## 8. STATUS OF PUBLICATION (2008-15)

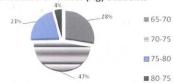
S.N	Particular		N	o. of Pu	ublication	on year	wise		Total
5.N	Particular	08-09	09-10	10-11	11-12	12-13	13-14	14-15	
1.	Research Paper (In National and International Journals)	05	07	02	05	10	05	02	36
2.	Abstracts published in seminar and symposia	04	08	06	02	07	04	11	42
3.	Text / Reference Books/Question Bank		-		- 1	-	01	-	01
4.	Practical Manuals		-	-	-	-	01	05	06
5.	Technical reports /Compilation	-	02	02	02	02	02	02	12
6.	Bulletins (Technical)	01	-	-	01	-	01	01	04
7.	Folder		01	-	-	-	-	-	-
8.	Extension literature /Bulletins	-	-	-	02	-	-		02
9.	Popular articles	03	01	04	(2)	-	-	-	08
10.	News paper coverage	-	07	06	07	07	08	01	36

## 9. IMPACT OF TEACHING (2009 - 15)

- a) Merit status of the PG and Ph.D. student
- i) Percent share of M.sc. (Ag) Agronomy student (2009 2015)

Percent range	No. of Student	Percent share of student
65-70	13	27.66%
70-75	22	46.21%
75-80	10	21.38%
80-85	02	04.26%
Total (6Years Period)	47	100.00%

#### Percent share of M.Sc. (Ag) Students



## ii) Percent share of Ph.D. (Agronomy) student (2008-15)

Percent range	No. of Student	Percent share of student
70-75	01	20%
75-80	03	60%
80-85	01	20%
Total (6Years Period)	05	100.00%

#### b. National Eligibility Test (NET)Qualified Students

S.N.	Year	Name of students
1	2010-11	Sh. Janmejay Sharma
2	2010-11	Sh. Manoj Kumar Palia
3	2012-13	Ku. Kiran Rawat
4	2012-13	Ku. Nisha Bhadauria
5	2012-13	Sh. Naresh Meena
6	2014	Ku. Manish Shyam

#### PUBLISHED:

By

HEAD OF DEPARTMENT DEPARTMENT OF AGRONOMY COLLEGE OF AGRICULTURE, GWALIOR (M.P.) - 474002





## AT A GLANCE



2009 Ph.D. (Agron.)

1957 M.Sc. (Ag) Agron.

> 1950 B.Sc. (Ag)

1951 Department

1950 College

2008 RVSKVV Established

### Complied by

Dr. J.P. Dixit

Sh. B.S. Kasana

Dr. S.S. Tomar

Dr. J. Sharma

Dr. D.S. Sasode

## **DEPARTMENT OF AGRONOMY**

RVSKVV - College of Agriculture, Gwalior (M.P.)

2015



## 1. GENERAL INFORMATION

#### a). Historical Background

- The college was founded by late Shri K.I. Thadani in 1950 and he was the founder Principal of the College.
- The first session of College was started on 31<sup>st</sup> July, 1950.
- The college was initially affiliated to Agra University during 1951 to 1957.
- Then to Vikram university, Ujjain, from 1st July, 1957 to 1964.
- From 1<sup>st</sup> July to October 1964 the College was affiliated with jiwaji university Gwalior.
- After establishment of JNKVV College was affiliated with JNKVV from October, 1964.
- Now after establishment of RVSKVV, College was affiliated with RVSKVV, Gwalior since August, 2008.

#### b). Degree programmes and availability of seats

S. No.	Degree	Year of start	Duration of degree (years)	degree seats at		Description of Seats	
1	B.Sc. (Ag)	1950-51	04	51	72	60 (Free)+ 12 (Payment)	
2	M.Sc. (Ag) Agronomy	1957-58	02	02	08	04 (Free) + 04(Payment)	
3	Ph. D. (Agronomy)	2009-10	03	06	07	04 (Free)+ 02 (Payment)+ 01( In-service)	

## 2. STAFF POSITION

## a). Sanctioned Posts

S. No	Name of the post	Sanctioned post	Filled
1.	Associate Professor	01	01
2.	Assistant Professor	03	02
	Lab Technician	01	-
1.	Lab Attendant	01	
	Total	06	

## 3. COURSE CURRICULUM PROGRAMME

# (I) Details of Under Graduate Degree Programmes (B.Sc. (Ag))

Year	Semester	Course No.	Course Name	Credit
Year	I Sem.	AGR- 102	Introductory Agriculture (Ancient Heritage, Agricultural Scenario and Gender Equity in Agriculture)	1+0
		AGR - 101	Principles of Agronomy & Agril. Meteorology	2+1
	II Sem.	AGR - 103	Water Management Including Micro Irrigation	2+1
II na	I Sem.	AGR - 202	Practical Crop Production – I	0+1
year		AGR - 201	Organic Farming	2+1
	II Sem.	AGR - 203	Practical Crop Production – II	0+1
III rd	I Sem.	AGR - 301	Farming System & Sustainable Agriculture	1+1
year		AGR - 302	Field Crops – I (Kharif Crops)	2+1
	II Sem.	AGR - 303	Field Crops – II (Rabi Crops)	2+1
		AGR - 304	Weed Management	2+1
IV ye	I Sem		RAWE Programme	0+5
ar	II Sem.	EPD-403	Integrated Farming System	1+2
		EPD - 404	Water Management (Watershed Micro-irrigation Problematic Water)	1+3
		Total Credit	s	35
		Total Cours	es	13

## (ii) Details of Post Graduate Degree Programmes (M.Sc. (Ag) Agronomy)

Sem.	Course No.	Course Name	Credit
st I Sem.	Agron 501	Modern Concepts in Crop Production	3+0
	Agron 504	Principles and Practices of Water Management	2+1
	Agron 511	Cropping System and Sustainable Agriculture	2+0
	Agron 513	Principles & Practices of Organic Farming	2+1
	Agron 502	Soil Fertility and Nutrient Management	2+1
II Sem.	Agron 503	Principles and Practices of Weed Management	2+1
	Agron 512	Dry Land Farming and Watershed Management	2+1
	PGS 506	Disaster Management	1+0
		Total Credits	21
		Total Courses	08

## (iii) Details of Doctoral Degree Programmes (Ph.D.- Agronomy)

Sem.	Course No.	Course Name	Credit
I <sup>st</sup> Sem.	Agron 601	Current Trends in Agronomy	3+0
	Agron 604	Advances in Crop Growth & Productivity	2+1
	Agron 605	Irrigation Management	2+1
II <sup>nd</sup> Sem.	Agron 606	Advance in Weed Management	2+0
	Agron 607	Integrated Farming System and Sustainable Agriculture	2+0
	Agron 608	Soil Conservation & Watershed Management	2+1
	PGS 506	Disaster Management	1+0
		Total Credits	17
		Total Courses	07

## 4. FACILITY AVAILABLE

#### i. Infrastructure

Museum cum Conference Hall Labs.	01 03
Office Rooms-	10
ii. Audiovisual aids	
Computers	04
Camera	02
Projectors	02
Photocopier machine	01
Printer	03





#### iii. Instruments

S.No.	Name of the instrument	Use	Photographs
1	Double Beem UV Visible Spectrophotometer	Estimation of phosphorus, potassium etc.	
2 /	Rotary Flask Shaker	Used to prepare solution	M
3	Electronic Kel-plus superior micro processor		
а	Electronic for stage autom- atic acid neutralizer scriber	Estimation of nitrogen	1 A
b	Electronic kejpiler auto sequencing micro processor		
4	Conductivity meter	To measure the electrical conductivity of the solution	6495
5	pH meter	Measurement of pH of the solution	1
6	Analytical balance	For accurate weighing	
	GPS (Global Position System)	To locate Longitude, Latitude, Altitude, etc.	
8	Air circular hot air Oven	Drying of soil/ seed /other samples	
9	Lux meter	To measure intensity of sun rays /light	100
10	LCD projector	For presentation	
11	Double ring infiltrometer	Infiltration rate of soil	B
12	Core sampler kit	Bulk density	F 100 3
13	V- notch	Measurement of discharge of water flow	
14	Leaf area analyzer	measurement of leaf area	
15	Moisture Meter	To Major soil moisture	HO.
16	Reflectometer	Measurement of reflectance	O PARTY
17	Plani -meter	To measure leaf area	PLANIMETER
18	Botanical Press	To press the plant samples	X X

## 5. STATUS OF THESIS

a) Year wise M. Sc. (Ag) Thesis

Year	1960-61	61-62	62-63	63- 64	64- 65	65-66	66-67	67-68	68-69	69-70
No.	8	6	8	6	6	5	2	4	5	4
Year	1970-71	71-72	72-73	73-74	74-75	75-76	76-77	77- 78	78-79	79-80
No.	5	5	3 .	2	5	5	7	8	6	5
Year	1980-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88	88-89	89-90
No.	8	7	5	8	10	12	12	8	9	2
Year	1990-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99- 2000
No.	2	3	4	12	1	3	7	2	3	5
Year	2000-01	01-02	02-03	03-04	04-05	05-06	06- 07	07- 08	08-09	09-2010
No.	4	5	6	6	4	3	4	2	7	7
Year	2010-11	11-12	12-13	13-14	14- 15					
No.	8	9	7	7	7			1		

## b) Year wise Ph.D. Thesis

Year	2013-14	2014-15
No.	03	02

## 6. TRANSFERABLE TECHNOLOGY

## (i.) AICRP on Weed Management

#### (a) Cereals:

- 1. Wheat:- For getting higher productivity of wheat under soybean-wheat cropping system, combined application of 2, 4-D Na @ 500 g/ha + isoproturon @ 1000 g/ha or metsulfuron @ 5 g/ha + isoproturon @ 1250 g/ha as post emergence at 30 DAS have controlled almost all the weeds
- a) Pre-emergence application of isoproturon @ 1000 g/ha or isoproturon @ 1000 g/ha applied before first irrigation proved effective to control the *Phalaris minor*.
- Sulfosulfuron @ 25 g or isoguard @ 1000 g/ha or clodinafop @ 60 g/ha were effective to control *Phalaris* minor
- c) Post emergence application of trisulfuron 15-20 g/ha controlled broad leaved weeds and combined application of trisulfuron @ 15 g + isoproturon @ 750 g/ha controlled broad and narrow leaved population of weed flora.
- d) Clodinafop @ 60g + metribuzin @ 150 g/ha gave higher yield and adjudged the most effective combination in controlling almost all the weeds.
- e) Post emergence application of carfentrazone ethyl @ 20 g/ha and affinity @ 1500 g/ha were found effective to control of weeds and gave higher grain yield of wheat.
- f) All the tillage practices gave almost similar grain yield of wheat. However, conventional practice is more profitable and recommended to follow by cultivators in wheat crop.
- g) For control grassy and broad leaved weeds, higher yield and net return form wheat, application of pinoxaden @ 40 g/ha (25 DAS) followed by carfentazone @ 25 g/ha with 1% ammonium sulphate surfactant as post emergence (one week after pinoxaden spray) or sulfosulfuron @ 25 g/ha (30 DAS) may be used.
- Pearl millet Pre-emergence application of atrazine @ 500 g/ha controlled most of the weeds and gave higher@yield. Conventional tillage operation is better than other tillage practices.

#### (b) Oilseed

- **Mustard -** Pre-emergence application of oxadiargyl @ 90-120 g/ha or isoproturon @ 750 g/ha effectively controlled the majority of weeds in mustard under blackgram-mustard cropping system.
- Soybean For effective controlling of weeds herbicide Fluchloralin @ 1000 g/ha (PPI), Clomazon @ 750 g/ha (PE), Lactofen @ 120 g/ha (PoE), combination of Chlorimuron ethyl @ 9 gm + fenoxaprop @ 90 g/ha (PoE) , pendimethalin @ 1000 g/ha (PE) and imazethpyr 100 g/ha (PoE) could be used in soybean.
- Groundnut Combined application of herbicides with one hand weeding at 30 DAS were found more remunerative over weedy check. After two hand weeding at 15 and 30 DAS higher net return Rs. 27230 /ha was obtained with application of Imazethapyr @ 100 g/ha as PoE + one hand weeding at 30 DAS followed by oxyflurofen @120 g/ha as PoE + 1, hand weeding at 30 DAS (Rs. 24012 /ha).
- Sesamum-Application of quizalofop ethyl @ 50 g/ha as PoE or trifluralin @ 750 g/ha as PPI or pendimethalin @ 750 g/ha alone or in combination with one hand weeding at 30 DAS may be used.

#### (c) Pulses

- **Gram -** Application of Pendimethalin @ 1000 g/ha preemergence controlled almost all weeds in turn gave the higher yield.
- Blackgram Herbicide Fluazifop-P-butyl @ 250 g/ha as PoE and Alachlor 2000 g/ha PE could be applied in black gram for effective control of weeds and for obtaining higher yields.

#### (d) Spices crop:

- Onion- For obtaining higher bulb yield of onion and net return 3, hand weeding at 30,45 and 60 DAT (weed free) or pre emergence application of oxyfluorfen @ 250 g/ha + one hand weeding at 40 DAT or oxadiargyl @ 90 g/ha with 1, hand weeding at 45 DAT transplanting may be practiced.
- **Coriander-** For effective control of weeds, higher yield and economic returns from coriander (grain) two hand weeding (30 and 45 DAS), pre-emergence application of pendimethalin @ 1000 g/ha and isoproturon @ 750 g/ha PE with one hand weeding at 30 DAS could used.

#### (e) Other

Chemical Control of Parthenium - Application of glyphosate @ 1500 g/ha or metribuzine 0.3% at pre-tlowering stage effectively controlled the Parthenium hysterophorus in non cropped areas.

## (ii) AICRP on Arid Legumes

- The variety HG-563 of clusterbean is performing very well for getting higher production in Northern Madhya Pradesh. It is early maturing variety (95-110 days), suitable for double cropping. Yield potential is 20-25
- The variety RMO-40 and RMO-435 of Moth bean found suitable for agro-climatic condition of gird region of M.P.
- Application of 60 kg P2O5/ha + 10 tonnes FYM/ha with 3 Rhizobium gave maximum net return of Rs. 31087/with B:C ratio 4.56.
- Application @ 10:20 NP kg/ha + Rhizobium + PSB 4. gave significantly higher grain yield of clusterbean (2175 kg/ha), maximum net return (Rs. 30585 /ha) and B:C ratio (4.47) as compared to 20:40 (RDF)
- Unbranched and branched variety of clusterbean should be shown at 30 and 45 cm of row spacing, respectively.
- Under agro-climatic condition of Northern M.P. balanced use of fertilizer viz., 20: 40:20 N:P:K kg/ ha should be adopted.

- 7. To obtain higher seed yield of Moth bean, it should be sown in first fortnight of July using 15 kg/ ha seed at a row distance of 30 cm in Gird region of M.P.
- 8. On the basis of three years study it is concluded that if a farmer has facility of two irrigations then irrigate Clusterbean crop at vegetative (25-30 DAS) and at 50 % flowering stage (40-45 DAS). In case of only one irrigation 50 % flowering stage is better.
- 9. In intercropping system significantly highest clusterbean equivalent seed yield, net return and B.C. ratio were obtained with sole clusterbean.
- 10. In weed management practices two intercultures at 25 and 45 DAS was remunerative in clusterbean
- 11. Application of Imazethapyr+ Imazamox @ 40 g/ha at 20 DAS in clusterbean provided better weed control and higher crop productivity.

## 7. STATUS OF AWARDS/ RECOGNITION (2009-15)

#### Scientists

	Scientists					
S. No.	Year	Nature of Award	Name of Scientists	Description of Award		
1	2009		Rawat Upama	for the paper on "Effect of different fertility levels and biofertilizers on productivity of early maturing variety of clusterbean" in National Seminar held at IARI, New Delhi on dated 13-15. April, 2009		
2	2011	presentation	Arora, Asha	for the paper entitled "Parthenium a harmful problematic weed" in 13 " National Active Science Sangosthi (Hindi) organized b Karnal and Bundelkhand University Jha. 21 to 23 January. 2011		
3	2011	IInd best poster presentation	Rawat, G.S. & Rajput, R.L.	award for the paper entitled "Effect of different critical stages of irrigation on productivity of clusterbean' in 13 <sup>th</sup> National Agriculture Science Sangosthi (Hindi) organized by BKAS, Karnal and Bundelkhand University Jhansi from 21 to 23 Jan., 2011		
4	2011	Best poster presentation	Rajput, R.L	award during National Seminar on Improving Water Productivity Limits and Opportunities held at RVSKVV, Gwalior on 25 – 26 February, 2011		
5	2011	Illrd best poster presentation	Rawat, G.S., Rajput, R.L. and Yadav, K.S.	award for the paper entitled "trigation schedules and sulphur levels on yield, WUE and economics of garlic ( Milum sativum L.)" in National Seminar Jointly organized by MPWSRP, Bhopal and RVSKVV, Gwalior during 25-26 Feb., 2011		
6	2011	surveillance recognition	Tomar, S.S.	award for successful implementation of National Invasive Surveillance scheme at Gwalior during 20 November, 2011 at TNAU, Coimbatore		
7	2013	Best poster presentation	Rajput, R.L. and Rawat, G.S.	award on "Effect of different fertility levels on yield and yield attributes of pea" in National Seminar held at CIFE, Barsova, Mumbai on dated 14-16 December, 2013		
8	2013	Best poster presentation	Rawat, G.S., Rajput, R.L. and Rawat Upama	award on "Response of varying levels of organic manure and PSB on the productivity of clusterbean" in National Seminar held at CIFE, Barsova, Mumbai on dated 14 -16 December, 2013		
9	2014	Rajiv Gandhi Achievers	Prajapati, B.L.	for Agricultural Education, Research and Extension Excellence organized by International Business Council, New Delhi on dated 23 September, 2014		
10	2014	First Prize in Poster Presentation	Kasana, B.S., Prajapati, B.L. and Yadav, S.	on 15 th National Symposium of Agricultural Science organized by Bhartiya Krishi Anusandhan Patrika, Karnal and RVSKVV, Gwalior on dated 5 – 7 December, 2014		
11	2014	II <sup>n3</sup> Award for exhibition in Krishi Vijay 2014	Dixit, J.P., Arora, Asha and Yadav, K.S.	organized at RVSKVV, Gwalior among Institutes exhibitions. The certificate was awarde Honble G.S. Bisen, The Agriculture M (M.P.)		
12	2015	IInd best poster presentation	Dixit, J.P. and Kasana, B.S.	on paper entitiled "Crop diversification under oilseed crops to mitigate the climatic change in Chambal Region of Madhya Pradesh during National Seminar on Climatic Change and Smart Agriculture Technologies at Gwalior		
13	2015	Ist best poster presentation	Kasana, B.S., Gupta, S., Dixit, J.P. and Prajapati, B.L.	on paper entitiled "Agromet Advisory Services – a Safeguard to Extreme weather event" during National Seminar on Climatic Change and Smart Agriculture Technologies at Gwalior during 13-14 June 2015		
Stud 14	dents 2008	best student	Rawat, Kiran	Received award.		
15	2014	II <sup>nd</sup> best poster presentation	Bhadauria Nisha and Rajput, R.L	on paper entitiled "Effect of climate on Agriculutre" during 15 " Krishi vigyan sangosthi" Bhattiya Krishi Anusa ndhan Samiti held at RVSKVV, Gwallor 5-7 December 2014		
16	2014	III <sup>rd</sup> best poster presentation	Sharma, Janmejay, Yadav, K.S., Tomar, S.S., Rajput, R.L. & Rawat, Kiran	management on growth, yield and quality of		

