G
rowers regularly ask the question: “Why does it take so long for a new cultivar to become available to the industry?” This document explains the various processes that are involved.

All citrus cultivars undergo shoot tip grafting for virus elimination by the ARC or CRI laboratories in Nelspruit before they are sent to the Citrus Foundation Block after +/- 16 months for evaluation. Biological indexing of the material takes a further ± 12 months before it is finally released for the multiplication process and supplied to the industry.

Cultivars are categorised according to their potential importance to the industry and are handled as such at the Citrus Foundation Block:

1. Category 1: > 50 000 buds per year
2. Category 2: 30 000 – 50 000 buds per year
3. Category 3: < 30 000 buds per year
4. Category 4: ± 2 000 buds per year
5. Category 5: Only important as a gene source. Remains in Nelspruit

The processes at the Citrus Foundation Block in Uitenhage

1. The first budwood received by the Citrus Foundation Block is used to establish mother trees and the first increase trees. For category 1 and 2 cultivars, six mother trees are made and for category 3 only three mother trees are established in 90 L drums. For category 4 cultivars, no mother trees are made and only a small number of increase trees are established as a budwood source to be used in evaluations. Cultivar evaluators determine whether or not the variety may advance to a higher category in the future. Increase trees are grown in 10L bags according to the production guidelines of 72 buds per increase tree per year, 12 months after budding. Multiplication will continue until the desired number of increase trees is reached. The number of increase trees per cultivar is determined by the cultivar owners/agents and CRI Cultivar Development as well as other role players, depending on the demand. Evaluation blocks of these cultivars are established in the different production regions by cultivar owner/agent and CRI Cultivar Development.

2. The purpose of the mother trees at the Citrus Foundation Block is firstly to determine the trueness-to-type of the cultivar. This is assessed by a group of specialists who evaluate the fruit every year according to the cultivar description, which was submitted together with the material for shoot-tip grafting or plant breeders’ rights. Secondly, after it has been declared true-to-type, the best mother trees become the source from which increase trees are made. The process of declaring a cultivar true-to-type takes a minimum of three years.

3. New cultivars can be made available to the industry before it is declared true-to-type for those growers who are willing to take the risk. However, CRI will not take any responsibility if the cultivar cannot be later declared true-to-type. This budwood is given out as being experimental. Nurseries will be informed annually of true-to-type status of all cultivars and this should be relayed to the growers.

4. The status of the cultivar will be indicated on the budwood invoice and later on the tree certificate.

5. Growers are advised to seek recommendations regarding their cultivar choice and should discuss it with either CRI Cultivar Development or CRI Extension Services, for an independent and objective opinion.

What is the meaning of the information on the front and back of the tree certificate that accompanies a certified tree?

• Certified (Yes/No) – The health status of the nursery tree is certified as being produced under specific conditions and conforms to the specific health and physical criteria.

• Classified as “True-to-Type” (Yes/No) – In addition to being certified, nursery trees may also be classified as “true-to-type” if they have been made using budwood cut from the increase block trees at the Citrus Foundation Block, which in turn were made from mother block trees that have been evaluated and, together with evaluation block trees, have been shown to consistently reflect the horticultural characteristics associated with that cultivar. A tree can still be certified as described but is not classified as “true-to-type” because the fruit of the cultivar has not yet been evaluated and is seen as experimental.

• Special conditions (Yes/No) – Indicates that the certified nursery has obtained a special dispensation to make a limited quantity of trees from budwood cut, under strict supervision, from nursery trees that have been made with budwood supplied by the Citrus Foundation block, as a non-routine measure when the Citrus Foundation Block temporarily has insufficient budwood material available to meet demand. In all other aspects the trees meet the certification requirements of the Citrus Improvement Scheme.

• Reference Number – If at any time problems are experienced with the trees after they have been planted, e.g. mutations or any other abnormalities that can be traced back to the original material, you can contact us and by using the reference number, we can locate the specific budwood source and attempt to identify the problem.

Although the main purpose of the scheme is to improve the standard of nursery trees sold to growers and to attempt to ensure that only the best quality trees are certified, the Citrus Improvement Scheme or Citrus Research International cannot be held liable for any problems relating to the growth or productivity of these trees.

If a buyer of certified trees is unhappy with the progress of trees, he is requested to contact the Manager of the Citrus Improvement Scheme regarding this matter: P O Box 2945, Uitenhage, 6230, Tel: 041 992 5366 Fax: 041 922 7416 E-mail: tdt@cri.co.za