

Narrow row cotton gives third option in the south

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With the extension of cotton into the south of NSW in recent years, growers have been looking at ways to grow cotton in cooler valleys while maintaining both yield and quality. To date some success has been seen with the use of the Ultra Narrow Row (UNR) system. But there have been concerns about the fibre quality and harvesting speed using strippers.

Further developments have been made with the trialing of a 15 inch cotton growing system in the Hay area. This system has become a third option for growing cotton in the southern areas of NSW. New narrow row spindle pickers have enabled growers to pick the cotton quicker than a UNR system, while also maintaining quality.

Too south, too cold

Previously, cotton growing in the Hay district was thought of as being too far south and too cold. Conventional row spaced cotton (one metre) gives growers the ability to produce cotton that can be spindle picked and not attract the discounts often associated with UNR stripped cotton.

The major problem with the conventional spaced cotton in the Murrumbidgee area is the length of the growing season. There is a higher risk of the crop not reaching maturity and rain setting in to slow the harvest. Ultra narrow row cotton gave this area the ability to produce cotton in a shorter growing season, but stripping the crop resulted in big discounts when ginned.

In an attempt to address these issues, John Deere will release their narrow row picker fronts this year — creating the opportunity to grow cotton in cooler areas such as the Hay district. The new picker fronts have enabled cotton to be grown under a similar principle as UNR cotton, while enabling the cotton to be spindle picked rather than stripped. This combines the benefits of both growing systems into a new system — the narrow row system.



Picking this season's crop at Ravensworth, Hay



Ron and Sue Harris and family.



Narrow row trials

Grower Ron Harris has spent a few seasons trialing prototypes of John Deere's narrow row spindle picker front at his Balranald property, Lake Marimley.

This season Ron conducted a large-scale trial of narrow row cotton on his property Ravensworth, Hay. Under the management of Darrel Strahley and myself, a 200 hectare trial was set down to compare growing cotton under a 15 inch row spacing with similar fields on a 36 inch row spacing.

The 15 inch cotton was grown and managed as a normal crop that was to be spindle picked — making use of the full height of the new fronts. The crop was grown out to 18 nodes at a height of one metre. With a short growing season in this district there is little opportunity to make up for lost positions on the plant, so fruit retention was maintained around 80 per cent. Mepiquat chloride was used to help control the height of the crop as a plant population of 180,000 plants per hectare created the opportunity for the crop to grow rank.

The benefits of the narrow row system have been clearly shown in the trial results.

The narrow row cotton reached maturity three weeks earlier than a field of conventionally spaced cotton (36 inch) that was planted at the same time. The crop also received one less stage three insecticide spray.

There was also a saving in the number of waterings the crop received. The 15 inch cotton didn't require one final watering, but the crop still used around the same amount of water per hectare as the 36 inch spaced cotton.

The 15 inch cotton field yielded 1.5 bales per hectare more than the 36 inch cotton. Ginning results to date have seen no discounts being attracted by the narrow row cotton.

This season the Murrumbidgee valley has experienced some harsh growing conditions. Drought conditions have brought about numerous dust storms resulting in large areas of cotton being lost from sand blasting.

A cold snap in October saw plant stands thinned out from disease and whole fields being lost to rhizoctonia and black root rot. Despite these harsh conditions, growers in the area have been



Narrow row cotton could give a much needed boost to Southern NSW.

able to achieve yields of around 10 bales per hectare with good fibre quality.

Continued advances in adapting production systems to the growing conditions should make cotton producing a very attractive option for growers in this region.

The narrow row (15 inch) system with the new John Deere picker fronts is likely to play a big part in the future of cotton down south. And the system is likely to fit well in other areas as well.