be true to type. Individual trees, or batches of tree stock, should be clearly labelled with the correct botanical nomenclature, as well as any other labelling or naming conventions. For further information, please visit GIA's National Plant Labelling Guidelines (https://www.greenlifeindustry.com.au/Category?Action=View&Category_id=501).

Tree stock health

Trees must exhibit good health with consideration given to particular times of

the year, geographic location and stage of growth. This can be assessed by appropriate:

- Crown density
- Crown cover
- Crown form
- Leaf colour and size
- Absence of epicormic shoots
- Absence of dieback

In addition to this, trees should also show no evidence of pests or disease that may impact upon the health of the tree. Additionally, trees must also be free from significant injury, apart from proper pruning cuts conducted in accordance with appropriate standards.

ABOVE GROUND ASPECTS

Height and calliper

The height and calliper must be recorded prior to dispatch and should be appropriate to the individual species.

Formative pruning

Formative pruning of tree stock must be conducted in line with appropriate standards as detailed in the manual.

Stem and branch structure

Diameter of the branch must be less than the diameter of the stem above the branch union and should be less than half of the stem diameter.

Crown distribution

The crown includes branches, leaves and any part of the trunk from which the branches come from.

Compatibility of graft unions

In grafted tree stock, the graft union must be sound, with the scion and rootstock compatible for the entire perimeter of the graft.

Trunk position

The base of the trunk must be positioned within the centre of the rootball (and pot) with a 10 per cent allowance.





BELOW GROUND ASPECTS

Rootball diameter and depth

Rootballs in containers 45L or greater and ex-ground tree stock should have a diameter greater than or equal to their depth.

Height of root crown

Trees in container and ex-ground trees must have a root crown at the uppermost surface of the rootball. Care should be taken to ensure the root crown is not covered with media during potting on.

Rootstock suckering

At the time of dispatch, there must be no suckering on rootstock.

Rootball occupancy

When removing the rootball from the container, at least 90 per cent of the growing media volume must remain intact in, or around, the rootball.

Root direction

From the point of initiation, roots must grow in an outwards and downward direction.

Root division

There are varying requirements for trees to undergo root division depending on whether trees are grown in less or greater than 45L containers.

Self-supporting

Stock must be self-supporting and satisfactory to the auditor.

Tree stock balance

The tree stock balance requires the above and below ground aspects of the tree to be balanced and in proportion to each other.

RECORD KEEPING

A production nursery must engage a NIASA auditor to ensure they have satisfactorily met all of its obligations, including consistent record keeping of tree stock.



Stephen Knight, Arborwest Tree Farm.

GROWER PROFILE

Stephen Knight, Arborwest Tree Farm

Western Australia's 'Arborwest' has raised the bar as a supplier of high-quality tree stock, by becoming the nation's first production nursery to pass the new Tree Stock Specification Audit.

Set on 25 acres in the suburb of Mariginiup on the outskirts of Perth, Arborwest Tree Farm grows more than 80 varieties of citrus, native, evergreen and deciduous trees in 45 litre to 500 litre container sizes.

As growers for the landscape and retail market, Arborwest's Assistant Manager, Stephen Knight, said the audit provided customer confidence that trees will adhere to the new nursery stock specification.

"The audit is industry's recognition that a business is adhering to the highest benchmarks, so that when a tree leaves the nursery, it's guaranteed a better chance of thriving in the landscape," Mr Knight said.

"Following accreditation, we envisage that Arborwest will continue to grow from strength to strength, increasing our production of larger stock from 1000lt to 2500lt bags."



Arborwest Tree Farm, WA

IMPLICATIONS FOR THE NURSERY INDUSTRY

The audit marks the latest addition to the well-known NIASA accreditation, a program that ensures production nurseries maintain a benchmark standard and continually improve their procedures.

With more buyers specifying high-quality tree stock for landscapes, the audit provides greater certainty to clients that trees have undergone a production process which ensures that they are 'fit for purpose'.

The audit allows a production nursery to demonstrate its sound growing credentials, and to show diligence in all aspects of tree production, from inception to dispatch.

In time, the process will help to negate tree performance issues in the landscape, as well as lead to greater customer satisfaction.

Accreditation against this optional appendix can be conducted during a business's annual NIASA audit.

LINKS TO RESOURCES

To purchase or view the latest edition of the NIASA manual and audit: <http://nurseryproductionfms.com.au/product-category/niasa/>

PAST EDITIONS OF NURSERY PAPERS ARE AVAILABLE ONLINE on the Nursery & Garden Industry Australia website http://www.ngia.com.au/Section?Action=View&Section_id=46