

# AGRICULTURAL RESEARCH STATION UMMEDGANJ, KOTA

(Maharana Pratap University of Agriculture & Technology, Udaipur)

## Dr. Pramod Dashora Assoc. Professor

(Agronomy)

Ph : 0744-2844369 (O) Fax : 0744-2844306 Mob. 8107279509 Office Address : Ummedganj Farm, Post Box No. 7, G.P.O. Nayapura, Kaithoon Road, KOTA - 324 001

Date : 16.5.2012

No.

To,

Dr. O.K. Sinha Project coordinator All India Coordinated Research Project on sugarcane IISR, Lucknow

Sub : Report of 2011-12, AICRP on Sugarcane (Agronomy and FLD), Kota centre – reg.

Respected Sir,

Kindly find enclosed herewith report of AICRP on Sugarcane (Agronomy and FLD), Kota centre for the year 2011-12. The report on crop improvement will be submitted after 20<sup>th</sup> of this month.

This is for your kind information & further necessary action.

Thanking you

Yours faithfully

Encl. As above.

(Pramod Dashora)

# FRONT LINE DEMONSTRATION (FLD) 2011-2012

## TECHNICAL REPORT OF THE FRONTLINE DEMONSTRATIONS OF SUGARCANE CONDUCTED BY AICRP ON SUGARCANE, KOTA CENTRE (2011-12)

1.	Name of the crop	:	Sugarcane
2.	Season	:	Spring (2011-12)
3.	Objective	:	Sustainable development of sugarcane based cropping system
4.	Name of the farmer	:	Sh. Kishal Lal Dhabhai
5.	location	:	Village –Naya Gaon P.S. – Bundi Taluka – Bundi District – Bundi
6.	Area under demonstration	:	One hectare
7.	Irrigated / rainfed	:	Irrigated
8.	Category of beneficence (a) Medium / small / marginal (b) SC/ST/OBC/General	:	Medium OBC
9.	Rainfall pattern	:	Medium
10.	Field condition (a) Topography	:	Plains
11.	Production technology adopted (a) Variety	: :	CoPK-05191
	(b) Seed rate	:	75 q/ha
	(c) Source of seed	:	ARS, Ummedganj, Kota.
	(d) Seed treatment	:	With 0.25% Agal + 0.1 Bavistin
	(e) Planting date	:	20.3.2011
	(f) Fertilizer		
	(i) Basal	:	$200 \ N: 60 \ P_2O_5: 60 \ K_2O \ ha^{-1}$
	(ii) Top dressing in two splits	:	100 kg N
	(h) Weed control	:	Herbicidal (Atrazine @ 2.0 kg a.i. ha-1) + One hand weeding at 60 DAP
	(i) Plant protection measures	:	Monocrotophos @ 1.25 lit./ha

12.	Date of harvesting	:	5.3.2012
13.	Estimate of yield (t/ha)	:	05.05 / 1
	(i) Demonstration plot	:	95.35 t/ha
	(ii) Traditional plot	:	81.62 t/ha
	(iii) Per cent increase over local check	:	13.73 %

#### 14. Economics

S.	Items	Cost estimate (Rs.)	Traditional method
No.		<b>Demonstration Plot</b>	
1.	Human labour	14652	16687
2.	Bullock / tractor	3960	4620
3.	Inputs		
	Seed	15000	13125
	Weedicide	900	
	Manure		
	Fertilization	2480	1850
	Plant Protection	500	
4.	Irrigation	6950	6950
5.	Total cost of cultivation (Rs./ha)	45556	42336
6.	Value of product (Rs./ha)	147380	127889
7.	Net return (Rs./ha)	101824	85553

\* Selling price Rs. 1500 t/ha

#### 15. Farmers reaction :

Farmers were quite satisfactory and impressed cane production. They had following observation:

- 1. Sowing of three budded sets gave netter and uniform germination over two or three piece of whole cane .
- 2. Sowing of sets if furrows with recommended spacing gave better plant population as compared to local ones.
- 3. Use of recommended varieties for the zone reduced the seed cost
- 4. Balanced fertilization of nutrients also reduced the input cost.
- 5. Use of seed treatment minimizes the disease infection
- 6. Use of herbicides for weed control reduce the total cost of cultivation
- 7. Control of shoot borer with prescribed insecticide at proper stage proved of assistance.

## TECHNICAL REPORT OF THE FRONTLINE DEMONSTRATIONS OF SUGARCANE CONDUCTED BY AICRP ON SUGARCANE, KOTA CENTRE (2010-11)

1.	Name of the crop	:	Sugarcane
2.	Season	:	Spring (2010-11)
3.	Objective	:	Sustainable development of sugarcane based cropping system
4.	Name of the farmer	:	Sh. Ashok Chaudhary
5.	location	:	Village – K. Patan P.S. – Bundi Taluka – Bundi District – Bundi
6.	Area under demonstration	:	One hectare
7.	Irrigated / rainfed	:	Irrigated
8.	Category of beneficence (a) Medium / small / marginal (b) SC/ST/OBC/General	:	Medium OBC
9.	Rainfall pattern	:	Medium
10.	Field condition (a) Topography	:	Plains
11.	Production technology adopted (a) Variety	:	CoPK-05192
	(b) Seed rate	:	75 q/ha
	(c) Source of seed	:	ARS, Ummedganj, Kota.
	(d) Seed treatment	:	With 0.25% Agal + 0.1 Bavistin
	(e) Planting date	:	27.3.2011
	(f) Fertilizer		
	(i) Basal	:	$200 \ N: 60 \ P_2O_5: 60 \ K_2O \ ha^{-1}$
	(ii) Top dressing in two splits	:	100 kg N
	(h) Weed control	:	Herbicidal (Atrazine @ 2.0 kg a.i. ha-1) + One hand weeding at 60 DAP
	(i) Plant protection measures	:	There was an incident of shoot borer at early stage in May for control spray of monocrotophos @ 1.25 lit./ha.

12.	Date of harvesting	:	9.3.2012
13.	Estimate of yield (t/ha)	:	
	(i) Demonstration plot	:	95.6 t/ha
	(ii) Traditional plot	:	77.28 t/ha
	(iii) Per cent increase over local check	:	18.32 %

#### 14. Economics

S.	Items	Cost estimate (Rs.)	Traditional method
No.		<b>Demonstration Plot</b>	
1.	Human labour	14652	16687
2.	Bullock / tractor	3960	4620
3.	Inputs		
	Seed	15000	13125
	Weedicide	900	
	Manure		
	Fertilization	2480	2035
	Plant Protection	500	
4.	Irrigation	6950	6950
5.	Total cost of cultivation (Rs./ha)	46426	45126
6.	Value of product (Rs./ha)	137328	113728
7.	Net return (Rs./ha)	90902	68602

\* Selling price Rs. 1500 t/ha

#### 15. Farmers reaction :

Farmers were quite satisfactory and impressed cane production. They had following observation:

- 1. Piece of whole cane.
- 2. Balanced fertilization of nutrients also reduced the input cost.
- 3. Sowing of sets if furrows with recommended spacing gave better plant population as compared to local ones.
- 4. Sowing of three budded sets gave netter and uniform germination over two or three Use of herbicides for weed control reduce the total cost of cultivation
- 5. Use of recommended varieties for the zone reduced the seed cost
- 6. Use of seed treatment minimizes the disease infection
- 7. Control of shoot borer with prescribed insecticide at proper stage proved of assistance.