FINAL REPORT

(due on completion of project)

Part 1 - Summary Details

Cotton CRC Project Number: 5.01.25 CRC 1105

Project Title: Sharing on-farm innovation to reduce the cost of cotton production in the Lower Namoi.

Project Commencement Date: 1/07/2010 **Project Completion Date:** 31/12/2011

Cotton CRC Program: Adoption

Part 2 – Contact Details

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Signature of Research Provider Representative: _____

Part 3 – IP and In-kind

Since the November 2011 6 monthly report, please outline the additional IP and in-kind that has been generated in the project.

1. Intellectual Property developed within the project.
   NONE

2. Project In-kind
   The in kind has involved the attendance of growers at the Irrigation Australia Limited meeting at Narrabri on the 4th of August. The IAL provided the speakers for this day. Consultants and others who spoke included Michael Wilson, NSW Office of Water, Brad Pollard, Elgas, Craig Baillie, National Centre for Engineering in Agriculture, Colin Barnes, BNB Engineering, Jim Purcell, Aquatech,. Growers who attended the day were Brendon Warnock, Scott Revell, Robert Kahl, Robin Findley, Luke Findley, Todd Farrer, Philip Firth, Geoff Phelps, Michael Carberry, Auscott Narrabri. The meeting lasted for 4.5 hours.

   Two nutrition forums were held. 8 growers attended the first at Auscott on the 19th July. The meeting lasted 3 hours. The growers were Michael Carberry, Michael Smith, Brendon Smith, Kevin Boyd, Philip Firth, Martin Mead, Rohan Bennett and Bill Back.
   A second nutrition meeting was held at Beechworth on the 27th July which involved 10 growers and also ran for 3 hours. Growers who were involved were David Grellman, Johnno Phelps, David Phelps, Geoff Phelps, Josh Hatton, Philip Knight, Andrew Greste, Charlie Arnott, Mandy Gilmour, Philip Firth.
   In preparation for these two meetings 3 growers made phone calls to growers from their end of the valley for 45 minutes each. At the eastern end of the valley Brendon Warnock Matt Norrie and Philip Firth made these calls. At the western end David Grellman, Andrew Greste and Philip Firth made these calls.
   In addition Philip Firth spent four hours organising each of these meetings, including venue, food and researcher attendance.

   This totals 111 hours of growers in kind and 3 hours of consultant in kind.
   (Grower Consultant Ginner or Grower Group In-Kind: Are you conducting part of your project on a cotton farm or in conjunction with an in-kind contribution from a consultant, ginner or Grower Group? Please supply group name - Number of persons involved per week and the number of hours per week involved.)

Part 4 – Final Report Guide (due at end date of project or 31st May 2012)

(The points below are to be used as a guideline when completing your final report.)

Background

1. The aim of the project was to provide a mechanism for sharing the innovations that individual growers in the Namoi Valley make to improve the efficiency of their cotton production system. It was intended to build on the successful neighbourhood groups that had been used for the Bill Gordon spray workshops in 2009.

   Often growers make innovations without passing on the benefits of their experience to other growers. These innovations could come from any number of the diverse aspects of cotton production. The particular areas that it was intended to focus on were identified by the Lower Namoi Cotton Growers Association as pumping costs, fertiliser inputs and the transition from cotton to winter crop. It was intended to have grower forums where experiences could be shared regarding grower innovations in these three important aspects of cotton production. It was intended that growers could learn from other growers unwritten knowledge.

Objectives

2. The primary objective was to provide a mechanism for growers to benefit from the experiences of other growers. The forums would let ideas and experiences be shared. They would also highlight those growers who had experience in particular areas so that they became reference people for certain areas of innovation.

   It was also intended that grower networks would be strengthened so that growers continue to learn from each other even in the absence of the forums. It also allowed the Lower Namoi Cotton Growers Association to be seen to be providing a relevant and valuable service to its members. Young cotton growers were to be encouraged to be involved as much as possible so that the benefits of participation in industry activities were highlighted.

Methods

3. Over the term of the project the issues of importance changed as industry conditions changed. The issues dealt with by the project therefore changed slightly. The three issues became;

   a. growing cotton in alternative row configurations,

   b. nutrition for high yielding cotton

   c. pumping efficiently

Each of these issues was dealt with differently.

Growing cotton in alternative row configurations was the management strategy of most interest at the beginning of the 10/11 cotton season. To provide information regarding the experiences of growers to other growers, an interview and data collection process took place. 6 Lower Namoi growers who had experience with growing cotton under alternative row configurations over a number of seasons were interviewed and a simple summary of their experience growing cotton in single skip, double skip or 80 inch row configuration was recorded. Also their comments and tips for other growers were recorded. This information was then compiled and put together with information from James Quinn's trial of wide row spacing done in the Gwydir Valley. Interviewed growers had their names and phone numbers attached and were prepared to be contacted if growers had other questions. The CCCCRC helped with printing the document. The completed document was then emailed to all growers on the LNCGA email list and hard copies were also made available at retail outlets in Wee Waa. They were taken by growers fairly quickly. (A copy of the final document is attached.) There were some further requests for copies which were met. With the change of seasons the number of growers considering this management technique to maximise water use efficiency was reduced.

Nutrition for high yielding cotton was dealt with in two forums held in July of 2011: one at the eastern end of the valley at Auscott and one at the western end at Beechworth. In total these were attended by 18 growers. Philip Firth facilitated these meetings and tried to ensure that a wide range of cotton nutrition aspects was discussed. Ian Rochester and Mike Braunack attended both meetings and acted as experts for reference. Mike Bange and Rose Brodrick also attended the eastern forum in the same role. Topics for discussion were generated by growers. Most discussion was initiated by growers and involved growers. Feedback was very positive regarding the format and the value of such a forum. It was suggested that a similar forum be run discussing water management later in the year. This has not happened due to rain and an interrupted wheat harvest.

Pumping efficiently was dealt with in a different way. Rod Jackson offered to shape the agenda of the IAL day around the information needs of the Lower Namoi Growers Association. It was felt that to hold forums discussing the same topic would be repetitive. The Lower Namoi Cotton growers therefore sponsored the IAL day so that grower members could go at no cost. 10 growers attended the day and feedback from this day was variable. Some found it of value, but others found it to be to general. Attendance was also disappointing.

Results and conclusion

4. The results from this project have not been as expected. The focus shifted from the generation of networks which growers could continue to use in the future, to covering the information of most interest to growers. This will not necessarily be beneficial in the long run. In discussing topics that would get growers to come

Having said this, the reception of the Alternative row spacing document and the nutrition forum were both very positive. These two extensions were both along the lines that the project was aiming to develop, where growers are learning from growers. For a well-established area like the Lower Namoi this takes a lot of work to drive, unless it is a hot topic such as addressing spray drift. The arrival of wetter seasons has also meant that growers have been under increased time pressure. In retrospect the number of forums proposed in the project application was probably too ambitious. However, the value of growers learning from growers remains, and has been highlighted by this project. The reception of the nutrition forums and the Wide row document clearly showed that growers value the learning of other growers. A positive outcome is that growers have been made aware of other growers who have been innovative in these areas and this gives them a referral point when they are looking for information.

Outputs from this project were:

1. Lower Namoi Grower Experiences with different Row Spacings
   Past Seasons – 6 growers contributed (copy attached)
2. 2 nutrition forums, 1 at each end of the Lower Namoi – a total of 18 growers attended
3. Irrigation Australia Limited workshop on pumping efficiently – 10 growers attended

Part 5 – Final Report Executive Summary

The aim of this project was to provide a mechanism for growers of the Lower Namoi Valley to learn from other innovative growers experiences. This was done by running topic focused grower forums with researchers from the topic area in attendance. The response of growers to this format was very positive with requests for more of this format.

Also a number of growers who had tried different row configurations for cotton production over a number of seasons were interviewed and their experiences were compiled into a simple record and published. The interest in this publication and the information it contained was significant. With growers improved water stocks uptake of these management strategies has not occurred.

A workshop on pumping efficiently was held by Irrigation Australia Limited. The content was developed with the input of the Lower Namoi Growers Association. There was disappointing attendance from growers at the workshop.

The value that growers see in the experiences of other growers was highlighted.
A number of growers were identified by the activities of the project as resources for other growers to learn from.
Seasonal developments made it even more difficult to get growers along to forums.
The Lower Namoi Cotton growers Association will continue to facilitate this sort of forum on various topics as its members see the value.

LOWER NAMOI COTTON GROWERS ASSOCIATION

'Lower Namoi Grower Experiences with different Row Spacing' Past Seasons

The LNCGA would like to thank all of those growers who provided information for this document. Thanks also to James Quinn for providing the results of the CSD trial.

With the exception of the CSD trial and the 30inch/40 inch trial at Havana this information is not from replicated trials. The aim of gathering this information is purely to inform growers about the experiences of other growers who have had cotton under different row spacing in this and previous seasons.

Individuals have presented their own opinions or conclusions from their observations. These are not based on trials, but are provided to assist those who are considering growing cotton under different configurations.

These views do not represent a recommendation to use any particular row spacing. Growers should make their own decisions based on the limitations of their own farm and farming system.

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CSD – Moree - Irrigated Skip Row Trial 2009/10

Trial Plan:

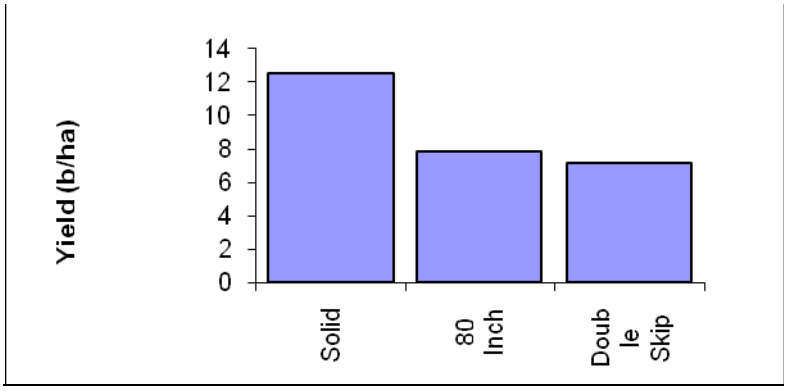
1. Solid
2. 80”
3. Double Skip
4. Solid
5. Double Skip
6. 80”
7. Solid
8. 80”
9. Double Skip

Planted: 22/10/09, watered up 24/10/09

Configuration	Plants/m
1. Solid	6.93
2. 80”	7.33
3. Double Skip	7.26

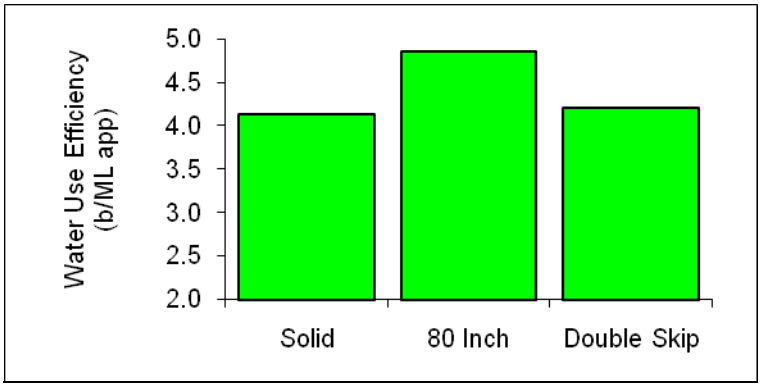
Yield and Quality:

Configuration	Yield	Turnout	Grade	Length	Strength	Micronaire	Uniformity
1. Solid	12.56	40.9	21-3	1.20	31.4	4.3	82.3
2. 80”	7.82	39.7	21-3	1.21	30.9	4.1	82.4
3. Double Skip	7.19	39.8	21-3	1.19	32.5	4.3	82.6



Water Use:

Configuration	Crop ET	Irrigation No.	Irrigation Applied	Total Rainfall	Effective Rainfall	Kg lint/mm	b/ML appl
1. Solid	756mm	6	304mm	320mm	237mm	3.77	4.1
2. 80"	742	3	161	320	237	2.39	4.9
3. Double Skip	718	3	173	320	247	2.27	4.2



Comments:

Picking speed was almost halved and blockages were more common in the skip row configurations when compared to the solid plant.

The skip row plants used slightly less water through the plant. These plants were bigger in size (mainly in lateral vegetative branches, not plant height) than the solid. One limitation of using the ETc method of determining crop water use within skip row plantings may be not taking into account all water use when ground coverage is not reached. Estimations were calculated and incorporated for evaporation loss from bare soil surface within the skip area however. (Additional information on the effect of stubble cover on mitigating the evaporation loss from the skipped area would benefit this system greatly.)

The solid planted area had the highest production of lint per mm at 3.77 kg lint/mm/ha; this is around average for similar crops in the Gwydir Valley during this past season. Both the skip configurations were less efficient per ha, 1.5 kilograms per mm per ha behind the solid planted crop, but greater WUE when calculating WUE on applied irrigation water. Conversely, if the kg lint/mm/linear metre is calculated the skip row plants were much more efficient, 80 inch returns a figure of 4.78 kg lint/mm/m and the double skip just behind at 4.55 kg lint/mm/m. This efficiency is thought to be a consequence of greater light interception and freedom to explore the soil for moisture and nutrients unhindered.

Total rainfall figures do not enable accurate WUE measurements to be calculated. This trial was assisted with very good and timely rainfall events in the second half of the growing season. If this rainfall had not eventuated then yield potential would have decreased and applied irrigation water would have increased.

Contact: James Quinn – 0428 950028

Coolabah Ent – Merah North – 80" Irrigated 2009/10

Prior Crop:	Durum Wheat 2008	
Fallow Period:	12 months	
Ground Prep:	Furrows and Plant line cleared with Sweep on Tyne	
Pre-plant Fert:	NIL	
Planted:	5/11/09 into full/uneven profile 8-9 seeds/m	
Variety:	71BRF	
Watering:	2 in-crop	27/01/10 26/02/10
In-crop Rain:	?	
In-crop Fert:	90kgN as Urea water-run in first in-crop Foliar spray 26/01/10	
Herbicide:	2-3 RR Herb Sprays	
Insecticide:	1 Admiral Spray	
Defoliation:	1st by Ground with some crop damage due to height of bush 2nd by Air	
Picked:	Late May	
Yield:	3.15b/ac 7.8b/ha	

Comments:

Crop struggled somewhat until rain at Christmas and did become slightly uneven.

Liked using 'Water-run' Urea

Weeds became an issue towards the finish, perhaps should have used a residual to keep skips clean.

Little 'Cost Saving' in Picking

Contact: Martin Haire – 0428 651421

Havana Farming – Merah North – 30″ Irrigated 2009/10

Prior Crop:	Wheat 2008			
Fallow Period:	11 months			
Ground Prep:	Furrowed + Rubber Roller			
Pre-plant Fert:	90kgN as Urea water-run			
Planted:	30/09/09			
Variety:	71BRF			
Watering:	Pre-water	15/09/09		
	In-crop	2/12/09	0.89mgs	
		19/12/09	0.77mgs	
		13/01/10	0.50mgs	
		27/01/10	0.70mgs	
		11/03/10	1.19mgs	TOTAL = 4.05mgs est.
In-crop Rain:	342mm			
In-crop Fert:	210kgN as Urea water-run (1st-4th irrigations)			
Herbicide:	1.5kgRRHerb17/10/09			
	1.5kgRRHerb14/12/09			
	1.5kgRRHerb8/01/10			
Insecticide:	Rogor @ 500ml + Pix @ 500ml	26/01/10		
	Rogor @ 500ml + Pix @ 720ml	24/02/10		
	Pegasus @ 800ml	16/03/10		
Defoliation:	Dropp @ 120ml + Prep @ 500mls + DC Tron @ 1lt			13/04/10
	Ethephon @ 60ml + Prep @ 3lt + DC Tron @ 1lt			24/04/10
	Dropp @ 80ml + Prep @ 3lt + DC Tron @ 1lt			3/05/10
Picked:	24/05/10			
Yield:	4.83b/ac			
	11.93b/ha			
Bales/mg:	2.95b/mg			

Comments:

N was over- done.

Contact: Jono Phelps – 0427 657452

Havana Farming – Merah North – 40″ Irrigated 2009/10

Prior Crop:	Wheat 2008			
Fallow Period:	11 months			
Ground Prep:	Furrowed + Rubber Roller			
Pre-plant Fert:	90kgN as Urea water-run			
Planted:	30/09/09			
Variety:	71BRF			
Watering:	Pre-water	15/09/09		
	In-crop	2/12/09	0.74mgs	
		19/12/09	0.63mgs	
		13/01/10	0.45mgs	
		27/01/10	0.62mgs	
		11/03/10	0.98mgs	TOTAL = 3.42mgs est.
In-crop Rain:	342mm			
In-crop Fert:	210kgN as Urea water-run (1st-4th irrigations)			
Herbicide:	1.5kgRRHerb17/10/09			
	1.5kgRRHerb14/12/09			
	1.5kgRRHerb8/01/10			
Insecticide:	Rogor @ 500ml + Pix @ 500ml	26/01/10		
	Rogor @ 500ml + Pix @ 720ml	24/02/10		
	Pegasus @ 800ml	16/03/10		
Defoliation:	Dropp @ 120ml + Prep @ 500mls + DC Tron @ 1lt	13/04/10		
	Ethephon @ 60ml + Prep @ 3lt + DC Tron @ 1lt	24/04/10		
	Dropp @ 80ml + Prep @ 3lt + DC Tron @ 1lt	3/05/10		
Picked:	21/05/10			
Yield:	5.06b/ac			
	12.49b/ha			
Bales/mg:	3.65b/mg			

Comments:

N was over- done.

Contact: Jono Phelps – 0427 657452

Havana Farming – Merah North – Best field 80″ 2009/10

Prior Crop:	Wheat 2008	
Fallow Period:	11 months	
Ground Prep:	Furrowed + NH3 application+ Rubber Roller	
Pre-plant Fert:	100kgN as NH3	
Planted:	4/11/09 7 seeds/m	
Variety:	71BRF	
Watering:	In-crop water only 18/01/10 12/02/10	
In-crop Rain:	342mm	
In-crop Fert:	46kgN as Urea water-run (1st irrigation)	
Herbicide:	1.5kgRRHerb12/11/09 1.5kgRRHerb15/01/10 1.5kgRRHerb24/02/10	
Insecticide:	Rogor @ 500ml + Pix @ 500ml Rogor @ 500ml Rogor @ 500ml + Pix @ 720ml Talstar 250 @ 300ml + Rogor @ 500ml + PBO @ 300ml Admiral @ 500ml	27/01/10 09/02/10 24/02/10 22/03/10 01/04/10
Defoliation:	Etee @ 60ml + Prep @ 500mls + DC Tron @ 1lt Dropp @ 100ml + Prep @ 3lt + DC Tron @ 1lt	19/04/10 30/04/10
Picked:	24/05/10	
Yield:	3.48b/ac 8.60b/ha	

Contact: Jono Phelps – 0427 657452

Havana Farming – Merah North – Best field Single skip 2009/10

Prior Crop:	Wheat 2008		
Fallow Period:	11 months		
Ground Prep:	Furrowed + NH3 application+ Rubber Roller		
Pre-plant Fert:	120kgN as NH3		
Planted:	23/10/09 – dry anticipating rain 7 seeds/m		
Variety:	71BRF		
Watering:	In-crop water only 15/01/10 03/02/10 14/03/10		
In-crop Rain:	342mm		
In-crop Fert:	166kgN as Urea water-run (1st and 2nd irrigations)		
Herbicide:	1.5kgRR Herb 1.5kgRR Herb 1.5kgRR Herb 1.5kgRR Herb	12/11/09 03/01/10 29/01/10 24/02/10	
Insecticide:	Rogor @ 500ml + Pix @ 500ml Rogor @ 500ml Rogor @ 500ml + Pix @ 720ml Talstar 250 @ 300ml + Rogor @ 500ml + PBO @ 300ml Pegasus @ 800ml	03/02/10 24/02/10 24/02/10 23/03/10 01/04/10	
Defoliation:	Etee @ 60ml + Prep @ 500mls + DC Tron @ 1lt Etee @ 80ml + Prep @ 3lt + DC Tron @ 1lt Prep @ 2.5 lt		13/04/10 24/04/10 19/05/10
Picked:	10/06/10		
Yield:	3.27b/ac 8.10b/ha		

Contact: Jono Phelps – 0427 657452

Havana Farming – Merah North – Best field Double skip 2009/10

Prior Crop: Wheat 2008

Fallow Period: 11 months

Ground Prep: Furrowed + NH3 application+ Rubber Roller

Pre-plant Fert: 100kgN as NH3

Planted: 4/11/09
8 seeds/m

Variety: 71BRF

Watering: In-crop water only
21/01/10
18/02/10
03/03/10

In-crop Rain: 342mm

In-crop Fert: 50kgN as Urea water-run (1st irrigation)

Herbicide:

Insecticide:

Defoliation:

Picked: 21/05/10

Yield: 2.83b/ac
7.00b/ha

Comments:
Picking did require a fair bit of adjustment – a lot of cotton high in the bush.
Both Case and late model John Deere pickers used with little difference.
The pickers did have to slow down.
Management of single skip was considered sub-optimal this season.
Whitefly infestation was unchanged with different row spacing.
80 inch fairly forgiving.
Favour more single skip if more water is available.
Would probably control the bush size more with Pix next time.
Early fruit loss helped the bush become overly large.

Contact: Jono Phelps – 0427 657452

Rossmore – Burren Junction - Double Skip 2009/10

Prior Crop:	Durum 2008
Fallow Period:	11 months
Ground Prep:	Zero Till
Pre-plant Fert:	NIL
Planted:	12/10/09 (rows under tractor bare) 11 seeds/m
Variety:	71BRF
Watering:	Water up 15/10/09 1.00mgs In-crop 17/12/09 0.95mgs 20/01/10 0.98mgs 11/02/10 0.95mgs 9/03/10 0.76mgs TOTAL = 4.64mgs est.
In-crop Rain:	?
In-crop Fert:	100kgN Water-run
Herbicide:	2 x RR Herb by ground Gesagard + Diuron Lay-by
Insecticide:	Dimethoate @ 500ml 29/01/10 Admiral @ 500ml 17/03/10
Defoliation:	Dropp @ 120mls + Prep @ 500mls 15/04/10 Dropp @ 80mls + Prep @ 2.5lt 29/04/10
Picked:	15/05/10
Yield:	3.2b/ac 7.9b/ha

Comments:
This field was planted to Double-skip to limit risk (only 3 waters available) + was easy to plant, spray & pick with existing equipment.

By staying in existing 8m wheel track configuration our priority was to maintain stubble cover to conserve moisture and hence no pre-plant fertilizer was applied.

80" may have yielded better given the rainfall during the season.

Contact: Andrew Greste – 0428 955126

Rossmore – Burren Junction - Double Skip 2009/10

Prior Crop:	Faba Beans 2009
Fallow Period:	1 month
Ground Prep:	Zero Till
Pre-plant Fert:	NIL
Planted:	1/11/09 on moisture (rows under tractor bare) 10 seeds/m
Variety:	71BRF
Watering:	In-crop 18/01/10 0.95mgs 17/02/10 0.81mgs TOTAL = 1.76mgs est.
In-crop Rain:	?
In-crop Fert:	50kgN Water-run
Herbicide:	2 x RRHerb by ground Gesagard + Diuron Lay-by
Insecticide:	Dimethoate @ 500ml 29/01/10 Admiral @ 500ml 17/03/10
Defoliation:	Dropp @ 120mls + Prep @ 500mls 15/04/10 Dropp @ 80mls + Prep @ 2.5lt 29/04/10
Picked:	18/05/10
Yield:	1.85b/ac 4.6b/ha

Comments:
Crop planted into Faba Bean stubble with minimal subsoil moisture. (The EPR option was ideal)

The crop suffered badly prior to the Christmas rain (most plants were already flowering and some were 2-3 NaWF and cutting out). Following the rain the crop looked great until the end of January when it was severely affected by 24D. 7-8 fruiting nodes were badly affected and the damage worsened over the next month before it started to grow out of it.
Result was pleasing given the tough time the crop had and it was interesting to see how the plant did manage to recover some yield after the setbacks it had. The season turned out to be very good for dry-land crops, however I remain cautious.
Contact: Andrew Greste – 0428 955126

Rosecott Pty Ltd – Millie - Best field 80″ – 3 waters 2009/10

Prior Crop:	Durum 2008			
Fallow Period:	11 months			
Ground Prep:	Chisel Plowed 20cm deep + Furrowed + NH3 application+ Lillestons			
Pre-plant Fert:	120kgN as NH3			
Planted:	23/10/09 dry 11.5 seeds/m			
Variety:	71BRF			
Watering:	Water up	25/10/09	1.50mgs	
	In-crop	20/11/09	0.95mgs	
		25/01/10	0.98mgs	
		18/02/10	1.10mgs	TOTAL = 4.53mgs est.
In-crop Rain:	300mm			
In-crop Fert:				
Herbicide:	1.5kgRR Herb 1.5kgRR Herb 1.5kgRR Herb			
Insecticide:	Shield @ 132ml		09/02/10	
	Pegasus @ 700ml		26/02/10	
Defoliation:	Dropp @ 80ml + Prep @ 1.5 lt + DC Tron @ 1lt			12/04/10
	Dropp @ 110ml + Prep @ 3lt + DC Tron @ 1lt			23/04/10
Picked:	07/05/10			
Yield:	3.83b/ac 9.46b/ha			
Bales/mg:	2.10b/mg			

Contact: Philip Firth – 0427 657532

Rosecott Pty Ltd – Millie - Worst field 80″ - 3 waters 2009/10

Prior Crop:	Sunflowers 08/09			
Fallow Period:	7 months			
Ground Prep:	Furrowed + Lillestons			
Pre-plant Fert:				
Planted:	21/10/09 dry 11.5 seeds/m			
Variety:	71BRF			
Watering:	Water up	23/10/09	1.80mgs	
	In-crop	20/11/09	0.75mgs	
		04/02/10	0.71mgs	
		23/02/10	0.92mgs	TOTAL = 4.18mgs est.
In-crop Rain:	300mm			
In-crop Fert:	73 kgN/ha as water run Urea – 1st irrigation			
Herbicide:	1.5kgRR Herb 1.5kgRR Herb 1.5kgRR Herb			
Insecticide:	Shield @ 132ml	09/02/10		
Defoliation:	Dropp @ 70ml + Prep @ 1.5 lt + DC Tron @ 1lt			01/04/10
	Dropp @ 80ml + Prep @ 2.5lt + DC Tron @ 1lt			13/04/10
	Etee @ 48ml + Prep @ 500ml + DC Tron @ 1lt			23/04/10
Picked:	29/04/10			
Yield:	3.36b/ac 8.30b/ha			
Bales/mg:	1.74b/mg			
Contact:	Philip Firth – 0427 657532			

Rosecott Pty Ltd – Millie – Only field 80″ – 2 waters 2009/10

Prior Crop:	Durum 2008			
Fallow Period:	11 months			
Ground Prep:	Chisel Plowed 20cm deep + Furrowed + NH3 application+ Lillestons			
Pre-plant Fert:	120kgN as NH3			
Planted:	16/10/09 dry 11.5 seeds/m			
Variety:	71BRF			
Watering:	Water up	18/10/09	1.50mgs	
	In-crop	19/12/09	1.20mgs	
		30/01/10	1.40mgs	TOTAL = 4.10mgs est.
In-crop Rain:	300mm			
In-crop Fert:				
Herbicide:	1.5kgRR Herb 1.5kgRR Herb 1.5kgRR Herb			
Insecticide:	Shield @ 132ml		09/02/10	
Defoliation:	Dropp @ 70ml + Prep @ 1.5 lt + DC Tron @ 1lt			01/04/10
	Dropp @ 80ml + Prep @ 2.5lt + DC Tron @ 1lt			13/04/10
Picked:	28/04/10			
Yield:	3.15b/ac 7.78b/ha			
Bales/mg:	1.89b/mg			

Comments: Cloudy weather at Xmas did not cause fruit loss in the 80 inch.
The early watering was to empty a dam that was evaporating. It helped keep the crop active through the December heat. The best 80 inch yielded 68 % of our best ever fully irrigated yield on this country. The highest yielding crop was still trying to grow and set fruit when we defoliated it. Picking is problematic and slow, but not impossible.
We found that we could not use a groundrig in this crop from mid January. The laterals got so long that we were doing too much damage. Defoliation coverage can be a problem if the wind blows form the one direction.

Contact: Philip Firth – 0427 657532

Massine – Irrigated 80″ 2008/09

Prior Crop:	Cotton 2007
Fallow Period:	5 months
Ground Prep:	Bed renovated with side buster and mulch blades Worked with guess row averager
Pre-plant Fert:	NIL
Planted:	7/11/08 on reasonable moisture 8-9 seeds/m
Variety:	70BRF
Watering:	4 x In-crop
In-crop Rain:	?
In-crop Fert:	100kgN applied every meter
Herbicide:	3 or 4 RRHerb (droppers used later in season)
Insecticide:	Mirid and Whitefly only
Defoliation:	1st by Ground with Airblast Sprayer (ordinary on one side of bush after this) 2nd by Air
Picked:	?
Yield:	2.75b/ac 6.79b/ha

Comments:
Wheel-tracks not kept in normal place (turned 1m wide at one end and 1m narrow at other end) and did not stick to wheel tracks.

Not a lot of cost saving.

Picking was a real problem.

80″ is perhaps a good option, in low water year.

Contact: Richard Schwager – 0429 957138

Arnfarm – Merah North - Irrigated 80" 2006/07

Prior Crop:	Cotton 2005
Fallow Period:	5 months
Ground Prep:	Anhyd Ammon Side-Dressed in May Steel Drum Roller in August
Pre-plant Fert:	N as Anhyd Ammon @ 115kg/ha P as gran @138kg/ha K as gran @ 73kg/ha Zn as gran @ 4.4kg/ha
Planted:	11/11/06 9 seeds/m
Variety:	80BRF
Watering:	Watered up 13/11/06 In-crop 15/01/07 3/02/07 22/02/07
In-crop Rain:	134mm
In-crop Fert:	NIL
Herbicide:	2 x RRHerb Chipping
Insecticide:	Minimal
Defoliation:	Dropp @ 60mls + Prep @ 300mls 7/04/07 Dropp @ 60mls + Prep @ 1lt 23/04/10
Picked:	2/5/10
Yield:	1.46b/ac 3.61b/ha

Comments:

Ground preparation very important to control regrowth cotton.
Back-to-Back an issue
No Significant in-crop Rain

Contact: Charlie Arnott – 0428 411649