

**Results of FLD on
Oilseed and Pulse Crops
2008-09**

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Soybean

Variety	Season	Area (ha)	No. of Farmers	Village (s)
JS-93-05	Kharif	05	12	Judawan

Problems	Low Yield (55%) due to improper sowing method, imbalance use of fertilizer and indiscriminate use insecticides.
Farmer's practice	Broadcasting method, 9:23:0 NPK Kg/ha Indiscriminate use of insecticide
Intervention	Crop management practices.
Technology demonstrated	<ol style="list-style-type: none"> 1. Line sowing 2. 20:60:20:30 NPKS kg/ha+ Rhizo+ PSB @ 20 g/Kg Seed 3. Summer deep ploughing+ Light Trap + Bird percher @ 50 per ha + Spray of Trizophos@ 1000ml/ha
Source of the technology & Year	JNKVV-2001

Farming Situation

Farming Situation	Rain fed	Soil Type	Heavy Soil
Seasonal Rainfall (mm)	1198 19.79% more than average	No. of Rainy Days	35

Results of Soil Testing Analysis

N	P	K	EC	pH	OC
Low	Medium	Medium	Normal	Normal	Medium
186	23	260	0.38	7.20	0.54

Detail of critical input supplied

Critical Inputs provided by KVK	Seed JS – 93-05	75 Kg/ha
	Sulphur	25 kg/ha
Critical Inputs used by Farmer	DAP	125 Kg
	MOP	35 kg
	Imezathypyr	1 lit.
	Tryzophos	2 lit.
	Rhizo + PSB	2.5 kg each

Results

Av. Yield (q/ha)						Increase in yield (%)	Distt. Produ. (q/ha)*	State Produ. (q/ha)*
Demonstration			Local Check					
Max	Min	Avg	Max	Min	Avg			
23.00	20.50	21.08	12.50	10.00	11.54	82.66	15.00	10.58

M.P. Agri statistics 2008-09, Directorate of agriculture, M.P., Bhopal

Results on Other Parameters

Name of the parameter	Unit of measurement	Data on Parameter		Remark
		Under FLD	Under LC	
No of pods	Per plant	63	45	-
No of grain	Per plant	135	92	-
Test weight	gms	141	96	-

Cost Particulars

Cost of Critical Inputs (Rs/ha)		Total Cost of production (Rs/ha)		Net Return (Rs/ha)		BC Ratio*		Addl. Cost (Rs/ha)	Addl. Yield (kg/ha)
Demo	LC	Demo	LC	Demo	LC	Demo	LC		
6,065	4,104	13,727	10,605	30,541	13,629	3.22	2.28	16,912	954

Farmers' Reaction

Farmer's convinced with technology because of higher yield and Net return.

They wants extra early variety which is suited in present rainfall pattern.

Details of extension activities

Name	Date (s)	No. of Activity	No. of Participants
Training of extension personnel	17.6.08	1	25
Training of farmers	01.6.08, 25.6.08, 04.8.08	3	70
Field Day	25.9.08	1	93
Farmers Meeting	-	-	-
TV Programme/ Radio talk	June 08	1	Mass
Others	-	-	-

Expenditure Statement

Head	Sanctioned	Fund Utilization	Balance
Critical Input	10,500	10,550	-
Extension activities	1,500	-	-
POL/TA/DA etc.	1,500	-	-
Total	13,500	10,550	-

FLD Soybean JS-93-05 (2008-09)



Flowering Stage



Bumper Podding



Excellent Crop of Soybean



Maturity Stage

Impact of previous year's FLDs Conducted by the KVK

Crop	Soybean
Season	Kharif
Year	2007-08
Intervention	1. Weed management 2. Integrated Nutrient management 3. Integrated pest management
Detail of technology demonstrated	1. Spray of imazathyphypyr @ 100ml/ha at 15 - 20 DAS + 1 HW at 40-45 DAS 2. 20:60:20:30 NPKS kg/ha+ Rhizo+ PSB @ 20 g/Kg Seed 3. Summer deep ploughing+2Spray of Trizophos@ 1000ml/ha+ Bird percher @ 50 per ha
Details of popularization methods suggested to the Extension system	Training, Field day, Field visit Publication of Folders

Horizontal Spread of the technology

No. of farmers	75
No. of village	08
Area in ha	300

Blackgram

Variety	Season	Area (ha)	No. of Farmers	Village (s)
IPU-94-1	Kharif	05	12	Judawan

Problems	Low yield (62%) due to imbalance use of fertilizer and local variety, affected areas (30,000 ha)
farmer's practice	Local variety (T 9), 4:11:0 NPK kg/ha , No weed management
Intervention	Varietals replacement
Technology demonstrated	1. IPU-94-1 2. 20:60:20 + 25 NPKS kg./ha.+ Rhizo+ PSB @ 20g/kg seed 1 hand weeding at 20-25 DAS
Source of the technology & Year	JNKVV- 2000
Characteristics of the variety	Yellow Vein Mosaic resistant
Source and Year of release	IIPR , 2002

Farming Situation

Farming Situation	Rainfed	Soil Type	Medium Soil
Seasonal Rainfall (mm)	1198 (19.79 % more than Average)	No. of Rainy Days	35

Results of Soil Testing Analysis

N	P	K	EC	pH	OC
Low	Medium	Medium	Normal	Normal	Low
158	23	187	0.34	7.00	0.46

Detail of critical input supplied

Critical Inputs provided by KVK	Seed IPU-94-1	25 kg
	Sulphur	30 kg
Critical Inputs used by Farmer	DAP	50 kg
	SSP	300 kg
	MOP	30 kg
	Rhizo	2 pkts
	PSB	2 pkts
	Fungicide	75 g

Results

Av. Yield (q/ha)						Increase in yield (%)	Distt. Produ. (q/ha)*	State Produ. (q/ha)*
Demonstration			Local Check					
Max	Min	Avg	Max	Min	Avg			
12.25	8.60	10.65	5.00	3.50	4.40	144.00	4.50	3.50

M.P. Agri statistics 2008-09, Directorate of agriculture, M.P., Bhopal

Results on Other Parameters

Name of the parameter	Unit of measurement	Data on Parameter		Remark
		Under FLD	Under LC	
No of pods	Per plant	60	31	-
No of grain	Per pod	09	07	-
Test weight	gms	46	37	-

Economic Analysis

Cost of Critical Inputs (Rs/ha)		Total Cost of production (Rs/ha)		Net Return (Rs/ha)		BC Ratio*		Addl. Cost (Rs/ha)	Addl. Yield (kg/ha)
Demo	LC	Demo	LC	Demo	LC	Demo	LC		
2,729	1,116	10,784	6,239	14,010	2,385	2.29	1.38	11,625	625

Farmers' Reaction

Farmer Convinced the yellow view resistance Variety : IPU-94-1.

Details of extension activities

Name	Date (s)	No. of Activity	No. of Participants
Training of extension personnel	07.07.08	1	30
Training of farmers	03.06.08, 14.06.08	2	42
Field Day	30.09.08	1	64
Farmers Meeting	-	-	-
TV Programme / Radio talk	July 2008	1	Mass
Others	-	-	-

Expenditure Statement

Head	Sanctioned	Fund Utilization	Balance
Critical Input	9,190	6,610	-
Extension activities	1,315	-	-
POL/TA/DA etc.	1,905	-	-
Total-	12,700	6,610	-

FLD Blackgram IPU-94-1 (2008-09)



YMV free crop



YMV infested local variety



IPU 94-1 variety



Winnowing

Impact of previous year's FLDs Conducted by the KVK

Crop	Blackgram
Season	Kharif
Year	2007-08
Intervention	Replacement of Variety
Detail of technology demonstrated	Yellow vein mosaic Resistance Variety LBG-20
Details of popularization methods suggested to the Extension system	Training, Demonstration, Seed supply, Folders, Field day, Crop Seminar.

Horizontal Spread of the technology

No. of farmers	65
No. of village	07
Area in ha	280

Mustard

Variety	Season	Area (ha)	No. of Farmers	Village (s)
Pusa Agrani	Rabi	05	12	Judawan, Patha

Problem	Low Yield (50%) due to imbalance dose of fertilizer and indiscriminate use of insecticide (affected areas 20,000 ha).
Farmer's practice	Imbalance and low fertilizer dose 40:20:0:0 NPKS kg/ha. Indiscriminate use of insecticide to control of Aphid .
Intervention	Crop management Practices.
Technology demonstrated	Seed (Pusa Agrani) 80:40:20:30 NPKS kg/ha + Azoto + PSB @ 20g/ kg seed Imidachloroprid @ 5 ml/15 lit of water.
Source of the technology & Year	JNKVV - 2000

Farming Situation

Farming Situation	Irrigated	Soil Type	Medium Soil
Seasonal Rainfall (mm)	1198 (19.79 % more than Average)	No. of Rainy Days	35

Results of Soil Testing Analysis

N	P	K	EC	pH	OC
Low	Low	Medium	Normal	Normal	Low
196	8	242	0.41	7.30	0.57

Detail of critical input supplied

Critical Inputs provided by KVK	Seed Pusa Agrani	5 kg
	SSP	250 kg
	Urea	125 kg
	Imedachloroprid	250 ml.
Critical Inputs used by Farmer	Urea	75 kg
	MOP	35 kg
	Azoto	2.5 kg
	PSB	2.5 kg

Results

Av. Yield (q/ha)						Increase in yield (%)	Distt. Produ. (q/ha)*	State Produ. (q/ha)*
Demonstration			Local Check					
Max	Min	Avg	Max	Min	Avg			
20.40	17.00	18.56	12.20	7.50	8.97	106.91	4.72	10.48

M.P. Agri statistics 2008-09, Directorate of agriculture, M.P., Bhopal

Results on Other Parameters

Name of the parameter	Unit of measurement	Data on Parameter		Remark
		Under FLD	Under LC	
No of siliguae	Per plant	150	114	-
No of grain	Per siliguae	18	13	-
Test weight	gms	5	4	-

Economic Analysis

Cost of Critical Inputs (Rs/ha)		Total Cost of production (Rs/ha)		Net Return (Rs/ha)		BC Ratio*		Addl. Cost (Rs/ha)	Addl. Yield (kg/ha)
Demo	LC	Demo	LC	Demo	LC	Demo	LC		
3,214	2,034	11,995	8,890	25,125	9,050	3.09	2.01	16,075	959

Farmers' Reaction

Farmer Convinced with the technology demonstrated but need suitable sowing implement due to small size of seed.

Details of extension activities

Name	Date (s)	No. of Activity	No. of Participants
Training of extension personnel	25.09.08	1	27
Training of farmers	28.09.08	1	29
Field Day	24.12.08	1	60
Farmers Meeting	-	-	-
TV Programme/ Radio talk	Feb 09	1	Mass
Others	-	-	-

Expenditure Statement

Head	Sanctioned	Fund Utilization	Balance
Critical Input	8,750	10,685	-
Extension activities	1,250	-	-
POL/TA/DA etc.	1,250	-	-
Total-	11,250	10,650	-

FLD Mustard – Pusa Agrani (2008-09)



Vegetative stage



Podding Stage



Maturity Stage



Farmer's Practice

Impact of previous year's FLDs Conducted by the KVK

Crop	Mustard
Season	Rabi
Year	2007-08
Intervention	Integrated crop management
Detail of technology demonstrated	80:40:20:30 NPKS kg/ha + Azoto + PSB @ 20g/ kg seed. 2 spray of Imidachloroprid @ 5 ml./15 lit of water.
Details of popularization methods suggested to the Extension system	Training, Demonstration, Field day, <i>Kisan Gosthi</i>, Publication of folder

Horizontal Spread of the technology

No. of farmers	75
No. of village	05
Area in ha	425

Gram

Variety	Season	Area (ha)	No. of Farmers	Village (s)
JG- 11	Rabi	05	12	Judawan, Bamori
Problems	Low Yield (49%) due to old variety and indiscriminate use of insecticide (30,000 ha).			
Farmer's practice	Local Varieties (Type 1) Indiscriminate use of insecticide.			
Intervention	Variety + IPM			
Technology demonstrated	Seed (JG -11) Seed treatment by Tricoderma viride @ 5g/kg seed + Deep ploughing + Feromone trap + Bird percher @ 50 / ha + Spray of quanalphos @ 2ml/ lit of water.			
Source of the technology & Year	JNKVV - 2000			
Characteristics of the variety	High Yielding Variety			
Source and Year of release	JNKVV - 2000			

Farming Situation

Farming Situation	Irrigated	Soil Type	Heavy
Seasonal Rainfall (mm)	1198 (19.79 % more than Average)	No. of Rainy Days	35

Results of Soil Testing Analysis

N	P	K	EC	pH	OC
Medium	Low	Medium	Normal	Normal	Medium
262	8	260	0.24	7.00	0.76

Detail of critical input supplied

Critical Inputs provided by KVK	Seed JG- 11	75 kg
	Fungicide	250 g
Critical Inputs used by Farmer	DAP	100 kg
	SSP	100kg
	MOP	30kg
	Rhizo	1 Pkt
	PSB	1 Pkt
	Quinalphas	2 lit

Results

Av. Yield (q/ha)						Increase in yield (%)	Distt. Produ. (q/ha)*	State Produ. (q/ha)*
Demonstration			Local Check					
Max	Min	Avg	Max	Min	Avg			
24.10	18.50	21.80	14.0	11.80	12.9	69%	9.00	9.27

M.P. Agri statistics 2007-08, Directorate of agriculture, M.P., Bhopal

Results on Other Parameters

Name of the parameter	Unit of measurement	Data on Parameter		Remark
		Under FLD	Under LC	
No of Pods	Per plant	52	38	-
No of seeds	Per plant	92	53	-
Test weight	gms	163	151	-

Cost Particulars

Cost of Critical Inputs (Rs/ha)		Total Cost of production (Rs/ha)		Net Return (Rs/ha)		BC Ratio*		Addl. Cost (Rs/ha)	Addl. Yield (kg/ha)
Demo	LC	Demo	LC	Demo	LC	Demo	LC		
4,745	3,186	13,264	8,943	34,696	19,437	3.61	3.17	15,259	890

Farmers' Reaction

Farmer Convince with variety and control measures of catter piller.

Details of extension activities

Name	Date (s)	No. of Activity	No. of Participants
Training of extension personnel	18.9.08	1	24
Training of farmers	12.11.08, 10.9.08, 3.2.09	3	82
Field Day	18.2.09	1	194
Farmers Meeting	-	-	-
TV Programme/ Radio talk	Feb 09	1	Mass
Others	-	-	-

Expenditure Statement

Head	Sanctioned	Fund Utilization	Balance
Critical Input	10,940	-	-
Extension activities	1,565	-	-
POL/TA/DA etc.	2,340	-	-
Total-	14,845	-	-

FLD Gram - JG-11 (2008-09)



Vegetative stage



Podding Stage



Flowering Stage



Maturity Stage

Impact of previous year's FLDs Conducted by the KVK

Crop	Gram
Season	Rabi
Year	2007-08
Intervention	Variety + IPM
Detail of technology demonstrated	Seed (JG – 11) Foramen trap+ Bird Percher @ 50/ha + one spray of quanalphos @ 2 ml/lit. of water
Details of popularization methods suggested to the Extension system	Training, Demonstration, Field days, Folders, Kisan Mela.

Horizontal Spread of the technology

No. of farmers	200
No. of village	20
Area in ha	400



*Action Plan for
FLD on Oilseed and Pulse Crops
2009-10*



3 to 4 June 2009

KRISHI VIGYAN KENDRA, TIKAMGARH

Soybean

Village	Judawan, Bhamhori	Season & Year	Kharif 2009-10
Irrigation availability	Rain fed	Soil Type	Heavy Soil
Problem Identified	Low Yield (55%) due to improper sowing method, imbalance use of fertilizer and indiscriminate use insecticides.		
Area affected (ha or %)	75%		
Farmers Practice	Broadcasting method, JS-335, 9:23:0 NPK Kg/ha Indiscriminate use of insecticide		
Technology selected	INM + IPM		
Detail of the technology	<ol style="list-style-type: none"> 1. JS-93-05 2. Line sowing 3. 20:60:20:30 NPKS kg/ha+ Rhizo+ PSB @ 20 g/Kg Seed 4. Deep Summer ploughing + 1 Spray of Trizophos at 40-45 DAS @ 1000ml/ha+ Light trap + Bird percher @ 50/ha. 		
Source & Year of Techno.	JNKVV- 2000		
Variety Proposed	JS-93-05		
Characteristics of the variety	Early maturing variety		
Source & Year of release of the variety	JNKVV-2001		

Area Proposed (ha)	05	
No. of Demos	12	
Critical Inputs by the Farmers	Fertilizer – DAP MOP Insecticide	
Critical Inputs by the KVK	Seed Bio fertilizer (Rhizo + PSB) + Sulphur	
Cost of These Inputs (Rs/ha)	35,00	
Proposed Extension Activities under FLD	Farmer Training	2
	Extension worker training	1
	Field day	1
Fund required head wise	Critical inputs	1,75,00
	Extension activities	25,00
	TA/DA/POL/etc.	25,00

Blackgram

Village	Judawan, Bhamhori	Season & Year	Kharif 2009-10
Irrigation availability	Rain fed	Soil Type	Medium soil
Problem Identified	Low yield (62%) due to imbalance use of fertilizer and local variety, affected no weeding areas (30,000 ha).		
Area affected (ha or %)	80%		
Farmers Practice	Local variety (T 9), 4:11:0 NPK kg/ha , No weed management		
Technology selected	Variety, Integrated Nutrient Management, Weed control practice		
Detail of the technology	<ol style="list-style-type: none"> 1. IPU 94-1 2. 20:60:20:25 NPKS kg./ha.+ Rhizo+ PSB@ 10g/kg seed 1 hand weeding at 20-25 DAS 		
Source & Year of Techno.	IIPR, 2000		
Variety Proposed	IPU 94-1		
Characteristics of the variety	Yellow vein mosaic resistant		
Source & Year of release of the variety	IIPR, 2000		

Area Proposed (ha)	05	
No. of Demos	12	
Critical Inputs by the Farmers	Fertilizer – DAP MOP	
Critical Inputs by the KVK	Seed Bio fertilizer (Rhizo + PSB) + Sulphur	
Cost of These Inputs (Rs/ha)	35,00	
Proposed Extension Activities under FLD	Farmer Training	2
	Extension worker training	1
	Field day	1
Fund required head wise	Crop inputs	1,75,00
	Extension activities	25,00
	TA/DA/POL/etc.	25,00

Mustard

Village	Judawan, Bamhori	Season & Year	Rabi 2009-10
Irrigation availability	Canal	Soil Type	Medium Soil
Problem Identified	Low Yield (50%) due to imbalance dose of fertilizer and indiscriminate use of insecticide (affected areas 20,000 ha).		
Area affected (ha or %)	50%		
Farmers Practice	Imbalance and low fertilizer dose 40:20:0:0 NPKS kg/ha. Indiscriminate use of insecticide to control of Aphid		
Technology selected	Integrated Nutrient Management Plant Protection measures		
Detail of the technology	80:40:20:30 NPKS kg/ha + Azoto + PSB @ 20g/ kg seed 1 spray Imidachloroprid @ 5 ml/15 lit of water		
Source & Year of Techno.	JNKVV- 2000		
Variety Proposed	Pusa Agrani		
Characteristics of the variety	High yield		
Source & Year of release of the variety	IARI - 2002		

Area Proposed (ha)	05	
No. of Demos	12	
Critical Inputs by the Farmers	Fertilizer – Urea	PSB
	MOP	Azoto
Critical Inputs by the KVK	Seed (Pusa Agrani)	Urea
	SSP	Imedachloroprid
Cost of These Inputs (Rs/ha)	35,00	
Proposed Extension Activities under FLD	Farmer Training	2
	Extension worker training	1
	Field day	1
Fund required head wise	Crop inputs	1,75,00
	Extension activities	25,00
	TA/DA/POL/etc.	25,00

Gram

Village	Judawan, Bamhori	Season & Year	Kharif 2009-10
Irrigation availability	Canal, Tube well	Soil Type	Heavy soil
Problem Identified	Low Yield (49%) due to old variety and indiscriminate use of insecticide (30000 ha).		
Area affected (ha or %)	80%		
Farmers Practice	Local Variety + indiscriminate use of insecticide		
Technology selected	Varietal replacement +IPM		
Detail of the technology	<ol style="list-style-type: none"> 1. JG-130 2. Seed treatment by Tricoderma viride @ 5g/kg seed + Deep ploughing, Early planting + Quinolphos 25 EC, 2-3 ml/lit of water + Bird percher 50/ha. 		
Source & Year of Techno.	JNKVV- 2000		
Variety Proposed	JG- 130		
Characteristics of the variety	High yielding		
Source & Year of release of the variety	JNKVV 2000		

Area Proposed (ha)	05	
No. of Demos	12	
Critical Inputs by the Farmers	DAP	MOP
	Quinatphas	
Critical Inputs by the KVK	Seed (JG-130)	Sulphur, Rhizo + PSB
Cost of These Inputs (Rs/ha)	35,00	
Proposed Extension Activities under FLD	Farmer Training	2
	Extension worker training	1
	Field day	1
Fund required head wise	Crop inputs	35,00
	Extension activities	25,00
	TA/DA/POL/etc.	25,00