

ACTION PLAN

(OCTOBER 2008 TO SEPTEMBER 2009)

OF

KRISHI VIGYAN KENDRA JAMNAGAR

**TO BE PRESENTED AT
ANNUAL ZONAL WORKSHOP
OF
ZONE-VI
(Rajasthan & Gujarat)**

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**ANNUAL ACTION PLAN OCTOBER-2008 TO SEPTEMBER-2009
QUARTER WISE SUMMARY OF TRAINING PROGRAMME
OF KVK, JAU, JAMNAGAR**

1. TRAINING

Sr. No.	Subject	On campus												T.
		2009									2008			
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	Farmers & Farm Women													
1	Crop production	0	1	0	1	1	1	1	0	0	1	1	1	8
2	Horticulture	0	0	1	1	0	0	0	0	0	0	1	0	3
3	Soil health & Fertility	1	0	0	1	2	0	1	1	0	0	0	0	6
4	Live stock production & management	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Home science	1	1	0	1	1	0	1	0	0	0	2	1	8
6	Agril Engineering	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Plant protection	2	0	0	0	0	0	3	5	5	3	2	2	22
8	Fisheries	0	0	0	1	0	1	1	1	0	0	0	0	4
9	Production of Input at site	1	0	1	0	1	0	0	0	0	2	0	1	6
10	Capacity Building and Group Management	1	0	0	1	1	0	0	0	0	0	0	0	3
11	Agro-foreshtry	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total Farmers & Farm Women	6	2	2	6	6	2	7	7	5	6	6	5	60
	Rural Youth	1	1	1	2	1	0	0	0	0	1	1	0	8
	Extesnion Personals	0	0	0	0	0	0	1	1	0	0	0	0	2
	Grand Total	7	3	3	8	7	2	8	8	5	7	7	5	70

Sr. No.	Subject	Off campus												T.
		2009									2008			
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	Farmers & Farm Women													
1	Crop production	0	0	0	2	0	2	0	0	0	0	1	0	5
2	Horticulture	0	0	1	1	0	0	0	0	0	0	0	0	2
3	Soil health & Fertility	0	1	0	1	0	0	1	0	0	0	0	0	3
4	Live stock production & management	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Home science	1	1	0	1	1	0	1	0	1	1	2	0	9
6	Agril Engineering	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Plant protection	1	0	0	0	0	0	2	3	4	4	3	1	18
8	Fisheries	0	0	0	0	0	0	1	2	0	0	0	0	3
9	Production of Input at site	0	1	1	1	1	0	0	0	0	2	0	0	6
10	Capacity Building and Group Management	1	1	0	1	0	0	0	0	0	0	0	0	3
11	Agro-foreshtry	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total Farmers & Farm Women	3	4	2	7	2	2	5	5	5	7	6	1	49
	Rural Youth	0	0	0	1	2	1	0	0	0	0	0	0	4
	Extesnion Personals	0	0	0	0	0	0	0	1	0	0	1	0	2
	Grand Total	3	5	4	8	2	2	5	6	5	7	7	1	55

Sr. No.	Subject	On + Off campus												T.
		2009									2008			
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	Farmers & Farm Women													
1	Crop production	0	1	0	3	1	3	1	0	0	1	2	1	13
2	Horticulture	0	0	2	2	0	0	0	0	0	0	1	0	5
3	Soil health & Fertility	1	1	0	2	2	0	2	1	0	0	0	0	9
4	Live stock production & management	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Home science	2	2	0	2	2	0	2	0	1	1	4	1	17
6	Agri Engineering	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Plant protection	3	0	0	0	0	0	5	8	9	7	5	3	40
8	Fisheries	0	0	0	1	0	1	2	3	0	0	0	0	7
9	Production of Input at site	1	1	2	1	2	0	0	0	0	4	0	1	12
10	Capacity Building and Group Management	2	1	0	2	1	0	0	0	0	0	0	0	6
11	Agro-foreshtry	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total Farmers & Farm Women	9	6	4	13	8	4	12	12	10	13	12	6	109
	Rural Youth	1	1	1	3	3	1	0	0	0	1	1	0	12
	Extension Personals	0	0	0	0	0	0	1	2	0	0	1	0	4
	Grand Total	10	8	7	16	9	4	13	14	10	14	14	6	125

A. Training programmes (In details):

Quarterwise training programmes on various aspects related to Agricultural technology based on thrust areas will be organized during the year 2008-2009. Details of training programme is as under.

A.1. On Campus Training Programme: (for practicing farmers, farm women & rural youth)

Thematic Area	No. of Courses (ON CAMPUS)												Total	
	2009									2008				
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
(A) Farmers & Farm Women														
I Crop Production														
Weed Management		1				1	1				1			4
Resource Conservation Technologies														0
Cropping Systems														0
Crop Diversification														0
Integrated Farming					1									1
Water management												1		1
Seed production				1						1				2
Nursery management														0

Integrated Crop Management														0
Fodder production														0
Production of organic inputs														0
Total	0	1	0	1	1	1	1	0	0	1	1	1		8
II Horticulture														
a) Vegetable Crops														0
Production of low volume and high value crops														0
Off-season vegetables														0
Nursery raising			1											1
Exotic vegetables like Broccoli														0
Export potential vegetables														0
Grading and standardization														0
Protective cultivation (Green Houses, Shade Net etc.)														0
b) Fruits														0
Training and Pruning														0
Layout and Management of Orchards														0
Cultivation of Fruit														0
Management of young plants/orchards														0
Rejuvenation of old orchards														0
Export potential fruits														0
Micro irrigation systems of orchards														0
Plant propagation techniques														0
c) Ornamental Plants														0
Nursery Management				1										1
Management of potted plants														0
Export potential of ornamental plants														0
Propagation techniques of Ornamental Plants														0
d) Plantation crops														0
Production and Management technology														0
Processing and value addition														0
e) Tuber crops														0
Production and Management technology														0
Processing and value addition														0
f) Spices														0
Production and Management technology											1			1
Processing and value addition														0
g) Medicinal and Aromatic Plants														0
Nursery management														0

Production and management technology													0
Post harvest technology and value addition													0
Total	0	0	1	1	0	0	0	0	0	0	1	0	3
III Soil Health and Fertility Management													
Soil fertility management					2								2
Soil and Water Conservation	1			1									2
Integrated Nutrient Management													0
Production and use of organic inputs													0
Management of Problematic soils													0
Micro nutrient deficiency in crops								1					1
Nutrient Use Efficiency							1						1
Soil and Water Testing													0
Total	1	0	0	1	2	0	1	1	0	0	0	0	6
IV Livestock Production and Management													
Dairy Management													0
Poultry Management													0
Piggery Management													0
Rabbit Management													0
Disease Management													0
Feed management													0
Production of quality animal products													0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
V Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening													0
Design and development of low/minimum cost diet							1						1
Designing and development for high nutrient efficiency diet													0
Minimization of nutrient loss in processing													0
Gender mainstreaming through SHGs													0
Storage loss minimization techniques													0
Value addition	1	1			1						1	1	5
Income generation activities for empowerment of rural Women				1									1

Location specific drudgery reduction technologies													0
Rural Crafts													0
Women and child care											1		1
Total	1	1	0	1	1	0	1	0	0	0	2	1	8
VI Agril. Engineering													
Installation and maintenance of micro irrigation systems													0
Use of Plastics in farming practices													0
Production of small tools and implements													0
Repair and maintenance of farm machinery and implements													0
Small scale processing and value addition													0
Post Harvest Technology													0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
VII Plant Protection													
Integrated Pest Management	1						1	2	2	2	1	1	10
Integrated Disease Management	1						1	2	2	1	1	1	9
Bio-control of pests and diseases								1	1				2
Production of bio control agents and bio pesticides							1						1
Total	2	0	0	0	0	0	3	5	5	3	2	2	22
VIII Fisheries													
Integrated fish farming				1									1
Carp breeding and hatchery management													0
Carp fry and fingerling rearing													0
Composite fish culture						1	1						2
Hatchery management and culture of freshwater prawn													0
Breeding and culture of ornamental fishes								1					1
Portable plastic carp hatchery													0
Pen culture of fish and prawn													0
Shrimp farming													0
Edible oyster farming													0
Pearl culture													0
Fish processing and value addition													0
Total	0	0	0	1	0	1	1	1	0	0	0	0	4
IX Production of Inputs at site													
Seed Production					1						1		2

Planting material production													0
Bio-agents production													0
Bio-pesticides production													0
Bio-fertilizer production													0
Vermi-compost production										1			1
Organic manures production	1		1									1	3
Production of fry and fingerlings													0
Production of Bee-colonies and wax sheets													0
Small tools and implements													0
Production of livestock feed and fodder													0
Production of Fish feed													0
Total	1	0	1	0	1	0	0	0	0	2	0	1	6
X Capacity Building and Group Dynamics													
Leadership development				1									1
Group dynamics													0
Formation and Management of SHGs	1				1								2
Mobilization of social capital													0
Entrepreneurial development of farmers/youths													0
WTO and IPR issues													0
Total	1	0	0	1	1	0	0	0	0	0	0	0	3
XI Agro-forestry													
Production technologies													0
Nursery management													0
Integrated Farming Systems													0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
XII Others (Pl. Specify)													
TOTAL	6	2	2	6	6	2	7	7	5	6	6	5	60
(B) RURAL YOUTH													
Mushroom Production													0
Bee-keeping													0
Integrated farming													0
Seed production				1	1								2
Production of organic inputs													0
Integrated Farming													0
Planting material production													0
Vermi-culture	1	1								1	1		4
Sericulture													0
Protected cultivation of vegetable crops													0
Commercial fruit production													0

Repair and maintenance of farm machinery and implements														0
Nursery Management of Horticulture crops														0
Training and pruning of orchards														0
Value addition			1											1
Production of quality animal products														0
Dairying														0
Sheep and goat rearing														0
Quail farming														0
Piggery														0
Rabbit farming														0
Poultry production														0
Ornamental fisheries														0
Para vets														0
Para extension workers														0
Composite fish culture														0
Freshwater prawn culture				1										1
Shrimp farming														0
Pearl culture														0
Cold water fisheries														0
Fish harvest and processing technology														0
Fry and fingerling rearing														0
Small scale processing														0
Post Harvest Technology														0
Tailoring and Stitching														0
Rural Crafts														0
TOTAL	1	1	1	2	1	0	0	0	0	0	1	1	0	8
(C) Extension Personnel														
Productivity enhancement in field crops							1							1
Integrated Pest Management								1						1
Integrated Nutrient management														0
Rejuvenation of old orchards														0
Protected cultivation technology														0
Formation and Management of SHGs														0
Group Dynamics and farmers organization														0
Information networking among farmers														0
Capacity building for ICT application														0

Care and maintenance of farm machinery and implements													0
WTO and IPR issues													0
Management in farm animals													0
Livestock feed and fodder production													0
Household food security													0
Women and Child care													0
Low cost and nutrient efficient diet designing													0
Production and use of organic inputs													0
Gender mainstreaming through SHGs													0
Any other (Pl. Specify)													0
TOTAL	0	0	0	0	0	0	1	1	0	0	0	0	2
Grand Total	7	3	3	8	7	2	8	8	5	7	7	5	70

A.2 Off- Campus training (for practicing farmers , farm women & rural youth)

Thematic Area	No. of Courses (OFF CAMPUS)												Total	
	2009									2008				
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
(A) Farmers & Farm Women														
I Crop Production														
Weed Management						1					1			2
Resource Conservation Technologies														0
Cropping Systems														0
Crop Diversification				1										1
Integrated Farming														0
Water management						1								1
Seed production				1										1
Nursery management														0
Integrated Crop Management														0
Fodder production														0
Production of organic inputs														0
Total	0	0	0	2	0	2	0	0	0	0	1	0		5
II Horticulture														
a) Vegetable Crops														0
Production of low volume and high value crops														0
Off-season vegetables														0
Nursery raising			1											1
Exotic vegetables like Broccoli														0
Export potential vegetables														0
Grading and standardization														0
Protective cultivation (Green Houses, Shade Net etc.)														0
b) Fruits														0
Training and Pruning														0
Layout and Management of Orchards														0
Cultivation of Fruit														0

Management of young plants/orchards													0
Rejuvenation of old orchards													0
Export potential fruits													0
Micro irrigation systems of orchards													0
Plant propagation techniques													0
c) Ornamental Plants													0
Nursery Management				1									1
Management of potted plants													0
Export potential of ornamental plants													0
Propagation techniques of Ornamental Plants													0
d) Plantation crops													0
Production and Management technology													0
Processing and value addition													0
e) Tuber crops													0
Production and Management technology													0
Processing and value addition													0
f) Spices													0
Production and Management technology													0
Processing and value addition													0
g) Medicinal and Aromatic Plants													0
Nursery management													0
Production and management technology													0
Post harvest technology and value addition													0
Total	0	0	1	1	0	0	0	0	0	0	0	0	2
III Soil Health and Fertility Management													
Soil fertility management													0
Soil and Water Conservation		1		1									2
Integrated Nutrient Management													0
Production and use of organic inputs													0
Management of Problematic soils													0
Micro nutrient deficiency in crops													0
Nutrient Use Efficiency							1						1
Soil and Water Testing													0
Total	0	1	0	1	0	0	1	0	0	0	0	0	3
IV Livestock Production and Management													
Dairy Management													0
Poultry Management													0
Piggery Management													0
Rabbit Management													0
Disease Management													0
Feed management													0
Production of quality animal products													0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
V Home Science/Women empowerment													
Household food security by kitchen gardening and nutrition gardening													0
Design and development of low/minimum cost diet							1						1

Designing and development for high nutrient efficiency diet													0
Minimization of nutrient loss in processing													0
Gender mainstreaming through SHGs													0
Storage loss minimization techniques													0
Value addition	1	1		1							1		4
Income generation activities for empowerment of rural Women					1				1				2
Location specific drudgery reduction technologies													0
Rural Crafts													0
Women and child care										1	1		2
Total	1	1	0	1	1	0	1	0	1	1	2	0	9
VI Agril. Engineering													
Installation and maintenance of micro irrigation systems													0
Use of Plastics in farming practices													0
Production of small tools and implements													0
Repair and maintenance of farm machinery and implements													0
Small scale processing and value addition													0
Post Harvest Technology													0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
VII Plant Protection													
Integrated Pest Management							1	1	2	2	1		7
Integrated Disease Management	1						1	2	2	2	2	1	11
Bio-control of pests and diseases													0
Production of bio control agents and bio pesticides													0
Total	1	0	0	0	0	0	2	3	4	4	3	1	18
VIII Fisheries													
Integrated fish farming							1						1
Carp breeding and hatchery management													0
Carp fry and fingerling rearing													0
Composite fish culture								1					1
Hatchery management and culture of freshwater prawn													0
Breeding and culture of ornamental fishes													0
Portable plastic carp hatchery													0
Pen culture of fish and prawn													0
Shrimp farming								1					1
Edible oyster farming													0
Pearl culture													0
Fish processing and value addition													0
Total	0	0	0	0	0	0	1	2	0	0	0	0	3
IX Production of Inputs at site													
Seed Production				1	1					1			3
Planting material production													0
Bio-agents production													0
Bio-pesticides production													0
Bio-fertilizer production													0
Vermi-compost production										1			1
Organic manures production		1	1										2

Production of fry and fingerlings													0
Production of Bee-colonies and wax sheets													0
Small tools and implements													0
Production of livestock feed and fodder													0
Production of Fish feed													0
Total	0	1	1	1	1	0	0	0	0	2	0	0	6
X Capacity Building and Group Dynamics													
Leadership development				1									1
Group dynamics	1												1
Formation and Management of SHGs		1											1
Mobilization of social capital													0
Entrepreneurial development of farmers/youths													0
WTO and IPR issues													0
Total	1	1	0	1	0	0	0	0	0	0	0	0	3
XI Agro-forestry													
Production technologies													0
Nursery management													0
Integrated Farming Systems													0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
XII Others (Pl. Specify)													
TOTAL	3	4	2	7	2	2	5	5	5	7	6	1	49
(B) RURAL YOUTH													
Mushroom Production													0
Bee-keeping													0
Integrated farming													0
Seed production				1									1
Production of organic inputs													0
Integrated Farming													0
Planting material production													0
Vermi-culture		1	1										2
Sericulture													0
Protected cultivation of vegetable crops													0
Commercial fruit production													0
Repair and maintenance of farm machinery and implements													0
Nursery Management of Horticulture crops													0
Training and pruning of orchards													0
Value addition				1									1
Production of quality animal products													0
Dairying													0
Sheep and goat rearing													0
Quail farming													0
Piggery													0
Rabbit farming													0
Poultry production													0
Ornamental fisheries													0
Para vets													0
Para extension workers													0
Composite fish culture													0
Freshwater prawn culture													0
Shrimp farming													0

Pearl culture													0
Cold water fisheries													0
Fish harvest and processing technology													0
Fry and fingerling rearing													0
Small scale processing													0
Post Harvest Technology													0
Tailoring and Stitching													0
Rural Crafts													0
TOTAL	0	1	2	1	0	0	0	0	0	0	0	0	4
(C) Extension Personnel													
Productivity enhancement in field crops								1					1
Integrated Pest Management										1			1
Integrated Nutrient management													0
Rejuvenation of old orchards													0
Protected cultivation technology													0
Formation and Management of SHGs													0
Group Dynamics and farmers organization													0
Information networking among farmers													0
Capacity building for ICT application													0
Care and maintenance of farm machinery and implements													0
WTO and IPR issues													0
Management in farm animals													0
Livestock feed and fodder production													0
Household food security													0
Women and Child care													0
Low cost and nutrient efficient diet designing													0
Production and use of organic inputs													0
Gender mainstreaming through SHGs													0
Any other (Pl. Specify)													0
TOTAL	0	0	0	0	0	0	0	1	0	0	1	0	2
Grand Total	3	5	4	8	2	2	5	6	5	7	7	1	55

A.3 Vocational Training programmes for Rural Youth

Crop / Enterprise	Identified Thrust Area	Training title*	No. of Course	Duration (days)	No. of Participants	Type of participant
Vegetable	Value addition in vegetable	Packaging & Preservation of vegetables	6	3	44	RY
Fruit	Value addition in fruits	Preparation of Jam - Jelly & pickles	6	3	54	RY
Fisheries	Income generation	Ornamental fisheries	1	3	16	RY

A.4 Training for Extension personnel

Sr. No.	Title of Training	No. of courses	Duration (days)	No. of participants	Type of participant
1	Pre-seasonal training on kharif crops	1	2	25	Ext.workers
2	Pre-seasonal training on Rabi crops	1	2	25	Ext.workers
3	Integrated pest management in cotton	1	2	25	Ext.workers

B. Summary of Training Programme :

Sr. No.	Subject	ON Campus	Off Campus	Total
	Farmers & Farm Women			
1	Crop production	12	5	17
2	Horticulture	3	2	5
3	Soil health & Fertility	8	4	12
4	Live stock production & management	0	0	0
5	Home science	13	14	27
6	Agril Engineering	0	0	0
7	Plant protection	25	25	50
8	Fisheries	4	2	6
9	Production of Input at site	10	8	18
10	Capacity Building and Group Management	15	10	25
11	Agro-foreshtry	0	0	0
	Total Farmers & Farm Women	90	70	160
	Rural Youth	22	30	52
	Extesnion Personals	3	4	7
	Grand Total	115	85	200

2. DEMONSTRATIONS

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)	
					Proposed	Total
FLD						
1	Groundnut (GG-5)	IDM	IDM, Variety	Kharif	5	10
2	Mung (GM-4)	Varietal	Varietal	Kharif	5	10
3	Sesamum (Guj Til-2)	ICM	Variety, IDM	Kharif	10	20
4	Castor (GCH-6)	IDM	Variety	Kharif	10	20
5	Cotton (Bt. Cotton)	ICM	Variety,IPM	Kharif	20	40
6	Chilli (Reshampatto)	IPM	IPM	Kharif	5	10
7	Brinjal (GBL-1)	IPM	IPM	Kharif	5	10
8	Tomato (GT-2)	INM	INM	Kharif	5	10
9	Cabbage/ Cauliflower	INM	INM	Rabi	10	20
10	Wheat (GW-366)	Varietal Evaluation	Variety	Rabi	20	40

11	Cumin (Guj.Cum.-4)	IDM	IDM	Rabi	10	20
12	Chick pea (Guj-2)	IDM/IPM	IPM, Variety	Rabi	10	20
Component Demonstration						
13	Groundnut	<i>Sclerotium rolfsii</i>	Trichoderma	Kharif	10	20
14	Cotton	Lepidopteran Pests	Pheromone trap	Kharif	10	20
15	Chick pea	Lepidopteran pests	Pheromone trap	Rabi	5	10
	Total				140	280

3. ON FARM TESTING

3.1 OFT – 1

OFT – 1 :- Cotton Management of Mealy bug infestation in cotton

1) Production system

Variety : Mallika {B.t. cotton (Government approved variety)}
 Season : Kharif –2009
 Size of the plot : 0.40 ha.

2) Problem definition:

1. More number of host range
2. Dispersion is very fast
3. Mealy like powder covered on the body
4. Leaving in gregarious phase
5. Ability to laid eggs in pouch
6. Eggs are hibernating in unfavorable condition
7. Symbiotic relation with ants
8. Low incidence of natural enemies
9. High capacity of migration and climbing of crawlers.

3) Title of the technology assessment/refinement: Integrated management of Mealy bug

4) Thematic area : Suppression of Mealy bug

5) Details of technologies for assessment/ refinement

Category	Source of technology	Technology detail		
Technology option 1	Farmer	T ₁	Farmer practices	Application of conventional insecticides after infestation on Mealy bug
Technology option 2	Main Oilseeds Res. Station, JAU, Junagadh	T ₂	Recommended practices	Pre-sowing application of Methyl parathion, Application of insecticides at the time of infestation
Technology option 3		T ₃	Refined practices	Pre-sowing application of Methyl parathion 2% Dust and followed by at

				15 days interval, removal of host plants & vegetation from boundaries, application of newer insecticides /bio pesticides (<i>Beauveria</i> spp. Or <i>Verticillium</i> spp.
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N.B.:- T₁, T₂ & T₃ are technology options 1, 2 & 3 respectively.

6) Production system and thematic area : Irrigated & Rainfed condition having heavy infestation of Mealy bug.

OFT – 2 :- Oilseeds (Groundnut) : Yield losses in groundnut due to Sclerotium stem rot.

1) Production system

Variety: GG-20

Season: *Kharif*- 2009

Size of plot : 0.40 ha

2) Problem definition :

1. Reduction in plant population/ unit area due to disease at initial stage
2. Poor quality of pod as well as straw
3. Pods detached from the plant and remains in the soil
4. Lack of knowledge about the proper method and time of application
5. Set furrow sowing system
6. Soil bunding enhance the disease intensity
7. Lack of summer deep ploughing
8. Lack of crop rotation

3) Title of technology assessed/refined: Biological control of *Sclerotium rolfsii* in groundnut

4) Thematic area : Management of stem rot in groundnut

5) Details of technologies for assessment/ refinement

Category	Source of technology	Technology details	
Technology option 1	Farmer	T ₁	Farmers practice (Control)

Technology option 2	Main Oilseeds Res. Station, JAU, Junagadh	T ₂	<i>Trichoderma harzeanum</i> @ 2.5 kg/ha with castor cake @ 500kg/ha at the time of sowing
Technology option 3	Refinement	T ₃	Castor cake @ 500 kg/ha, Drenching of <i>Trichoderma harzeanum</i> @2.5 kg/ha at 30 & 45 DAG

6) Production system and thematic area : Management of stem rot in groundnut

OFT – 3 :- Cotton : Low yield in cotton

1) Production system

Variety : Mallika {B.t. cotton (Government approved variety)}

Season : *Kharif*–2009

Size of the plot : 0.40 ha.

2) Problem definition:

1. Farmers are using phosphatic fertilizer as basal as well as top dressing.
2. Plant needs more phosphorus at initial growth stage.
3. Improper variety selection
4. High labour charges
5. Lack of proper practices knowledge
6. Plant stand per hectare
7. Monocropping
8. Long duration crops
9. Injudicious use of fertilizers
10. Injudicious use of pesticides
11. Lack of disease management
12. Scheduling of irrigation

3) Title of the technology assessment/refinement: Judicious use of fertilizer

4) Thematic area : Unjudicious use of chemical fertilizers in cotton production

5) Details of technologies for assessment/ refinement

Treatment	Period of application	N (kg/ha)	P ₂ O ₅ (kg/ha)	K ₂ O (kg/ha)	Source
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T ₁	Farmer practices	Farmer	Basal	22.5	57.5	0	DAP
			Split-1(30 DAS)	57.5	0	0	Urea
			Split-2 (45 DAS)	57.5	0	0	Urea
			Split-3 (60 DAS)	80	57.5	0	Urea+DAP
			Split-4 (75 DAS)	57.5	0	0	Urea
			Total	275	115	0	
T ₂	Recommended practices	Cotton Res. Station, JAU, Junagadh	Basal	40	0	0	AS
			Split-1(30 DAS)	40	0	0	Urea
			Split-2 (45 DAS)	40	0	0	Urea
			Split-3 (60 DAS)	40	0	0	Urea
			Total	160	0	0	
T ₃	Refined practices – I		Basal	40	0	60	AS + MOP
			Split-1(30 DAS)	40	0	0	Urea
			Split-2 (45 DAS)	40	0	0	Urea
			Split-3 (60 DAS)	40	0	0	Urea
			Total	160	0	60	
T ₄	Refined practices – II		Basal	40	0	60	AS+MOP
			Split-1(30 DAS)	40	0	20	AS+MOP
			Split-2 (45 DAS)	40	0	20	AS+MOP
			Split-3 (60 DAS)	40	0	20	AS+MOP
			Total	160	0	120	

N.B.:- T₁, T₂, T₃ & T₄ are technology options 1, 2, 3 & 4 respectively.

6) Production system and thematic area : Application of DAP

4. EXTENSION ACTIVITIES

Nature of Extension Programme	No. of Programmes	
Field Day	25	
Kisan Mela		
Kisan Ghosthi	10	
Exhibition		
Film Show		
Method Demonstrations	2	1

Farmers Seminar	30	
Workshop		
Group meetings	15	5
Lectures delivered as resource persons	60	4
Newspaper coverage		
Radio talks	2	2
TV talks	2	2
Popular articles		
Extension Literature	5	5
Advisory Services		
Scientific visit to farmers field		
Farmers visit to KVK		
Diagnostic visits		
Exposure visits		
Ex-trainees Sammelan		
Soil health Camp		
Animal Health Camp		
Agri mobile clinic		
Soil test campaigns		
Farm Science Club Conveners meet		
Self Help Group Conveners meetings	5	
Mahila Mandals Conveners meetings	5	
Celebration of important days (specify)		
Female groups	5	
Any Other (Specify)		
Total	166	19

N.B. Above full fledge activities can be performed only after recruiting the staff as per discipline required.

Sr.No	Demonstration Units	Rs. In Lakh
1	Vermi compost unit	1.50
2	Poly house Unit	1.00
3	Horticulture and vegetable nursery	3.00
4	Animal unit	4.00
5	Fisheries culture unit	4.00
6	Drip irrigation unit with hort. crops	3.00
7	Home science	3.00

8.	Entomological & Pathological laboratory as well as Museum	4.00
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