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## Southern cotton review

*The year had a cold wet start and cool finish, but the mid part of the season compensated well with above average conditions. Most growers locked in at last year's high prices of up to \$615 a bale and have been rewarded with good yields.*

Southern cotton on the Lachlan and Murrumbidgee started this past season with a below average cold and wet start. Planting was rain delayed and interrupted.

Ground preparation in some cases was delayed due to rain in August and September.

As in most areas, September was very wet with rainfall totalling 175mm in Hillston for the month.

**Pic 1:** UNR plant spacing, six rows to a bed.

**Pic 2:** Bugchecking School on conventionally spaced cotton.



Pic 1

First planting commenced a week late on September 30 and the last of the cotton was planted on October 26.

The total area planted for the Lachlan Valley was just over 6600 hectares and for the Murrumbidgee Valley around 100ha. Last season there was only two growers and this has risen to thirteen this season.

Lachlan Valley crops are located from just upstream of Euabalong to around thirty kilometres downstream of Hillston. Crops planted at the start of October did well, making the most of mid October rainfall. However, as the season progressed, some of the best crops were the later planted ones.

November and December weather was slightly above average while January was well above average and the crops responded well to the warmer conditions. Irrigation allocation on the Lachlan was at 100% at the start of the season.

### In a Nutshell

• *This article is a summary of the recent southern cotton season. At the time of writing in mid May, around 75% of the crop had been picked in fine conditions.*

### Insect pressure

Heliothis caterpillar pressure during Stage 1 (up to December 29) was high and consistent with large egg lays. This insect pressure combined with the cold start resulted in poor

early fruit retention in some areas. A greater emphasis was placed on retaining existing and future fruit. Stage 1 sprays were around 5 - 7 for conventional and 2 - 3 for Ingard ( Cotton with the Bt gene ).

Ingard coped well earlier, but suffered more than the conventional cotton with tipping and fruit retention. Flowering this season was only slightly behind last season, with first flowers seen around mid December.

A cool period late in the season delayed planned defoliation on some early crops and slowed the later crops down. In early March, the Hillston district received rainfall of up to 125mm in some areas that tested some new tailwater pumps.



Pic 2

Insect pressure during Stages II and III ( Stage III starts February 1 ) varies through both valleys from light to heavy with no real pattern. There have been cases of late regrowth that have made late Heliothis control difficult.

Total sprays for the season ranged from 10 - 14 for conventional and 5 - 9 for the Ingard Cotton.

## Harvest

Defoliation started at the end of March, with the first pickers starting in the second half of April. Picker availability has been a problem for some growers, especially with some of the northern areas experiencing late and delayed starts.



Pic 3

At the time of writing, picking had been in progress for four weeks with uninterrupted blue skies. The morning dew has resulted in later than preferred starting times. Yields at this stage are good with budgeted yields of between 6.9 to 7.4 bales/ha ( 2.8 to 3 bales per acre ) being easily achieved and often exceeded.

The cotton modules weigh between 15 - 20 tonnes ( with around 4.5 bales per tonne).

They are hauled by road trains to the nearest gins around Warren and Trangie.

Early reports indicate that the cotton quality is good with little to no downgrading occurring. Ultra narrow row cotton is only just starting to be picked as most stripper pickers have been at Lake Tandou near Menindee. The early yields are quite promising and are not far behind the conventional yields.

There is also a large amount of landforming and ground preparation underway for the 99/00 crop prior to any wet weather.

### Best management practices

Cotton Australia with NSW Agriculture has conducted three Best Management Practices workshops in Hillston during the season, with most growers and industry support attending.

These workshops are the start of an industry led self assessment process that initially concentrates on pesticide usage, but will include irrigation and other farming practices at a later date.

Southern cotton has not escaped the problems associated with cattle and endosulfan.

Three public meetings have been held during the season at Condobolin, Lake Cargelligo and

Hillston, where these issues were discussed with both cattle and cotton industry representatives present.

### Ultra Narrow Row Cotton

The southern areas have the largest area of Ultra Narrow Row Cotton in the state. A number of different UNR planting configuration are being trialed in the valley this year by growers.

These include UNR on beds, bordercheck and under laterals on row spacings varying from 200mm to 380mm. UNR is very new and has not been grown for more than two seasons commercially in Australia.

The aim of UNR is to have higher plant populations per hectare, but instead of tall plants with up to 30 fruit each, small plants with only a few fruit are desired. Small plants don't take as long to grow, and hence better use can be made of a short season.

Because there is a high plant population, fruit numbers per hectare on UNR are similar to conventional planting configurations and as a result yields are comparable. Costs can also be reduced as the crop is usually finished at the time of high insect pressure. Weed growth and picking can be a problem in some UNR crops.



Pic 4

UNR area is greater than was earlier thought with just over 900 hectares planted in this way. The crops are varied with some having experienced heavy tipping damage early in the season, while others are showing promise with thin plants setting 5 to 9 bolls.

*Pic 3: Range of UNR plants showing from left to right; small plant with six bolls is ideal, plant with too much foliage (too rank), larger plant with too many bolls (late maturing), plant tipped out by insects early in the season required more time to catch up.*

*Pic 4: Conventional cotton prior to picking.*

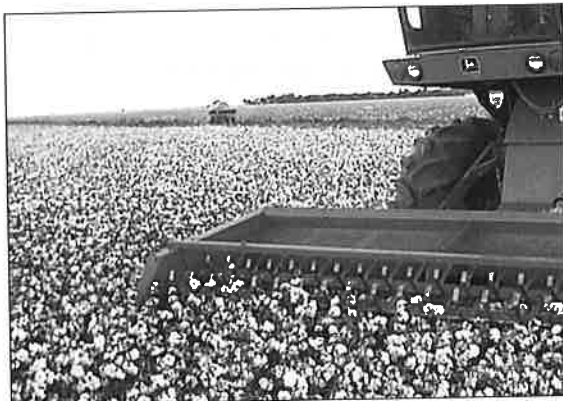
Looking at the crops prior to defoliation, it appears as if the plant populations could have been higher. Potential problems still exist with UNR in the areas of rank growth, weed control and the picking dilemmas. Overall UNR has potential, but the close of picking will tell the final story with this planting configuration.

### Hillston Gin

Good news was received around Christmas with the announcement that the Namoi Cotton Co-operative will be building a three stand Continental gin at Hillston for the 2000 crop. Negotiations have been completed in the securing of a suitable site.

*Pic 5: Picking of UNR cotton at Hillston with a modified front on a stripper.*

*Pic 6: Before and after picking of UNR cotton at Hillston.*

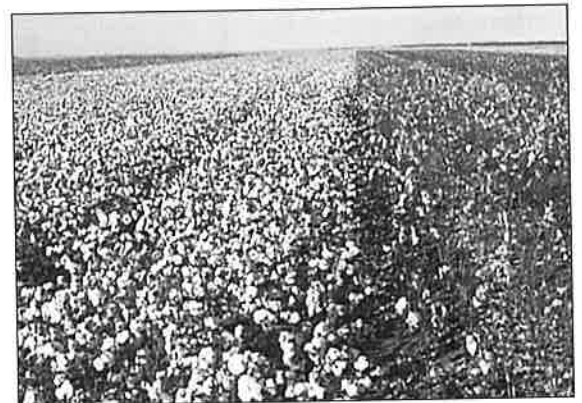


*Pic 5*

It has been encouraging to know that outside interest in the area recognises the potential of the region and that investment confidence is reflected accordingly. This news should boost future cotton areas considerably as many have baulked at the cost of module transportation to the Macquarie. Namoi Cotton has tipped a doubling in cotton area in the region for next season. This should be achieved easily.

### Industry Support

Support and involvement from people involved in the cotton industry from northern areas has been strong, with cotton industry personnel coming a long way to talk at the many field days that were held during the season.



*Pic 6*

Local infrastructure has grown with the increasing availability of both aerial and ground operators, chipping crews, picking contractors and accommodation.

The Cotton Variety Trial Field Day at Hillston in February was well attended with around 150 turning up on the day. There have also been many other smaller field days and seminars during the season, addressing specific cotton topics and these have also been well supported.

With the majority of the crop picked at this stage, it is fair to say that the season has been quite successful, coping with the problems of a difficult start and cool finish, southern cotton is feasible if short season management and planning is practiced and budgets are calculated on realistic yields.

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