

Germinating ideas

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With the 2005-06 cotton season already with us, this edition of Germinating Ideas will look at Pima growing and the key points of a new Pima grower information brochure.

It will also look at a new grower information brochure that is being prepared on Roundup Ready cotton. Roundup Ready cotton has changed many farming systems and allows for greater choice and selection in weed control programs.

GROWING PIMA COTTON

There has been increased interest in Pima cotton in the lead up to this season. Pima is a different species (*Gossypium barbedense*) to upland cotton (*Gossypium hirsutum*) but there are many similarities between growing them.

CSD has just released a Pima growing information brochure, as there was a real need for an update for Pima production. It is important to note that there are currently no Pima varieties with Bollgard II or Roundup Ready technology.

The brochure covers the following topics:

- Economics, including marketing and yield versus dollars per bale parametric budgets;
- Diseases including Alternaria leaf spot, bacterial blight and black root rot;
- Planting considerations — field selection, preparation and planting date;
- Pest management — heliothis, mirids,



There is an increased interest in Pima production this season.

- aphids, mites and silverleaf whitefly;
- Weed management;
- Irrigation management;
- Nutrition management; and,
- Defoliation, picking and ginning.

There are several key points that are highlighted in the brochure, and which must be considered prior to planting.

- Pima is very susceptible to some diseases;
- Pima is very susceptible to downgrades at picking;
- Make arrangements to market the crop,

including viewing a premium and discount sheet;

- Make prior arrangements to gin the crop; and,
- The risks of heavy crop losses from diseases and weather downgrades are substantial. Managing the risk will be critical to success.

This season will see the full release of a new variety, Pima A8, which is a CSIRO plant breeding team selection from an Arizona introduction. It is less susceptible to bacterial blight than Pima S7 but it is not resistant. Bacterial blight resistance in Pima is still at least two years away.

It has longer and stronger fibre than Pima S7. It also has excellent Fusarium resistance with a FRR of 170. There are further breeding lines in seed increase that have improvements in yield, fibre quality and disease resistance from the Sipima breeding program.

The brochure is available to anyone requiring a copy by contacting any of the CSD Extension and Development team or from the CSD website.

TABLE 1: Variations in time to reach the '4th leaf stage' at several locations

Region	Date Planted	'Days to 4 leaf'	Other factors
Emerald	20/09/00	26	Back to back, black clay
Emerald	03/10/01	23	Back to back, black clay
Goondiwindi	04/10/00	34	Fallow, heavy grey clay
Dalby	08/10/00	36	Fallow, heavy black clay
Dalby	10/10/01	35	Back to back, black clay
Macalister	24/10/10	31	Back to back, black clay
Dalby	22/10/01	29	Long fallow, light Brigalow clay
Emerald	20/01/02	18	Wheat stubble, sandy clay loam

Source CSD Agronomy trials 2000, 2001 and 2002

ROUNDUP READY INFORMATION BROCHURE

The uptake of Roundup Ready technology is still on the increase. In response to this increased interest and the ongoing need for relevant information to supplement the label and regulatory requirements, CSD is compiling an updated grower information brochure on Roundup Ready cotton.

It will look at how Roundup Ready cotton has changed the way cotton can be grown and the advantages offered by it. Many key areas will be covered including the following topics:

- The time it can take to reach the fourth leaf stage and why it is critical not to spray past this point;
- Uptake of the technology;
- Weed control programs and changes in the use of residual and lay-by herbicides;
- Timing and use of directed and shielded sprays;
- Changes in farming systems — for example, planting into stubble, watering up and pre-irrigation, double cropping opportunities, the use of planting cotton into shoulder wheat to reduce sand blasting and potentially less seed bed preparation and reduced tillage to utilise early OTT sprays for weed control;
- The benefits of Roundup Ready cotton in narrow row planting configurations;
- Roundup Ready use in dryland cotton; and,
- The introduction of Roundup Ready Flex cotton into Australia and the benefits offered by it.

The brochure will be available from CSD as mail out and will be on the CSD website.



Cotton at the four true leaf stage.



Cotton being planted into shoulder wheat.



Groundrig spraying Roundup Ready cotton.