

SECTION 4  
AREA ROUNDUP

This section brought to you in association with



QUEENSLAND



MAP LEGEND

Cotton Area .....

Cotton Gin .....

# Macintyre Valley

By David Kelly, Cotton Seed Distributors Ltd

The Macintyre Valley this season saw one of the smallest crops in over a decade and one of the mildest seasons for a long time. But the season also featured some of the best yield results ever seen in the district.

### How the season evolved

By the end of winter 2007, things were not looking good. Most on-farm storages were empty; there was zero allocation and very few growers with a miniscule amount of carryover water. In August, due to some rain in the catchment, growers on the NSW side were given an allocation of about five per cent and those on the Queensland side were given one day of pumping.

In both cases, most people, rather than putting a relatively small amount of water into a bone-dry storage, pre-irrigated as far as that water would go and planted a small area of early sorghum. Obviously the sorghum price was a key driver for this but also generally poor results in the previous two seasons from cotton crops planted with very little water sapped much of the enthusiasm for doing the same thing again.

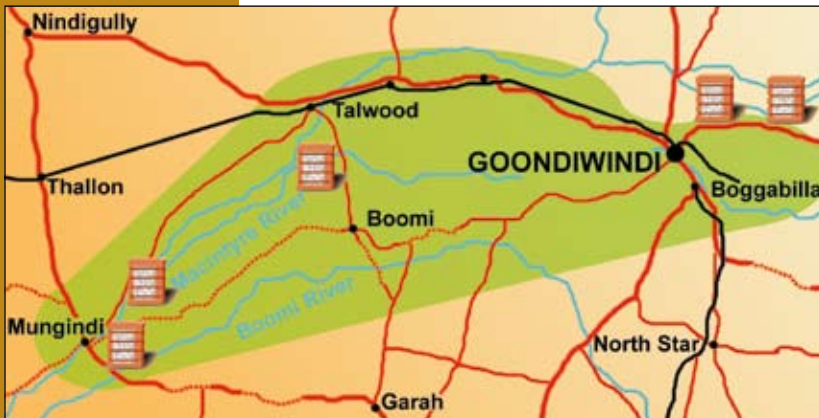
Those on the NSW side received another small increase in allocation, so at around the time of planting it was somewhere around 10 per cent.

A very small part of the area — only a couple hundred hectares — was planted in the first part of October. Many growers opted to wait and capture some soil moisture in the profile on the chance they could plant on rain moisture.

By the middle of October they bit the bullet and pre-irrigated, and as luck would have it, struck a couple of weeks of storms, meaning a long delay in planting. Thankfully, virtually all of it was planted well before November 15. By the end of planting, there was about 5500 hectares planted in the area.

Early November saw a flow in the Weir River, and while most of this was used for sorghum, it provided for a small area of cotton in Mungindi. Subsequent

### The Macintyre Valley cotton area



flows in this system during the summer provided water for a 2008 winter crop and some for cotton in 2008–09.

Crop establishment was generally excellent and trouble-free with soil temperatures being suitable for planting any time from mid September onwards.

### A very mild season

Following two of the hottest seasons on record, it was hard to believe that a mild season like we had in 2007–08 was possible. There were no extremes in temperature — while an average season in Goondiwindi would include 25 days over 36°C, this season there were only six, putting it in the lowest 10 per cent of years for days >36°C.

This also meant it took longer to grow a crop. Using day degrees alone, an October planted crop would have taken 187 days to mature — 18 days longer than the long-term average and about 35 days longer than the previous two seasons. This season in the Macintyre was similar to an average season in the Macquarie Valley.

The growing conditions for the whole season were incredibly soft — mostly in the 20°C minimum and low 30s maximum temperature range. Crops were able to develop in a relatively stress-free environment, not needing to burn up a lot of water to keep themselves cool and the end result was some of the highest boll counts seen for a long time. The only stresses for the season were some overcast weather and in some cases, waterlogging during January.

### Herbicide drift

Unfortunately, this season will be remembered as one in which many growers suffered serious damage to their small cotton areas from fallow herbicide drift — the most obvious being from hormone based products. From late November to mid January almost every crop in the Macintyre was affected to some degree, and in the worst cases, crops received up to four hits. While some of the earlier planted crops had time to recover, the delay this damage caused those planted in the latter part of November

**SECTION 4  
AREA ROUNDUP**

This section brought to you in association with



pushed their maturity into May and June, resulting in severe yield and fibre quality penalties. Some crops were removed all together.

**Disease**

The mild season was quite conducive to both Verticillium and Fusarium wilts — the latter being more evident in affected areas than it has been in recent seasons.

**Insects**

A relatively moderate season on the insect front although there were a few surprises to keep people on their toes. Most of the area was planted with Bollgard II and did not require any heliothis control and those few conventional crops had less than 10 insecticide treatments. Mirid pressure was quite intense throughout November and December and pale cotton stainers caught everyone by surprise in late February and March.

**Picking and defoliation**

Defoliation was a challenge this season. The later planting and the longer crop length pushed this operation into April, May and in some cases June. This period was very cool with many nights well below 12°C and some frosts in late April. It meant a lot of waiting and in many cases, three applications.

Picking began in late April and was long, drawn-out affair with the last field picked in the area being in the first week of July.

**Yields and quality**

Yields in the crops planted before mid-November were excellent with solid planted crops with full water mostly yielding over 10.0 bales per hectare and many much closer to 12.5 bales per hectare and higher. The late November planted crops, most of which were affected by herbicide damage, yielded closer to 7.5 bales per hectare or less.

Fibre quality in the earlier planted crops was also excellent, in particular length and micronaire. Lengths in the 37 and 38's was commonplace as well as micronaire around the high 3 to low 4 range. Most of these crops were picked before any rain, resulting in mostly 21 colour.

The late November planted crops matured in some very cool conditions, resulting in some low micronaire, a problem not seen in this area for a long time. A small rainfall event, combined with some cool conditions in late May, significantly impacted colour of these crops also.

There were only a couple of paddocks of dryland cotton this year due to limited planting opportunities in the areas south of Goondiwindi and the good sorghum prices. The results of this year's crops were excellent, averaging around 4.0 bales per hectare and achieving base grade and better.

**Grower Awards**

Winners of the Macintyre Valley Cotton Awards for 2007-08 were:

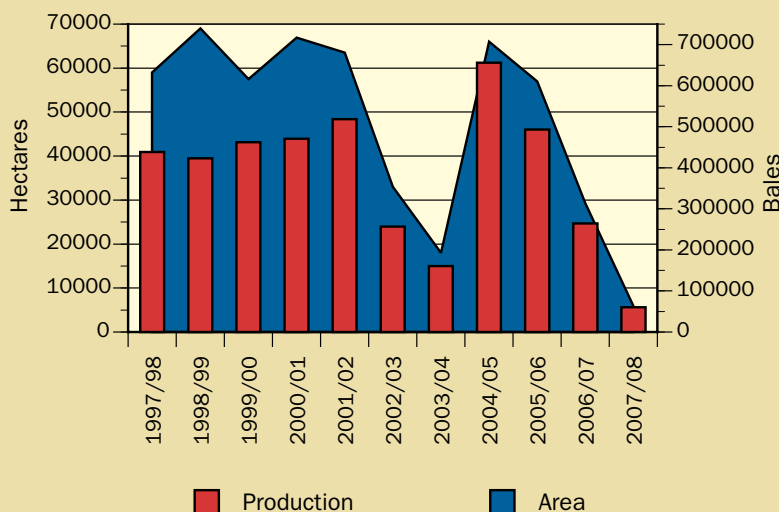
- Landmark Irrigated Crop Competition. Morella Agriculture, David and Kim Coulton, 13.51 bales per hectare with a crop of Sicot 71B.

- Namoi Cotton Farm of the Year Award. Norman Farming, 'Kalanga'.
- Service to the Industry Award. Brian and Julie Duddy, 'South Callandoon'.
- Patricia Coulton Memorial Award. John Peters, Border Tyres and Batteries.

**Prospects for 2008-09**

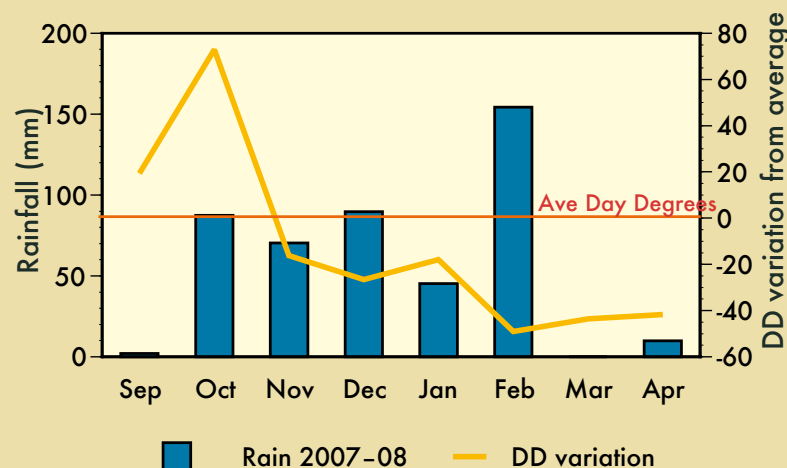
At the start of September, the prospects for 2008-09 for the Macintyre are only slightly better than the previous season. With many people choosing to use their limited water on winter crops, there is not much on-farm or allocation water for summer crop. At this stage most of the area will be those with access to the Weir River who received some flows during the previous summer.

**Macintyre Valley: Area and production**



**Goondiwindi 2007-08 seasonal climate**

**Total Day Degrees: 2626 (-103); Total rain: 450 mm (+9)**



	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Total
<b>Cold shock</b>	17	5	0	0	0	0	3	11	36 (+2)
<b>Hot shock</b>	0	1	0	0	4	1	0	0	6 (-19)

\*Average day degrees from 1957 to 2008.  
Source: CSIRO Plant Industry.