REPORT ON OILSEED AND PULSES

(2011-12)





KVK ANGUL, AT- PANCHAMAHALA , ANGUL , PIN-759132

Orissa University of Agriculture & Technology

Bhubaneswar -751003

Set TOT - 1

Seasonal report of KVK Angul on oilseed/pulse demonstrations KHARIF-PULSE-ARHAR

Table 1: Average yield and cost particulars of demonstration and local check plots

District: Angul

Season: Kharif

Year: 2012

Average District yield of previous year (Preferably current year): 5.5 q/ha.

S. No	Name of	Variety	Farm- ers	Area (ha)	Av. Yield	l (q/ha)		Increa -se in	Cost of cash input (Rs)		Remarks
	crop		(no.)		Highest	Demons	Local	yield (%)			
						-tration	спеск	(70)	Demons-	Local	
									tration	check	
RA	INFED										
1	Arhar	ICPL-	06	2.0	16.3	15.8	11.7	35.0			Harvesti
		87-119							16 600	10,450	ng
		(Asha)							10,000		complet
											e

Table 2: Details of Extension activities

Districts: Angul		Season: Kharif		Year: 2012			
S. No.	Activities	No. of	No. of Participants				
		Programmes	Male	Female	SC/ST	TOTAL	
1.	Training Progrmme - For farmers	1	25	-	1	25	
2.	Field days	-	-	-	-	-	
3.	Farmers' Conventions	2	12	5	1	17	
4.	Radio talk/ Television programme	-	-	-	-	-	
5.	Leaflet published	1	-	-	-	25 copies	

Table 3: Weather data during the crop seasonDistricts : AngulSeason : KharifLocation of the weather station: Collectorate,Angul

Year : 2012

S.No	Meteorological	Rainfall	No. of	Any	other like		Remarks
	week	(mm)	rainy days	Max. Temp	Min. Temp	Humidity	
1	June	121.08	20	NA	NA	NA	Crop
2	July	134.6	24				optimum
3	August	100.2	30	NA	NA	NA	water
4	September	98.0	16	NA	NA	NA	
5	October	12.88	8	NA	NA	NA	
6	November	Nil	Nil	NA	NA	NA	
7	December	4.0	1	NA	NA	NA	

Table 4: Consolidated reports about farming situation of demonstration plot

Village	No. of		Type of Farming Situation				
	farmer	Source of	Soil Type	Previous	Sowing	Harvesting	
		irrigation		Crop	time	Time	
Barasingha	06	Rainfed	Sandy	Fallow	4 th week	Last week	Harvesting
			loam		of June	of	completed
Block:						December	
Banarpal							

Agro-climatic Zone: <u>Mid Central Table Land</u> District: <u>Angul</u> Crop: <u>Arhar</u>

Soil Status :

Village	РН	EC(dsm per sq.m)	OC(%)	N(Kg/ha)	P(Kg/ha)	K(Kg/ha)
Rantalei	5.5	0.12	0.51	262	9.5	170

Appendix—1

Critical inputs supplied under demonstration

State: Orissa Crop: Arhar

Area: 2.0 ha Av. Yield (q/ha) : 15.8

Name of District	Farming situation	Critical inputs demonstrated
Angul	Irrigated	DAP,PP Chemicals(Triazophus)

Appendix-2

Feed back/Suggestions

For future research : Short height variety with less duration of ICPL 87119 needs to be evolved

<u>For developments departments</u> : Popularization of the variety in scientific manner needs to be

facilitated.

For policy considerations : Seeds of ICPL 87119 may be supplied to the farmer at subsidized rate.

Any serious constraints in implementation of the programme :

- 1. Non-availability of seed(Farmers arranged the input)
- 2. Vulnerability of arhar to number of insect pest compared to other crops also hindered the programme.

Details of fund utilized during the period under report

	ing the period under report	, 	
Particulars	Amount Booked & utilized	Balance	Remarks
1 Inpute			Expenditure has been made
1.111puts			Experientere has been made
2 Extension Activities			from the office contingency
2.Extension Activities			
2 T A / D A / D O L ata]	
5.1 A/DA/POL etc.	-		

Set TOT-2

General Information:

1. Type of farmer	:	Marginal
2. Year	:	2012
3. Season	:	Kharif
4. District	:	Angul
5. Village	:	Barasingha
6. Crop	:	Arhar
7. Variety	:	ICPL-87-119
8. Farming situation	:	Rainfed upland
Previous crop grown	:	Fallow
Source of irrigation	:	Rainfed
• Soil type	:	Sandy loam
9. Quantity of Organic manure used (q/ha)	:	0.5 t
10. Avg. Rate at which produce was sold (Rs/q)	:	Rs. 4000/q

Beneficiary Details:

Sl.No.	Name	Area(ac)	Sowing time	Harvest time	Yield(c	q/ha)
					F.P	R.P
1.	Phakira mohan Sahu	1.5	22.06.12	27.12.12	12.4	16.3
2.	Gagan Sahu	1.0	24.06.12	29.12.12	12.0	15.8
3.	Dwari Sahu	0.5	28.06.12	30.12.12	10.8	15.1
4.	Prasanna Sahu	0.5	23.06.12	26.12.12	11.7	16.0
5.	Arata Sahu	0.5	25.06.12	28.12.12	11.2	15.4
6.	Bilas Sahu	1.0	27.06.12	30.12.12	12.1	16.2

Result:

Yield	Maximum(q/ha)	Minimum(q/ha)	Average(q/ha)	Increase (%)
R.P	16.3	15.1	15.8	35.0
L.C	12.4	10.8	11.7	

Input Details:

S. No.	Cash inputs	Supplied by the centre		Invested by t	he farmer
		Quantity/ha	Cost (Rs./ha)	Quantity/ha	Cost (Rs./ha)
1.	Seed	-	-	15 kg	1050/-
2.	Seed treatment (Rhizobium)	-	-	0.5 kg	50/-
3.	Fertilizers				-
	(a) DAP	1.0 q	1316/-	2.0	
	(b) MOP			1.5	
4.	Pesticides/Fungicides				
	(a) Triazophus	1500ml	352/-		
5.	Herbicide(Butachlor)			500 ml	400/-
6.	Any other inputs* FYM			5 q	500/-

15. Any serious pest /disease problem during the year

: Pod borer infestation

16. Any other relevant information

: No.

Set TOT-3

Identification of critical inputs for demonstrations on oilseed/pulse crops.

Distri	ct: Angul (Crop : Arhar		Farming Si	tuation: Ra	infed	
Sl. No	Item	Recomm- ended practice	Existing practice	Gap in adoption (3-4)	Propose d quantity (kg/ha)	Critical inputs cost (Rs/ha)	Remarks
1	2	3	4	5	6	7	
A	Variety	ICPL-87-119	UPAS-120	Partial	-	-	
В	Seed rate (kg/ha)	20	15	5	20	1600/-	
С	Seed treatment (Yes/No)	Rhizobium @ 20 g/kg of seed	_	Full	400 gm	50/-	
D	Fertilizer (NPK – kg/ha)						
	- N	20	5	Partial	20		
	- P	40	10		40	1500/-	
	- K	40			40		
E	F. No. of dusting/ sprayings for	Two spray of monocrotophu	No spray	Partial	2	796	
	pests/diseases/weed - -	s One spray of triazophus			1	375	
F	Sowing implement	Seed drill	Nil	Full	1	To be hired	
G	Any other (specify) FYM	20 q / ha	5 q/ha	Full	20 q	2000/-	



Set TOT - 1

Seasonal Report of KVK Angul on oilseed/pulse demonstrations

RABI -OILSEED-GROUNDNUT

Table 1: Average yield and cost particulars of demonstration and local check plots

District: Angul

Season: Rabi

Year: 2011-12

Average District yield of previous year (Preferably current year): 10.96 q/ha.

S. No	Name of	Variety	Farm- ers	Area (ha)	Av. Yield (q/ha)		Increa Cost of -se in (Rs)		ash input	Remarks	
	crop		(no.)		Highest	Demons	Local	yield			
						-tration	check	(70)	Demons	Local	
									-tration	check	
Irı	igated										
1	Ground	ICGV-	15	5.0	Pod form	nation stag	e		10,435/	8700/-	Continuing
	nut	91114(-		
		Devi)									

Table 2: Details of Extension activities

Districts: Angul Season: Rabi Year: 2011-12

S. No.	Activities	No. of	No. of Participants				
		Programmes	Male	Female	SC/ST	TOTAL	
1.	Training Progrmme - For farmers	2	50	-	-	50	
2.	Field days	-	-	-	-	-	
3.	Farmers' Conventions	2	14	4	-	18	
4.	Radio talk	-	-	-	-	-	
5.	Publication(leaflet)	1	-	-	-	60 copies	

Table 3: Weather data during the crop seasonDistricts : AngulSeason : RabiYear : 2011-12Location of the weather station: KVK campus, Angul

S.No	Meteorological week	Meteorological week Rainfall No. of (mm) rainy		A		Remarks	
		(11111)	days	Max. Temp	Min. Temp	Humidity	
1	Jan'12	Nil	Nil	NA	NA	NA	Irrigtaion was done as per requirement
2	Feb'12	Nil	Nil	NA	NA	NA	
3	Mar'12	Nil	Nil	NA	NA	NA	
4	April'12	Nil	Nil	NA	NA	NA	

Table 4: Consolidated reports about farming situation of demonstration plot

Agro-climatic Zone: Mid- Central Table Land District: Angul Crop: Groundnut									
Village	No. of		Type of Farming Situation						
	farmer	Source of	Soil Type	Previous	Sowing	Harvesting			
		irrigation		Crop	time	Time			
Dhobapal	15	Irrigated	Sandy	Short	1 st week	-	Continuing		
			loam	duration	January-				
Block:Talcher				paddy	2012				

SOIL STATUS:

Village	РН	EC(dsm per sq.m)	OC(%)	N(Kg/ha)	P(Kg/ha)	K(Kg/ha)
Dhobapal	5.6	0.09	0.66	294	10.2	184

Appendix—1

Critical inputs supplied under demonstration

State: Orissa Crop: Groundnut

Area: 5.0 ha Production: - Av. Yield (q/ha) : -

	Name of	Farming	Critical inputs demonstrated
S.No.	District	situation	
1	Angul	Irrigated	ST – Rhizobium(12.5kg),gypsum(100 kg),DAP- 3q,MOP-1.5 q,PP chemicals-Hexaconazole(1.5 ltr),Imidacholrpid(375 ml)

Appendix-2

Feed back/Suggestions

For future research : Groundnut variety spreading type needs to be developed

For developments departments : Popularization and spread of the variety needs to be facilitated.

For policy considerations : Seeds of Devi may be supplied to the farmer at subsidized rate.

Any serious constraints in implementation of the programme :

Non-availability of specific fund for this purpose.

Details of fund utilize during the period under report							
Particulars	Amount Booked & utilized	Balance	Remarks				
1.Inputs	10,435/-	-	Expenditure has been made				
2.Extension Activities	3950/-		from the available				
3.TA/DA/POL etc			contingency				

General Information:

1. Type of farmer	:	Marginal
2. Year	:	2011-12
3. Season	:	Rabi
4. District	:	Angul
5. Village	:	Dhobapal
6. Crop	:	Groundnut
7. Variety	:	ICGV-91114(Devi)
8. Farming situation	:	Irrigated medium land
Previous crop grown	:	Paddy
Source of irrigation	:	Irrigated
• Soil type	:	Sandy loam
9. Quantity of Organic manure used (q/ha)	:	15 q
10. Avg.Rate at which produce was sold (Rs/q)	:	-

Beneficiary Details:

Sl.No.	Name	Area(ac)	Sowing time	Harvest time	Yield(c	[/ha)
					F.P	R.P
1.	Bhabagrahi Sahu	1.0	21.01.12	Continuing	-	-
2.	Srihari Sahu	1.0	24.01.12			
3.	Santha Sahu	1.0	22.01.12			
4.	Saranga Sahu	0.5	21.01.12			
5.	Bhagaban Sahu	1.0	23.01.12			
6.	Bhubana Sahu	1.0	22.01.12			
7.	Ananta Sahu	0.5	23.01.12			
8.	Khirod Sahu	1.0	22.01.12			
9.	Sarat Sahu	0.5	21.01.12			
10.	Jharu sahu	1.0	24.01.12			
11.	Digambar Pradhan	1.0	25.01.12			
12.	Kusa Pradhan	0.5	24.01.12			
13.	Arabinda Pradhan	1.0	25.01.12			
14.	Pahali sahu	0.5	22.01.12			
15.	Milu Pradhan	1.0	21.01.12			

Result:

Yield	Maximum(q/ha)	Minimum(q/ha)	Average(q/ha)	Increase (%)
R.P	-	-	-	•

Inp	ut Details:					
S. No.	Cash inputs	Supplied b	y the centre	Invested by the farmer		
		Quantity/ha	Cost (Rs./ha)	Quantity/ha	Cost (Rs./ha)	
1.	Seed	-	-	125 kg	6750/-	
2.	Seed treatment (Rhizobium)	2.5 kg	250/-	-	-	
3.	Fertilizers			-	-	
	(a) DAP	0.6 q	1129.40/-			
	(b) MOP	0.3 g	352.56			
4.	Pesticides/Fungicides					
	Hexaconazole	300 ml	135/-			
	Imidachlorpid	75 ml.	150/-			
5.	Herbicide			-	-	
6.	Any other inputs* Gypsum	200 kg	320/-	-	-	

15. Any serious pest /disease problem during the : leaf eating caterpillar seen at the later stage year

16. Any other relevant information may also be : collected depending on the

Set TOT-3

Identification of critical inputs for demonstrations on oilseed/pulse crops.

Distr	ict: Angul	Crop : Gro	undnut	Farming	Situation: Ir	rigated	
S	Item	Recomm-	Existing	Gap in	Proposed	Critical	Remarks
No		ended	practice	adoption	quantity	inputs cost	
		practice		(3-4)	(kg/ha)	(Rs/ha)	
1	2	3	4	5	6	7	
Α	Variety	Devi	AK 12-24	Partial	90	3960	
В	Seed rate (kg/ha)	125	75	Nil	90	3960	
С	Seed treatment	Rhizobium @	-	Full	60gm	24	
	(Yes/No)	20 g/kg of					
		seed					
D	Fertilizer (NPK –						
	kg/ha)	20	10	Partial	20		
	- N	40	20		40	2000/-	
	- P	40	30		40		
	- K						
E	Micro-nutrients						
	(kg/ha)	-	-	-	-	-	
F	F. No. of dusting/	Two spray of	1 spray of	Partial	2	500/-	
	sprayings for	hexaconazole	endosulphan				
	pests/diseases/weed	One spray of					
		imidachlorpid			1.5		
G	Sowing implement	Inclined plate	Nil	Full	-	Not	
		planter				introduced]
Η	Any other (specify)	2.5q / ha	1 q/ha	Full	2.5q	400/-	
	Gypsum	_	_		_		



Set TOT - 1

Seasonal report of each KVK, Angul on oilseed/pulse demonstrations RABI-PULSE-GREEN GRAM

Table 1: Average yield and cost particulars of demonstration and local check plots

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District: Angul
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Season: Rabi Year: 2011-12

Average District yield of previous year (Preferably current year): 1.73 q/ha.

S. No	Name of	Variety	Farm- ers	Area (ha)	Av. Yield (q/ha)			Increa Cost of cash -se in input (Rs)			Remarks
	crop		(no.)		Highest	Demons	Local	yield			
						-tration	check	(70)	Demons	Local	
									-tration	check	
Ra	infed										
1	Green	SML-	15	5.0	10.5	9.5	6.8	39.7	16,899	11,00	Harvesting
	gram	668								0	complete

Table 2: Details of Extension activities

Districts: Angul Season: Rabi

Year: 2011-12

S. No.	Activities	No. of	No. of Participants				
		Programmes	Male	Female	SC/ST	TOTAL	
1.	Training Progrmme - For farmers	2	49	1	30	50	
2.	Field days	1	27	3	15	30	
3.	Farmers' Conventions	2	12	4	10	30	
4.	Radio talk	-	-	-	-	-	
5.	Leaflet published	1		-	-	60 copies	

Table 3: Weather data during the crop season

Districts : Angul Season : Rabi Year : 2011-12

Location of the weather station: Collectorate, Angul

S.No	Meteorological week	Rainfall (mm)	No. of	A	Any other like			
		(11111)	days	Max. Temp	Min. Temp	Humidity		
1	January	Nil	Nil	NA	NA	NA	L.I point irrigation	
2	February	Nil	Nil					
3	March	Nil	Nil	NA	NA	NA		
4	April	Nil	Nil	NA	NA	NA		
5	Total	Nil	Nil					

Table 4:

Consolidated reports about farming situation of demonstration plot

Village	No. of		Remarks				
	farmer	Source of	Soil Type	Previous	Sowing	Harvesting	
		irrigation		Crop	time	Time	
Simulichuin,	15	Irrigated	Sandy loam	Paddy	2 nd week of	2 nd week of April	Harvesting completed
Block:Banarpal					January	1	I

Agro-climatic Zone: Mid Central Table Land District: Angul Crop: Greengram

Soil Status :

Village	РН	EC(dsm per sq.m)	OC(%)	N(Kg/ha)	P(Kg/ha)	K(Kg/ha)
Simulichuin	5.7	0.11	0.60	277	10.1	169

Appendix—1

Critical inputs supplied under demonstration

State: Orissa Crop: Green gram

Area: 5.0 ha		Av. Yield (q/h	a) : 9.5
	Name of	Farming	Critical inputs demonstrated
S.No.	District	situation	
	Angul	Irrigated	Seeds : SML-668(125 Kg), Fertilizer-2.0 q DAP,1.0 q
			MOP, PP chemicals(Imidachlorpid-375 ml.)

Appendix-2

Feed back/Suggestions

For future research : YMV resistant variety needs to be released

For developments departments : Popularization and spread of the variety needs to be facilitated.

For policy considerations : Seeds of SML-668 may be supplied to the farmer at subsidized rate.

Any serious constraints in implementation of the programme

Vulnerability of Greengram to water stress at later stage of growth

Details of fund utilized during the period under report							
Particulars	Amount Booked & utilized	Balance	Remarks				
1.Inputs	16,899/-	-	Expenditure has been made				
2.Extension Activities	3950/-		from the office contingency				
3.TA/DA/POL etc.	-	Ĩ					

General Information:

1. Type of farmer	:	Marginal		
2. Year	:	2011-12		
3. Season	:	Rabi		
4. District	:	Angul		
5. Village	:	Simulichuin		
6. Crop	:	Green gram		
7. Variety	:	SML-668		
8. Farming situation	:	Irrigated medium land		
 Previous crop grown 	:	Paddy		
Source of irrigation	:	L.I Point		
• Soil type	:	Sandy loam		
9. Quantity of Organic manure used (q/ha)	:	3.0 t/ha		
10. Avg.Rate at which produce was sold (Rs/q)	:	Rs. 4000/q		

Beneficiary Details:

Sl.No.	Name	Area(ac)	Sowing time	Harvest time	Yield(q/ha)
					F.P	R.P
1.	Santosh Dash	1.0	25.01.12	12.04.12	6.8	9.8
2.	Nakula Naik	0.5	26.01.12	13.04.12	7.0	9.0
3.	Baman Behera	1.0	28.01.12	12.04.12	6.5	9.5
4.	Duryodhan Behera	0.5	29.01.12	14.04.12	7.2	9.0
5.	Kailash Naik	0.5	27.01.12	16.04.12	6.8	8.5
6.	Babuli Dash	0.5	29.01.12	13.04.12	6.3	10.2
7.	Prasanna Dash	0.5	27.01.12	15.04.12	6.0	8.0
8.	Dushmanta Mahalik	2.0	30.01.12	15.04.12	6.5	9.5
9.	Daya Naik	1.5	25.01.12	16.04.12	7.2	9.8
10.	Sadhu Charan Dash	0.5	29.01.12	16.04.12	6.8	10.0
11.	Purna Ch Dash	0.5	28.01.12	15.04.12	7.0	9.8
12.	Nirod Kumar Dash	1.0	25.01.12	14.04.12	7.5	9.2
13.	Chabindra Dash	0.5	28.01.12	12.04.12	6.2	9.6
14.	Ghanashyam Behera	1.5	26.01.12	13.04.12	6.6	10.5
15.	Titi Mahalik	0.5	30.01.12	14.04.12	7.6	10.1

Result:

Yield	Maximum(q/ha)	Minimum(q/ha)	Average(q/ha)	Increase (%)
R.P	10.5	8.0	9.5	39.7
L.C	7.5	6.0	6.8	

Input Details:

S. No.	Cash inputs	Supplied b	y the centre	Invested by t	he farmer
		Quantity/ha	Cost (Rs./ha)	Quantity/ha	Cost (Rs./ha)
1.	Seed	25	2241.80/-	-	-
2.	Seed treatment (Rhizobium)	-	-	250 gm	25/-
3.	Fertilizers				-
	(a) DAP	0.4 q	988/-	-	
	(b) MOP	0.2 g			
4.	Pesticides/Fungicides				
	(a) Imidachlorpid	75 ml	150/-		
5.	Herbicide(Butachlor)			500 ml	400/-
6.	Any other inputs* FYM			5 q	500/-

15. Any serious pest /disease problem during the :No year : No.

16. Any other relevant information

Identification of critical inputs for demonstrations on oilseed/pulse crops.

Distr	ict: Angul	Crop : Green	rop : Green Gram Fari			ming Situation: Irrigated		
Sl. No	Item	Recomm- ended practice	Existing practice	Gap in adoption (3-4)	Proposed quantity (kg/ha)	Critical inputs cost (Rs/ha)	Remarks	
1	2	3	4	5	6	7		
А	Variety	SML-668	Local	Partial	25			
В	Seed rate (kg/ha)	25	20	Nil	20			
С	Seed treatment (Yes/No)	Rhizobium @ 20 g/kg of seed	-	Full	400 gm	50/-		
D	Fertilizer (NPK – kg/ha) - N - P - K	20 40 20	5 10	Partial	20 40 40	1500/-		
Е	Micro-nutrients (kg/ha)	-	-	-	-	-		
F	F. No. of dusting/ sprayings for pests/diseases/weed	One spray of Imidachlorpid	Two spray of endosulphan	Partial	2	500		
G	Sowing implement	Seed drill	Nil	Full	1	To be hired		
Η	Any other (specify) FYM	30 q / ha	10 q/ha	Full	20 q	2000/-		

