

## Higher, earlier yields: Improved growth of young trees with **Surround<sup>®</sup>**

Modern citrus trees have descended from rainforest species originally adapted to growing in shade conditions. In Australia, citrus is grown in regions where high summer temperatures are common. Air temperatures exceeding 30°C can cause trees to shut down, thereby stopping photosynthesis and stunting growth.

Canopy temperature can be reduced by up to 8°C using a Surround<sup>®</sup> program, which in turn reduces overall stress on the tree. Over the hot summer months, this can mean a significant improvement in growth of young trees which in turn come into production earlier than would otherwise occur.

Ultimately a Surround program provides the opportunity for earlier fruit production which can significantly improve the financial viability of new citrus plantings.

International trials have demonstrated higher, earlier yields following the use of a Surround program (see data overleaf).

Australian trials have confirmed under local conditions that a Surround program improves overall tree vigour, with treated trees often larger and having improved foliar flushes.

### Getting the best out of Surround

Commence applications prior to the first heat event and maintain the Surround film over the hot summer months. Repeat applications will be required to cover new growth and after heavy rain. Spray the canopy to 'near drip' coverage (before the point of runoff).

Surround can disrupt activity of some insects. Monitor Surround treated trees for Citrus Scale and take appropriate action if Citrus Scale is found.



**Surround** – Improved growth of young trees.  
(2003/04 Mildura)

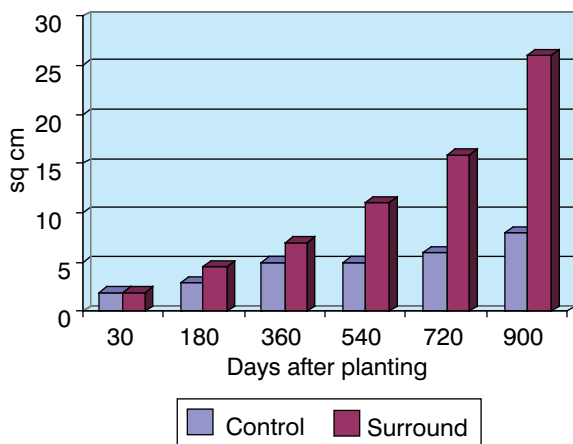


Untreated

*Continued over >*

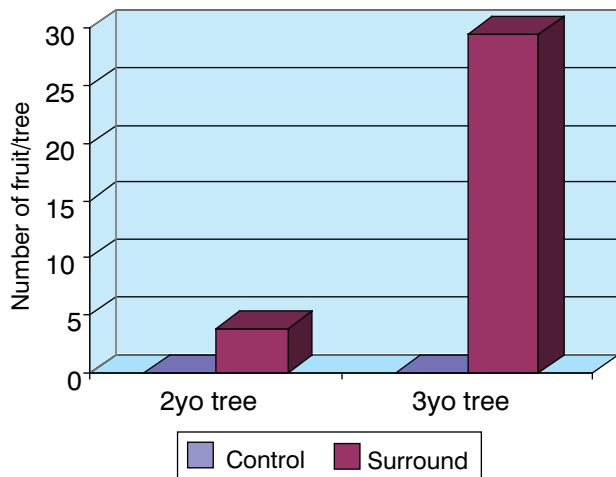
Research conducted by Lapointe, McKenzie and Hall, published in the Journal of Economic Entomology in 2006, has confirmed observations in Australian trials and commercial use.

**Increase in trunk cross sectional area (root stock).**

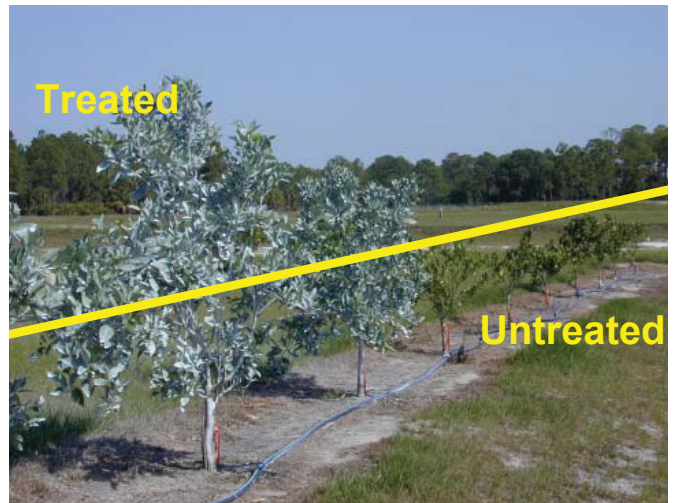


Source: Lapointe, McKenzie and Hall 2006

**Increase in fruit yield (no. of fruit per tree).**



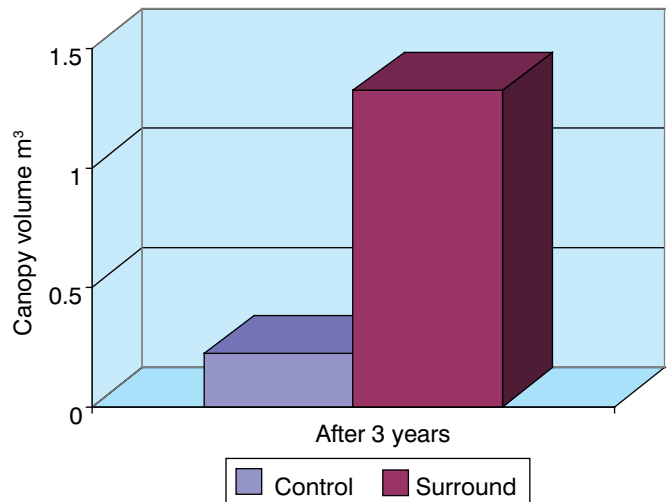
Source: Lapointe, McKenzie and Hall 2006



Two year results of biweekly **Surround** applications on Valencia citrus trees.

S. L. Lapointe, U.S. Horticultural Research Lab, Ft. Pierce, FLORIDA, USA

**Increase in canopy volume after 4 weekly applications of Surround.**



Source: Lapointe, McKenzie and Hall 2006

# Surround<sup>®</sup> Protection you can see. Performance you can trust.

For more information contact your local retailer or visit [www.agnova.com.au](http://www.agnova.com.au)

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