# ARC-Institute for Industrial Crops

## Cotton Project Annual Progress Report

## 2012/2013

# Table of Contents

## Cotton Trust



## Cotton SA

**PROJECT NUMBER** : TK 208/16

**PROJECT TITLE** : Minimum input

**REPORT YEAR** : 2012/2013

**PROJECT MANAGER** : HJ Steyn

**CO-WORKER(S)** : SJE Steyn
MS Magwaza

## ABSTRACT

The objective of these dryland cotton demonstration trials was to demonstrate to cotton farmers the difference between the rip-on-row dryland cotton production method (1 m inter-row spacing and 30 cm intra-row spacing – Solid rows) the rip-on-row method where two rows are planted and two skipped (double skip row). The cotton cultivar PM3225B2RF from Monsanto/Deltapine was planted under dryland conditions in four different farmers' fields on the Makhathini Flats. These farmers are Amos Khumalo, Doris Nhlebela, Doris Gumbi and Phineas Gumede. Half of the cotton demonstrations on each of the farms were planted in the 1 m inter-row spacing and the other half in the double skip row spacing. In the 1 m inter-row spacing, four rows of 30 m in length were harvested and the mass compared to that of two rows of 30 m length in the skip row spacing. Calculations were made of seed cotton yield per hectare in kilograms. The cotton demonstrations were not planted in scientific trial layouts so the data cannot be analysed statistically. Observations made were that the average seed cotton yield of the 1 m inter-row spacing at the four farmers' fields was 1 639 kg/ha and for the double skip row 1 561 kg/ha, but the double skip row spacing used half the amount of seed and pesticides compared to the 1 m inter-row spacing. The cultivation cost for ripping on the planting lines is also less for the double skip row spacing than the 1 m inter-row spacing because only half of the field is ripped.

## OBJECTIVES

### Long term

To plant on-farm demonstration trials for small scale farmers to teach and convince them of the benefits of the production methods proven to be the most profitable for them.

### Short term

To compare the profitability of the rip-on-row dryland cotton production method (Solid row) with rip-on-row where two rows are planted and two skipped (Double skip row) using two cotton cultivars.

## EXPERIMENTAL PROCEDURES

### Demonstration blocks

Four on-farm demonstration blocks were planted this season. One was planted on the farm of Amos Khumalo on 30 October 2012, a second on the farm of Doris Nhlebela on 30 October 2012, a third at Doris Gumbi on 12 December 2012 and a fourth one on the farm of Phineas Gumede in the first week of December 2012. The cultivar PM3225B2RF was planted in all four cases. The demonstration at Amos Khumalo was sprayed with Roundup directly after plant and also on 02 January 2013. No pest control was done. The first pick was done on 05 April 2013 and the second on 09 May 2013. The demonstration at Doris Nhlebela was also planted on 30 October 2012, hand hoed on 15 November 2012 and Roundup was sprayed on 27 November 2012 and 30 January 2013. No pest control was done. The demonstration was harvested once on 05 April 2013. The demonstration at Doris Gumbi was sprayed with Roundup before planting and again on 03 January 2013 and 23 January 2013. No pest control was done. It was harvested once on 02 May 2013. The demonstration at Phineas Gumede was planted in the first week of December 2012. Roundup was sprayed three times during the season. Dimethoate was sprayed once in April 2013 to control aphids. The first pick of this demonstration was harvested in the first week of April 2013 and a second pick in the second week of May 2013. The seed cotton yield was determined at the end of the season.

**Table 1.** Total annual rainfall (mm) on the Makhathini Research Station from April 2006 to March 2013

| Season | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | Average |
|---|---|---|---|---|---|---|---|---|
| | 591 | 434 | 501 | 443 | 747 | 531 | 516 | 537 |

## RESULTS AND DISCUSSION

### Demonstration blocks

In the cotton demonstration planting on the farm of Amos Khumalo the two different spacing gave the same yield of 1 800 kg/ha. In the demonstration at Doris Nhlebela the 1 m inter-row spacing gave 1 920 kg/ha and the double skip spacing 1 761 kg/ha. In the demonstration at Doris Gumbi the 1 m inter-row spacing yielded 1 336 kg/ha and the double skip row 1 266 kg/ha. In the demonstration at Phineas Gumede the 1 m inter-row spacing gave 1 500 kg/ha and the double skip row 1 416 kg seed cotton per hectare. The average yield per hectare for the double skip row spacing was a little less than that of the 1 m inter-row inter-row spacing, but it must be taken into account that the cultivation-, seed- and pesticide costs were much less than with the 1 m inter-row spacing, therefore, the risk of the double skip row-rip on the row method is less than the 1 m inter-row planting method and the profit per hectare potentially higher.

**Table 2.** The effect of the different cultivation practices on the seed cotton yield of dryland cotton (kg/ha) at four different farms on the Makhathini Flats, 2012/2013 growing season

| Localities | 1 m inter-row | Double skip row |
|---|---|---|
| Amos Khumalo | 1 800 | 1 800 |
| Doris Nhlebela | 1 920 | 1 761 |
| Doris Gumbi | 1 336 | 1 266 |
| Phineas Gumede | 1 500 | 1 416 |
| **Average** | **1 639** | **1 561** |

## CONCLUSION

The reasoning behind the double skip row-rip on the row configuration; is that the average annual rainfall on the Makhathini Flats is too low to farm cotton successfully in the traditional way of ploughing and discing and planting in the 1 m inter-row spacing. The cotton planted in the double skip rows where the planting rows have been ripped, has the advantage of using conserved moisture from the previous season.

## NEXT SEASON

- A continuation with the on-farm demonstration blocks is recommended, to promote this adapted planting pattern under small-scale farmers.
- The effect of the planting with a started fertilizer like MAP, which contains Phosphorus and Nitrogen, must be investigated.

## LITERATURE

Baker SH (1976) Response of cotton to row patterns and plant populations. Agron. J. 68:85-88

Bange MP, Carberry PS, Marshall, J and Milroy SP (2005). Row configuration as a tool for managing rain-fed cotton systems: review and simulation analysis. Austr. J. Exp. Agric. 45(1):65-77

Kelly, D (2011) Row configurations. Australian Cotton Production Manual. p 37-38 (*www.cottoncrc.org*)

| | | |
|---|---|---|
| **PROJECT NUMBER** | **:** | TK 211/03 |
| **PROJECT TITLE** | **:** | Promoting cotton as an alternative or rotation crop for small scale farmers |
| **REPORT YEAR** | **:** | 2012/2013 |
| **PROJECT MANAGER** | **:** | APF Cornelissen |
| **CO-WORKER(S)** | **:** | **Internal**<br>LG Mabula<br>IM Bodigelo<br>MM Setemere<br>BE Taffa<br>**External**<br>G Klindt |


**ABSTRACT**

Pre-season guidance meetings were arranged at the Nokaneng ADC Offices. A list of prospective cotton farmers was compiled and forwarded to the Mpumalanga DAFF for consideration of support. Somehow the request for mechanical/input support was mislaid and only at the second request late in September-October was a new contract signed with Kanjani Service Provider who did his utmost to support the cotton farmers and prepared and planted 140 ha on behalf of the 18 Cooperatives.

During the season regular visits followed and the ADC office called a Farmer's Field Day on the farm of Mr Nambo in Seabe, which was very well attended and various difficulties experienced during planting were clearly visible and explained by the speakers. Participation once again was enthusiastic and the basics of the cotton plant and the management of the crop were explained and understood.

Loskop Ginnery confirmed that the farmers of this area had delivered seed cotton in access of 88 tons, which is about the norm for yield from rainfed cotton plantings. The price participants received were satisfactory. Where the quality was low or the cotton contained debris the impact was explained and understood. Loskop Ginnery supplied the picking bags and woolpacks for the delivery of the seed cotton to them. If the DAFF staff can resolve their petty differences this area could make a substantial contribution to the Cotton-bale of the country. This model and method of training farmers the cotton production and management methods should be initiated in the other possible cotton production areas.

A demonstration plot with the five standard treatments was also established at Kroondal and has attracted attention.

**OPSOMMING**

Leiding het hierdie jaar weer bestaan uit vooraf beplanningsvergaderings by Nokaneng ADC kantore. Lyste van deelnemers aan beoogde katoenaanplantings is saamgestel en opgestuur vir evaluering deur Mpumalanga DAFF. Êrens het iets skeefgeloop en is daar nie in die eerste tender ook gevra vir bewerking van die katoenaanplantings. By ‘n opvolgaanvraag in September-Oktober het Kanjani Service Provider katoenboere tegemoet gekom en probeer help. Net 140 ha is geplant onder beheer van die 18 “Cooperatives” in die Nokaneng-distrik.

Dwarsdeur die seisoen is opvolgbesoeke aan die boere en aanplantings gedoen. ‘n Besoekersdag is op die plaas van Mnr Nambo gehou en daar is puntenerig na probleme gesoek en verduidelik. Opkoms was besonder goed; deelname entoesiasties en praktyke by oes van katoen is breedvoerig bespreek. So ook is die bemarking van katoen verduidelik. Die 140 ha het ruim 88 ton opgelewer wat ‘n goeie opbrengs is vir droëland katoen.

Loskop Pluismeule het pluk- en baalsakke op die gebruiklike wyse voorsien. Boere was in die algemeen tevrede met die prys vir die gelewerde katoen. Waar die kwaliteit laag was of die katoen baie afval bevat het, was die prys dienooreenkomstig benadeel. Loskop Pluismeule het die regte tipe pluk- en baalsakke voorsien. As die

probleem binne Mpumalanga DAFF uitgestryk kan word, sal hierdie gebied ‘n betekenisvolle bydrae lewer tot die katoenbaal van die land. Hierdie metode om boere vertroud te maak met die beginsels van katoenverbouing moet uitgebrei word na alle moontlike produksie-areas.

‘n Demonstrasie aanplanting waarin die vyf standaard verbouingsmetodes gedemonstreer is, is weereens aangeplant en is dikwels deur buitestaanders besoek.

**SCOPE OF PROJECT**

As these farmers have no or limited experience gained from previous plantings of cotton or cotton production, the smallholder and resource poor farmers must be made aware of and familiarized with a new alternative or rotation crop in their respective production areas where climatic conditions prevail that are conducive to cotton production.

**OBJECTIVES**

1. Allow these farmers to become familiar with the cotton plant and the inputs required for the successful cultivation of cotton.
2. By means of empowerment plots the prospective farmers get to experience first-hand what is physically required to produce cotton, and that the profit that can be made from this plot would enable them to acquire inputs for the following production season.
3. Parallel to this empowerment plot the farmers also plant a demonstration block on which 5 cotton management systems are demonstrated.
4. After this familiarization with cotton they are able to attend and comprehend the level of skills training available in the AgriSETA/PAETA modular training programme about principles for cotton production and farm management, and ultimately in the Master Mentor Programmed of DAFF and Cotton SA.

## PROCEDURES, DISCUSSION & RESULTS

### Materials, methods and deployment of the programme

As has become customary the farmers called the ARC-IIC training staff to Nokaneng ADC to again imprint on their memory the steps to be followed to make a success of a cotton planting season.

At this meeting all farmers who were hoping to plant cotton registered. Forms were handed in and the Extension Officer would forward the requests for input assistance to Mpumalanga DAFF.

The season started with a clash between the maize and cotton farmers regarding the land preparation and the maize farmers got preferential treatment.

It was decided to demonstrate the double skip-row planting scheme this season in this area. Instead of loading seed in all four planting bins, the cotton seed is fed only to the two outside bins. This has the effect that the two middle-rows are not planted and when the tractor turns around at the end of the field the outside bucket with seed plants adjacent to the previously planted single row and then it is also a double row.

The reason for planting skip-row cotton is to have some additional moisture available for the two planted rows as the root system will develop into the open space. However, the roots will not occupy the total area and this leaves moisture stored in the centre open space where the two rows will be planted the following season.

However, by end of November to 1$^{st}$ week of December 2012, 140 ha had been planted with cotton. In January 2013 the farmers did not get any assistance with application of herbicide on the cotton to reduce the weed competition. In the 1$^{st}$ week of February 2013 a farmers' meeting was held and it became apparent why there was this clash with maize planting and no herbicide spraying done. The tender for support of farmers in the Nokaneng district had only specified maize and sunflower as target crops. When Kanjani was approached to include cotton as an attachment to the contract and assist the cotton farmers they were only able to plough and plant 140 ha, before going back to maize. At this meeting in February the Managers of

Kanjani also claimed that Mpumalanga DAFF was owing them R20 m for services rendered this season. However, they understood the cotton farmers' predicament and allocated two tractors with spraying equipment to immediately first spray herbicide and then pesticide to control the first outbreak of cotton stainers.

Nokaneng ADC arranged a further meeting between the farmers and the ARC-IIC trainers and this turned out to be a Field Day on the farm of Mr Nambo in Seabe. This was very well attended and frank discussions ensued on the field when certain "faults" were identified by the farmers and it turned out to be very productive.

On this farm the double-skip-row planting that has shown its value on the Makhathini Experimental farm was also implemented and all farmers were made aware of the reasoning behind this planting scheme, that it conserves moisture in the non-planted area for the cotton to be planted on that fallow strip/area the following year.

The representatives from the Loskop Ginnery also explained the critical aspects of harvesting cotton to obtain the highest pricing for their delivered crop. This included picking with little debris, leaves and stalks; not picking cotton in woven polypropylene bags; not loading bales with stones to increase weight; and not picking forced or slightly opened bolls as the cotton from such bolls is of low quality and would have a negative effect on the pricing.

After harvesting the farmers arranged the delivery of their crop to the Loskop Ginnery near Marble Hall. The Ginnery paid the money into their personal accounts.

We are now of the opinion that the farmers who have had this experience can now proceed on their own if the Nokaneng ADC Staff play their role in the communities that they serve. They should take the responsibility and show their commitment to the Mpumalanga DAFF by executing the job for which they applied and were appointed.

This year a demonstration plot was also established at the ARC-IIC Campus in Kroondal and visitors, farmers and students from North-West University had the opportunity to see the value of "best Practice" farming system and the detrimental

effects of neglecting any one of the four critical cotton farming practices.(see attached pictures)

**CHANGES IMPLEMENTED TO PROCEDURES** (Compared to previous seasons)

This year the use of the new cotton variety, ***PM3225B2RF*** with the new formulation of Roundup Ready herbicide, ***PowerMax*** was available to the farmers. The adapted/modified management practices were explained and correctly implemented.

The only aspect that farmers are understanding but the tractor drivers are not implementing correctly is the planting of the Refugia… Closer supervision of the tractor driver MUST BE IMPLEMENTED. Else farmers may lose the licence to plant GMO Cotton.

**Economic justification for the project**

1. It developed the personal skills of the participants. The shared knowledge, know-how of underlying concepts and their experiences empowers the participants.
2. The industry is committed to transfer cotton production skills to farmers interested in cotton as an alternative or rotation crop.
3. The textile manufacturing trade in South Africa has been retrenching workers for many years due to the reduced availability of raw materials/inputs and the importation of manufactured textiles and products/garments.

**ARC PROGRESS REPORT FORMAT**

**Progress with meeting objectives**

Farmers have attained a promising level of competence and commitment to including cotton as a rotation or senior crop in their farming enterprise. The provisioning of inputs remains a problem as farmers do not have the collateral required by financial institutions for a personal loan. If some financing scheme could be developed for/by the Ginnery input costs could be deducted from the value of the delivered crop.

One other recurring problem in cotton production remains the marauding cattle that inflict serious losses in growth during the season and yield from browsing shortly before bolls burst or during the boll burst period which lasts about 6 weeks.

**Technology transfer**

18 Cooperatives planted 140 ha of cotton. Cooperatives have varying numbers of members as persons join or find alternative employment. During the harvesting period they also employed temporary labour who were paid by the Cooperatives according to amount of cotton picked after the crop had been delivered to the Ginnery.

It would be advantageous if the pictorial pocket guides dealing with,

i. insect pests and predators and
ii. diseases of cotton

could be produced for the farmers.

**Proposed continuation of this project**

Some farmers in Tonga/Khombaso area of East Mpumalanga have made contact to support them in the coming season.

Likewise a farmer in the Ledig-Tweelaagte has negotiated with the Local Chief for a 2 ha field to plant cotton and wants guidance.

During meetings of the SSFORUM at Cotton SA the Limpopo DAFF requested that we do demonstration and empowerment plantings but they have not come back to us. Maybe the proposal will be on the table at the September 2013 SSF meeting.

**Table 1:** Seed cotton delivered up to 10 July 2013, by participating farmers. They were paid the daily rate as they were all "outside of contracts" (Data supplied by Loskop Ginnery). Comment is by APF Cornelissen (ARC-IIC)

| Bale No | Farmer | Yield (Kg) | Length (inch) | Length (mm) | Micronaire | Comment | Value | R/Kg | Grade |
|---|---|---|---|---|---|---|---|---|---|
| 291027 | E.Malela | 4812 | 1.125 | 28.8 | 4.0 | | 26 117.28 | 5.43 | A |
| 294925 | H.Makoeta | 4140 | 1.125 | 28.8 | 3.1 | Low | 19 143.36 | 4.62 | A |
| 297923 | MJ Malella | 3968 | 1.125 | 28.8 | 3.1 | Low | 18 348.03 | 4.62 | A |
| 303802 | ME Khumalo | 4996 | 1.125 | 28.8 | 3.8 | | 27 178.24 | 5.44 | A |
| 304001 | Mokatani | 42 | 1.0938 | 28.0 | 3.3 | Short & Low | 198.78 | 4.73 | A |
| 305804 | JC Maheso | 564 | 1.125 | 28.8 | 3.8 | | 3 068.16 | 5.44 | A |
| 306002 | F Magena | 312 | 1.0625 | 27.2 | 3.5 | Short | 1 442.69 | 4.62 | B |
| 306603 | J Maheso | 468 | 1.125 | 28.8 | 3.8 | | 2 545.92 | 5.44 | A |
| 307105 | NJ Mathe | 1000 | 1.125 | 28.8 | 4.3 | | 5 440.00 | 5.44 | A |
| 307505 | MS Monesi | 900 | 1.125 | 28.8 | 4.2 | | 4 896.00 | 5.44 | A |
| 308005 | Mr Mathe | 700 | 1.125 | 28.8 | 3.7 | | 3 808.00 | 5.44 | A |
| 308905 | MF Masenya | 740 | 1.0938 | 28.0 | 3.2 | Short & Low | 3 220.48 | 4.35 | A |
| 310005 | J Maheso | 800 | 1.125 | 28.8 | 3.7 | | 4 352.00 | 5.44 | A |
| 311105 | JC Maheso | 660 | 1.125 | 28.8 | 3.8 | | 3 590.40 | 5.44 | A |
| 311812 | Shikwane | 1512 | 1.0938 | 28.0 | 4.5 | Short | 7 814.02 | 5.17 | A |
| 313605 | JC Maheso | 680 | 1.125 | 28.8 | 3.6 | | 3 699.20 | 5.44 | A |
| 313805 | JC Maheso | 680 | 1.125 | 28.8 | 4.0 | | 3 699.20 | 5.44 | A |
| 317209 | MS Monesi | 1484 | 1.125 | 28.8 | 4.2 | | 8 072.96 | 5.44 | A |
| 318925 | M Swele | 4900 | 1.125 | 28.8 | 3.9 | | 26 656.00 | 5.44 | A |
| 319024 | M Swele | 3640 | 1.125 | 28.8 | 3.9 | | 19 801.60 | 5.44 | A |
| 318305 | Kokotwane | 840 | 1.125 | 28.8 | 3.3 | Low | 4 204.03 | 5.00 | A |
| 318306 | Kokotwane | 785 | 1.125 | 28.8 | 3.3 | Low | 3 928.77 | 5.00 | A |
| 318506 | JE Maheso | 936 | 1.938 | 49.4 | 3.8 | | 5 091.84 | 5.44 | A |
| 319305 | J Shabangu | 700 | 1.0938 | 28.0 | 4.0 | Short | 3 617.60 | 5.17 | A |
| 320210 | BN Msiza | 1300 | 1.0938 | 28.0 | 4.2 | Short | 6 718.40 | 5.17 | A |
| 320608 | P Maodi | 1308 | 1.125 | 28.8 | 4.1 | | 7 115.52 | 5.44 | A |
| 321005 | Kokotwane | 820 | 1.125 | 28.8 | 3.4 | Low | 4 371.58 | 5.33 | A |
| 321104 | JE Maheso | 684 | 1.125 | 28.8 | 3.8 | | 3 720.96 | 5.44 | A |
| 323416 | NJ Mathe | 3036 | 1.125 | 28.8 | 3.9 | | 16 515.84 | 5.44 | A |
| 323502 | Mr Mathe | 292 | 1.125 | 28.8 | 3.4 | Low | 1 556.71 | 5.33 | A |
| 323705 | Kokotwane | 840 | 1.125 | 28.8 | 3.6 | | 4 569.60 | 5.44 | A |
| 324705 | Kokotwane | 740 | 1.125 | 28.8 | 3.9 | | 4 025.60 | 5.44 | A |
| 324705 | Kokotwane | 740 | 1.125 | 28.8 | 3.9 | | 4 025.60 | 5.44 | A |

| Bale No | Farmer | Yield (Kg) | Length (inch) | Length (mm) | Micronaire | Comment | Value | R/Kg | Grade |
|---|---|---|---|---|---|---|---|---|---|
| 325605 | Kokotwane | 820 | 1.0938 | 28.0 | 3.8 | Short | 4 237.76 | 5.17 | A |
| 327508 | MS Mnisi | 1288 | 1.125 | 28.8 | 4.1 | | 7 006.72 | 5.44 | A |
| 331005 | Kokotwane | 840 | 1.0938 | 28.0 | 3.6 | Short | 4 341.12 | 5.17 | A |
| 333110 | MJ Thubane | 1280 | 1.0938 | 28.0 | 4.5 | Short | 6 615.04 | 5.17 | A |
| 333408 | M Ramogale | 1228 | 1.0938 | 28.0 | 4.5 | Short | 6 346.30 | 5.17 | A |
| 333610 | BN Msiza | 1240 | 1.0938 | 28.0 | 4.1 | Short | 6 408.32 | 5.17 | A |
| 335010 | Thubane | 1460 | 1.0938 | 28.0 | 3.6 | Short | 7 545.28 | 5.17 | A |
| 335411 | Masenya | 1836 | 1.0938 | 28.0 | 4.0 | Short | 9 488.45 | 5.17 | A |
| 335511 | P Ramaboleng | 1576 | 1.0938 | 28.0 | 3.6 | Short | 8 144.77 | 5.17 | A |
| 335618 | Tsosha | 2788 | 1.0938 | 28.0 | 4.0 | Short | 14 408.38 | 5.17 | A |
| 336905 | Kokotwane | 880 | 1.0938 | 28.0 | 3.8 | Short | 4 547.84 | 5.17 | A |
| 338105 | Kokotwane | 880 | 1.0938 | 28.0 | 3.8 | Short | 4 547.84 | 5.17 | A |
| 341403 | S Aphane | 608 | 1.0938 | 28.0 | 3.6 | Short | 3 142.14 | 5.17 | A |
| 347105 | Kokotwane | 900 | 1.0938 | 28.0 | 4.2 | Short | 4 651.20 | 5.17 | A |
| 350603 | S Aphane | 548 | 1.0938 | 28.0 | 3.9 | Short | 2 832.06 | 5.17 | A |
| 353105 | P Maodi | 820 | 1.0938 | 28.0 | 4.2 | Short | 4 237.76 | 5.17 | A |
| 353298 | ML Mashego | 1128 | 1.0938 | 28.0 | 4.2 | Short | 5 829.50 | 5.17 | A |
| 356310 | MJ Thubane | 1420 | 1.0625 | 28.0 | 4.3 | Short | 6 952.32 | 4.90 | A |
| 358503 | BN Msiza | 448 | 1.0938 | 28.0 | 3.7 | Short | 2 193.41 | 4.90 | B |
| 358606 | SD Thbane | 836 | 1.0938 | 28.0 | 3.7 | Short | 4 093.06 | 4.90 | B |
| 360009 | J Shabangu | 1264 | 1.0938 | 28.0 | 3.6 | Short | 6 188.54 | 4.90 | B |
| 360205 | A Ledwaba | 1020 | 1.0938 | 28.0 | 4.2 | Short | 5 271.36 | 5.17 | A |
| 360805 | A Ledwaba | 1020 | 1.0938 | 28.0 | 4.1 | Short | 5 271.36 | 5.17 | A |
| 362105 | Kokotwane | 900 | 1.125 | 28.8 | 3.8 | | 4 651.20 | 5.17 | B |
| 362505 | J Maheso | 760 | 1.0938 | 28.0 | 3.3 | Short & Low | 3 596.93 | 4.73 | A |
| 365205 | J Maheso | 820 | 1.0938 | 28.0 | 3.6 | Short | 4 237.76 | 5.17 | A |
| 365505 | J Maheso | 900 | 1.0938 | 28.0 | 3.6 | Short | 4 651.20 | 5.17 | A |
| 366305 | JE Maheso | 740 | 1.0938 | 28.0 | 3.9 | Short | 3 824.32 | 5.17 | A |
| 367606 | Raijoo | 896 | 1.0938 | 28.0 | 3.8 | Short | 4 630.53 | 5.17 | A |
| 369904 | MJ Thubane | 504 | 1.0938 | 28.0 | 4.3 | Short | 2 604.67 | 5.17 | A |
| 370310 | Lehabane | 2100 | 1.0938 | 28.0 | 4.2 | Short | 10 852.80 | 5.17 | A |
| 371805 | MP Ramalobeng | 760 | 1.0938 | 28.0 | 4.0 | Short | 3 927.68 | 5.17 | A |
| 372210 | NJ Mathe | 1940 | 1.0938 | 28.0 | 3.9 | Short | 10 025.92 | 5.17 | A |
| 372403 | F Masenya | 428 | 1.0938 | 28.0 | 4.1 | Short | 2 211.90 | 5.17 | A |
| 376702 | MS Monesi | 292 | 1.0938 | 28.0 | 3.7 | Short | 1 509.06 | 5.17 | A |
| 381705 | Lehabane | 1160 | 1.0938 | 28.0 | 4.0 | Short | 5 994.88 | 5.17 | A |

| Bale No | Farmer | Yield (Kg) | Length (inch) | Length (mm) | Micronaire | Comment | Value | R/Kg | Grade |
|---|---|---|---|---|---|---|---|---|---|
| 383104 | J Shabangu | 564 | 1.0938 | 28.0 | 4.1 | Short | 2 454.53 | 4.35 | C |
| 384412 | Shikwane | 1352 | 1.0625 | 27.2 | 4.1 | Short | 6 619.39 | 4.90 | A |
| 384605 | Lehabane | 1040 | 1.0938 | 28.0 | 4.3 | Short | 5 ,374.72 | 5.17 | A |
| 108901 | SC Mokwane | 40 | 1.0938 | 28.0 | 4.1 | Short | 206.72 | 5.17 | A |
| 388101 | P Ramalobeng | 136 | 1.0938 | 28.0 | 3.5 | Short | 702.85 | 5.17 | A |
| 388203 | Mr Rangwaga | 288 | 1.0938 | 28.0 | 3.5 | Short | 1 488.38 | 5.17 | A |
| 392806 | ME Makgoba | 816 | 1.0938 | 28.0 | 3.5 | Short | 4 217.09 | 5.17 | A |

**Footnotes:**

*The comments refer to:*

1. Fibre length below 28.8 mm is deemed short; No long fibre was produced (30.0 mm +); Short fibre could be the negative effect of the very late weed control. Micronaire is Low if the value is below 3.5; could indicate stress or fibre from late bolls; Grade refers to the level of debris/dirt in the harvested cotton; Grades B & C have a fair amount of dirt in the harvested cotton that could be from cotton that was picked-up from the ground, and therefore contains excess leafy material.

2. The fluctuation in the price obtained by farmers from R4.35 to R5.44 is due to the daily fluctuation of the International cotton price. No farmers signed pre- or early season volume/price contracts as they produce the cotton under rain-fed/dryland conditions and have no guarantee of production/yield, and a contract would have serious financial implications for them.

3. The applicable deductions for short fibre, low micronaire and lower grades were implemented, and had a detrimental effect on “money-in-the-pocket” of the farmers.

## Photographic report of visits to the farmers' fields, and what happened there

**Photo 1 & 2.** Start the right way……..meet and greet the structures and the people……discuss the way forward for the season….else ……. And there will still be chaos….

**Photo 3 & 4.** While implements are serviced and drivers receive guidance and test the repaired tractors

**Photo 5 & 6.** Fields were finally prepared and planted

**Photo 7 & 8.** The cotton planted in uneven fields germinated and had to compete with weeds as herbicide application was only done in late January 2013

**Photo 9 & 10.** Once weed control had been done the cotton flourished. Double skip row demonstration plots at Seabe, and conventional rows at Katjebane (Ledwaba) and weed interspersed cotton at Loding.



**Photo 11 & 12.** Nokaneng Field Day at Mr Nambo, Seabe.



**Photo 13 & 14.** But animals and farmers had to battle it out for the yield

**Photo 15 & 16.** Nokaneng farmers attended the Field Day at ARC-IIC Loskop Exp farm. Project display with the Supervisors Fanfani and Leah of Mr Mothoa, at Sekgotlotso (Bloedfontein) prepared for the Premier's visit who never arrived.