

CLUSTER FRONTLINE DEMONSTRATION OF RABI PULSES (2019-20) PERFORMANCE DATA

1. Name of KVK: Deogarh

2. Year of establishment: 2006

3. Host Institution: OUAT, Bhubaneswar

4. Address: Krishi Vigyan Kendra, Deogarh,
Dist.-Deogarh, Odisha, PIN-768119

5. District: Deogarh

6. State: Odisha

7. Performance of the demonstration:

A. Technical Parameters:

Sl. No.	Crop demonstrated	Existing (Farmer's) variety name	Existing yield (q/ha)	Yield gap (Kg/ha) w.r.to			Name of Variety + Technology demonstrated	Number of farmers	Area in ha	Yield obtained (q/ha)			Yield gap minimized (%)		
				District yield (D)	State yield (S)	Potential yield (P)				Max.	Min.	Av.	D	S	P
1	Greengram (Var.-IPM 02-03)	Local (Kalamuga)	2.6	146	220	340	High yielding variety IPM 02-03, seed treatment with Vitavax Power (Carboxin + Thiram) @ 2g and 20 gm rhizobium per 1kg of seed, line sowing (30 cm x 10 cm), application of tebuconazole 10% + sulphur 65% WG @ 1250gm/ha to control powdery mildew, Chloropyrifos 35% + Cypermethrin 10% EC @ 1lit/ha, Indoxacarb @ 0.5 lit/ha and spinosad @ 0.15 lit/ha for control of pod borer	25	10	5.35	2.92	3.8	43.5	36.3	25.4

B. Economic parameters

Sl. No.	Variety demonstrated & Technology demonstrated	Farmer's Existing plot				Demonstration plot			
		Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio	Gross Cost (Rs/ha)	Gross return (Rs/ha)	Net Return (Rs/ha)	B:C ratio
1	High yielding variety IPM 02-03, seed treatment with Vitavax Power (Carboxin + Thiram) @ 2g and 20 gm rhizobium per 1kg of seed, line sowing (30 cm x 10 cm), post emergence herbicide Imazethapyr @ 1 lit /ha,Chloropyrifos 35% 1lit/ha, Imidachloprid @ 0.3ml /lit for control of aphids and spinosad @ 0.3ml /lit for control of pod borer	12000.00	14500.00	2500.00	1.2	16000.00	24650.00	8650.00	1.54

C. Socio-economic impact parameters

Sl. No.	Crop and variety Demonstrated	Total Produce Obtained (kg/ha)	Produce sold (Kg/household)	Selling Rate (Rs/Kg)	Produce used for own sowing (Kg)	Produce distributed to other farmers (Kg)	Purpose for which income gained was utilized	Employment Generated (Mandays/house hold)
1	Greengram (Var.-IPM 02-03)	380	250 kg/Household	70	100	30	Agriculture and household needs	38 MD

D. Farmers' perception of the intervention demonstrated

Sl. No.	Technologies demonstrated (with name)	Farmers' Perception parameters					
		Suitability to their farming system	Likings (Preference)	Affordability	Any negative effect	Is Technology acceptable to all in the group/village	Suggestions, for change/improvement, if any
1	High yielding variety IPM 02-03, seed treatment with Vitavax Power (Carboxin + Thiram) @ 2g and 20 gm rhizobium per 1kg of seed, line sowing (30 cm x 10 cm), application of tebuconazole 10% + sulphur 65% WG @ 1250gm/ha to control	Suitable	IPM 02-03 variety obtaining good yield in some areas Deogarh district	Yes	No	Yes	New released high yielding varieties of greengram should be available to the farmers for improvement

powdery mildew, Chloropyrifos 35% + Cypermethrin 10% EC @ 1lit/ha, Indoxacarb @ 0.5 lit/ha and spinosad @ 0.15 lit/ha for control of pod borer						
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E. Specific Characteristics of Technology and Performance

Specific Characteristic	Performance	Performance of Technology vis-a-vis Local Check	Farmers Feedback
High yielding variety	Enhancement of yield	Enhancement of yield against local check	Farmer observed and satisfied with the specific characteristics of the demonstrated technologies upto the flowering stage but during pod formation stage hailstorm severely damaged the crop and reduced the yield.
Seed treatment (Rhizobium)	Increase nodulation	Increase nodulation as compared to without rhizobium treatment	
Seed treatment (Chemicals)	Reduce disease incidence	Reduce disease incidence against local check	
Plant protection measures	Reduce pest and disease incidence	Reduce pest and disease incidence against local check	

F. Extension activities under FLD conducted till dates:

Sl. No.	Extension Activities organized	Date and place of activity	Number of farmer attended
1	Field Day	Satakiari (Dt 21.03.2020)	40

8. Sequential good quality photographs (as per crop stages i.e. growth & development)

	
Germination stage	15 DAS



Flower initiation stage

Maturing stage

9. Farmers' training/Quality photographs



Diagnostic field visit along with farmers



Distribution of WSF among the farmers

10. Quality Photographs of field visits/field days and technology demonstrated.

 <p>Spraying of pesticide in flowering stage</p>	 <p>Field day at village Satakiari</p>
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11. Details of budget utilization

Crop (provide crop wise information)	Items	Budget Received (Rs.)	Budget Utilization (Rs.)	Balance (Rs.)
Greengram	i) Critical input	81,000/-	81,000/-	00
	ii) TA/DA/POL etc. for monitoring	9,000/-	9,000/-	00
	iii) Extension Activities (Field day)			
	iv) Publication of literature			
Total		90,000/-	90,000/-	00

12. List of Farmer under FLD (Crop wise)

a) Crop1-Greengram

Name of farmer	Father's name	Village	Block	Aadhar No.	GPS Coordinates (DDMMSS format)		Soil testing done (Yes/No)	Recommendations based on soil test value	Brief technology intervention	Variety	Area (ha)	Seed quantity used	Demo yield(q/ha)			Yield of local check q/ha	% increase
					Latitude	Longitude							H	L	A		
Darshania Bag	Bahadur Bag	Satakiari	Reamal	5302 0755 0899	21°20'19.5"N	84°46'48.8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha	High yielding variety IPM 02-03, seed treatment with Vitavax Power (Carboxin + Thiram) @	Green gram (IPM-02-03)	0.4	8Kg	5.04	2.92	3.98	2.6	53.1
Kshyama Chhuria	Sukru Chhuria	Satakiari	Reamal	8898 4011 7881	21°20'19.5"N	84°46'48.8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha		Green gram (IPM-02-03)	0.4	8Kg	4.56	2.95	3.76	2.6	44.4
Manoj Bagh	Anama Bagh	Satakiari	Reamal	8115 3876 2631	21°20'19.5"N	84°46'48.8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha		Green gram (IPM-02-03)	0.4	8Kg	5.01	3.24	4.13	2.6	58.7
Kunja Bagh	Anama Bagh	Satakiari	Reamal	3292 7002 3379	21°20'19.5"N	84°46'48.8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 -	Green gram (IPM-02-03)	0.4	8Kg	4.62	3.10	3.86	2.6	48.5	

								25kg/ha									
Gagan Bagh	Dila Bagh	Satakiari	Reamal	8746 0354 3124	21°20'19. 5"N	84°46'48. 8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha	2g and 20 gm rhizobium per 1kg of seed, line sowing (30 cm x 10 cm), application of tebuc onazole 10% + sulph ur 65% WG @ 1250g m/ha to control powd ery milde w,	Green gram (IPM-02-03)	0.4	8Kg	5. 1 5	3. 2 5	4 . 2 0	2.6	61.5
Satru Bagh	Bhabader Bagh	Satakiari	Reamal	8476 1949 4219	21°20'19. 5"N	84°46'48. 8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha	Green gram (IPM-02-03)	0.4	8Kg	4. 2 8	3. 1 0	3 . 6 9	2.6	41.9	
Sugri Bagh	Ganga Bagh	Satakiari	Reamal	9018 2431 6227	21°20'19. 5"N	84°46'48. 8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha	Green gram (IPM-02-03)	0.4	8Kg	4. 0 6	2. 9 8	3 . 5 2	2.6	35.4	
Minaketan Bagh	Benudhar Pradhan	Satakiari	Reamal	7449 5709 8224	21°20'19. 5"N	84°46'48. 8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha	Green gram (IPM-02-03)	0.4	8Kg	4. 5 0	2. 9 0	3 . 7 0	2.6	42.3	
Jogendra Pradhan	Bholeswar Pradhan	Satakiari	Reamal	2666 7383 7167	21°20'19. 5"N	84°46'48. 8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha	Green gram (IPM-02-03)	0.4	8Kg	4. 3 5	3. 1 5	3 . 7 5	2.6	44.2	
Pradip Pradhan	Biswanth Nayak	Satakiari	Reamal	3868 2693 7167	21°20'19. 5"N	84°46'48. 8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha	Green gram (IPM-02-03)	0.4	8Kg	4. 8 0	3. 3 5	4 . 0 8	2.6	56.7	
Basanta Nayak	Kulha Bagh	Satakiari	Reamal	8863 1477 9731	21°20'19. 5"N	84°46'48. 8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha	Green gram (IPM-02-03)	0.4	8Kg	5. 1 0	3. 2 2	4 . 1 6	2.6	60.0	

								Zn SO4 - 25kg/ha	Chlor opyrif os 35% + Cyper methrin 10% EC @ 1lit/ha, Indox acarb @ 0.5 lit/ha and spinosad @ 0.15 lit/ha for control of pod borer								
Santosh Bagh	Kulha Bagh	Satakiar i	Reamal	7261 8095 0174	21°20'19. 5"N	84°46'48. 8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha		Green gram (IPM-02-03)	0.4	8Kg	4. 3 0	3. 2 0	3 . 7 5	2.6	44.2
Paramendra Pradhan	Sushila Pradhan	Satakiar i	Reamal	9363 3167 9809	21°20'19. 5"N	84°46'48. 8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha		Green gram (IPM-02-03)	0.4	8Kg	4. 7 5	2. 9 5	3 . 8 5	2.6	48.1
Rajib Nayak	Chandra mani Bagh	Satakiar i	Reamal	5296 2728 2054	21°20'19. 5"N	84°46'48. 8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha		Green gram (IPM-02-03)	0.4	8Kg	4. 9 0	3. 2 5	4 . 0 8	2.6	56.7
Prafulla Bagh	Biranchi Bagh	Satakiar i	Reamal	9748 8972 3029	21°20'19. 5"N	84°46'48. 8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha		Green gram (IPM-02-03)	0.4	8Kg	5. 0 5	3. 1 5	4 . 1 0	2.6	57.7
Bipin Bagh	Anama Bagh	Satakiar i	Reamal	3053 9450 6010	21°20'19. 5"N	84°46'48. 8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha		Green gram (IPM-02-03)	0.4	8Kg	3. 5 1	2. 8 5	3 . 1 8	2.6	22.3
Chhabil a Bagh	Anama Bagh	Satakiar i	Reamal	3544 2251 9212	21°20'19. 5"N	84°46'48. 8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha		Green gram (IPM-02-03)	0.4	8Kg	3. 8 5	2. 6 2	3 . 2 4	2.6	24.4
Tikeswar Bagh	Mala Bagh	Satakiar i	Reamal	8105 4736 7859	21°20'19. 5"N	84°46'48. 8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha		Green gram (IPM-	0.4	8Kg	4. 7 3	3. 1 0	3 . 9	2.6	50.6

								S-20kg/ha Zn SO4 - 25kg/ha		02-03)					2		
Hrudan anda Bagh	Achyuta Bagh	Satakiar i	Reamal	7290 6681 9365	21°20'19. 5"N	84°46'48. 8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha		Green gram (IPM- 02-03)	0.4	8Kg	4. 1 0	3. 2 1	3 · 6 6	2.6	40.6
Babuli Pradha n	Benudh ar Pradhan	Satakiar i	Reamal	5304 6308 4724	21°20'19. 5"N	84°46'48. 8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha		Green gram (IPM- 02-03)	0.4	8Kg	4. 6 2	2. 7 5	3 · 6 9	2.6	41.7
Paduka Nath	Brada Nayak	Satakiar i	Reamal	5693 3207 2342	21°20'19. 5"N	84°46'48. 8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha		Green gram (IPM- 02-03)	0.4	8Kg	5. 3 5	3. 2 5	4 · 3 0	2.6	65.4
Kuna Ch Pradha n	Modan Mohan Pradhan	Satakiar i	Reamal	4605 6012 1736	21°20'19. 5"N	84°46'48. 8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha		Green gram (IPM- 02-03)	0.4	8Kg	4. 2 2	3. 0 5	3 · 6 4	2.6	39.8
Bibhuti Bhusan Pradha n	Giridhar Pradhan	Satakiar i	Reamal	4035 0044 0857	21°20'19. 5"N	84°46'48. 8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha		Green gram (IPM- 02-03)	0.4	8Kg	4. 3 2	2. 9 5	3 · 6 4	2.6	39.8
Gobard han Pradha n	Kanhei Pradhan	Satakiar i	Reamal	9387 0057 1188	21°20'19. 5"N	84°46'48. 8"E	Yes	N-25kg/ha P-50kg/ha K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha		Green gram (IPM- 02-03)	0.4	8Kg	4. 4 5	3. 7 0	4 · 0 8	2.6	56.7
Kalia Bagh	Achyuta Bagh	Satakiar i	Reamal	8170 0749	21°20'19. 5"N	84°46'48. 8"E	Yes	N-25kg/ha P-50kg/ha		Green gram	0.4	8Kg	4. 9	3. 2	4 · . .	2.6	56.7

				1285				K-25kg/ha S-20kg/ha Zn SO4 - 25kg/ha		(IPM- 02-03)				5	0	0	8		
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Sd/-
Senior Scientist & Head
KVK, Deogarh