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ANNUAL REPORT

2014-2015

RAJMATA VIJAYARAJE SCINDIA KRISHI VISHWA VIDYALAYA
GWALIOR - 474 002 (M.P.)

Mission

To impart education, conduct research and extension activities for enhancing productivity, optimization of profit, sustainability of agriculture and allied sectors and improving rural livelihood in the state of Madhya Pradesh.

Vision

To transform the Agricultural landscape of Madhya Pradesh by producing excellent dynamic and result oriented skilled human resource in modern Agriculture, thereby creating higher income, employment, gender equity, accessibility, sustainable production system and achieving social welfare for all.

Mandate

- To serve as a centre of higher education in the field of agriculture and allied sciences.
- To conduct basic, strategic, applied and anticipatory research in the field of agriculture and allied sciences.
- To disseminate technologies to farmers, extension personnel and organizations engaged in agricultural development through various extension programmes.
- To produce and supply of genuine and quality seed/planting material to the farmers.

Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya

Opposite Mela Ground, Race Course Road,
Gwalior 474 002 (M.P.)

WELCOME
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Annual Report

2014-15

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Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya
Gwalior - 474002 (M.P.)

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FOREWORD

It is a privilege for me to present the Annual Report of Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya (RVSKVV), Gwalior for the year 2014-15. The main mandate of this University is to impart education, conduct research and transfer the technology of agricultural and allied aspects with a focus on enhancing livelihood of the farming community.

Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya has grown into a diverse innovative institution of higher education, pursuing excellence in the fields of teaching, research and extension in agricultural sciences. Over the years, the University has sought to make a major contribution in improving the quality of human life in the region through its research-led initiatives in agriculture, environmental related issues, and a host of other modern-day challenges including the production of quality seed and genuine planting material. With emphasis of human resources development as the core of its activities, the University conducts itself with a spirit and dedication of being honest, diligent, practical and creative to further the reform of education. The structure of its activities is rationalized, with emphasis on its distinguished strengths, management of education and development of quality man power and in this direction notable success has been achieved. In addition to the diverse activities related to agricultural sciences, RVSKVV has a strong emphasis on farmers skills improvement and empowerment through the nineteen KVKs in the various districts. Teaching and learning quality has been steadily improving in recent years and a large number of capable man power has been trained here. The Fourth Deans' Committee recommendations of ICAR have been adopted by this University for UG, PG and Ph.D. education; thereby ensuring uniformity of agriculture education throughout the nation.

The research programme of the University finds a very special place in NARS through the coordinated projects in pulses, oil seeds, cotton, cereals, horticulture and natural recourses management. Exceptional research work on chickpea improvement, CMS based pigeon pea hybrid, efficient water management for boosting the productivity of cotton, soybean, mustard, wheat, medicinal and aromatic plants are some of the noteworthy contributions of the University. RVSKVV is also making sincere efforts to generate

cutting edge technologies for enhancing crop productivity. Thrust is also on seed replacement in the state by producing quality seeds of important crops. It is worthwhile to mention that RVSKVV has produced 7750.00 q seeds of different crops during 2014-15 which helped the farmers in a big way for seed replacement, thereby, enhancing the productivity of crops.

The Extension activities *viz*., trainings, demonstrations, Field days, study tours, Krishi Melas, Krishi Goshtis and other farm advisory services were carried out to help the farming community of the region to solve their farm related problems. Krishi mela 'Krishi Vijay-2014' was one of the mega events which served as a platform for interaction of farmers and scientists.

With extraordinary explosion of knowledge, speedy travel, evolution in information technology and increasing awareness of global concerns, the University has felt the need and realized the value of establishing closer ties with national and international organizations, which will in future ensure attaining new heights by this University. The period under report has been very prolific and eventful as the University has hosted a number of National Level activities which has certainly left an imprint on the national map.

In due course of time, the achievements of the University have duly been recognized by many agencies. International Accreditation Organization (IAO) has awarded Life Time International Accreditation to the University and the United Registrar of Systems awarded ISO9001-2008 certificate on April 10, 2014 for the excellent work done so far.

The students' performance in academic, sports and cultural events was impressive. The faculty of teaching, non-teaching and farm labourers joined their hands in fulfilling the mandate of the University.

The Annual Report 2014-15, brought out by the University, covers the development and progress made in the areas of teaching, research, extension and seed production. It is my firm belief that this Annual Report will aptly serve as a show case of the activities of the University. It will be a good reference for administrators, policy makers, staff, students and even the farming community. I would like to thank all the Deans, Directors, Officers of the University and Heads of the Departments as well as the members of the Editorial Board and Compilation Committee for compiling and editing this report in a comprehensive and presentable manner.

(A.K. Singh)

CONTENTS

EXECUTIVE SUMMARY

Rajmata Vijyaraje Scindia Krishi Vishwa Vidyalaya, (RVSKVV) Gwalior (M.P.) was established on August 19, 2008. The University, since then, caters to the educational needs of farming community. It is a new, but fast emerging promising University in the field of agriculture and allied sciences.

The mandate of the University is teaching, research and extension with a view to evolve appropriate solutions and technologies in the field of agriculture. It has a network of five colleges (four Agriculture and one Horticulture), five Zonal Agricultural Research Stations (ZARS), four Regional Agricultural Research Stations (RARS), six Special Research Stations (SRS), nineteen Krishi Vigyan Kendras (KVKs) and twenty-seven All India Coordinated Research Projects (AICRPs), spread across six agro-climatic zones in twenty-six districts of Madhya Pradesh. In addition to this, other ongoing projects / schemes *i.e.* non-plan, plan, tribal sub-plan and adhoc projects are also in operation.

During the year 2014-15, the University has undertaken a number of initiatives for the promotion of quality in its mandated areas. The major activities and achievements of the University are as follows:

TEACHING:

- The University offers two Under Graduate Courses *i.e.* B.Sc. (Ag.) and B.Sc. (Hort.), 11 Post Graduate degree and 9 Ph.D. degree programmes in the different disciplines of Agriculture and Horticulture. The total intake capacity was 696 out of which, 364 were in undergraduate (UG), 269 in postgraduate (PG) and 63 in Ph.D. degree programme. In the undergraduate level, out of 364 total seats, 308 seats were in B.Sc. (Ag.) and 56 in B.Sc. (Hort.) degree programme. In the post graduate level, out of 269 seats, 197 seats were in M.Sc. (Ag.) and 72 in M.Sc. (Hort.). Similarly, in Ph.D. programme, out of 63 total seats, 49 seats were in Agriculture and 14 were in Horticulture discipline.
- During the year 2014-15, total 1990 (Boys-1377, Girls-613) students were on the roll of the University, out of which, 1412 students (Boys-963, Girls-449) were in UG, 507 (Boys-358, Girls-149) in PG and 71 (Boys-56, Girls-15) in Ph.D. degree programmes.
- In PG, 120 students submitted their thesis to the Director Instruction for valuation. Out of which, 80 thesis were in M.Sc. (Ag.) and 40 in M.Sc. (Hort.)
- In Ph.D., 07 students submitted their thesis to the Director Instruction for valuation. Out of which, 04 were in Agronomy, 02 in Plant Breeding and Genetics and 01 in Horticulture discipline.
- In experiential learning programme, 337 students of fourth year (B.Sc. Ag. and B.Sc. Hort.) have taken adequate hands-on experience on different aspects of Agriculture / Horticulture to cultivate capabilities suitable to the emerging job markets and build entrepreneurship spirit and business management competence in a way that they will be able to generate employment for themselves and for others.

- The modules of experiential learning programme namely Crop Production, Crop Protection, Horticulture, Nursery Production and Management, Protected cultivation of high value vegetable crops, Floriculture & Landscape Gardening and Value addition in horticultural crops are running successfully.
- Under Rural Agriculture/Horticulture Work Experience 337 students of Fourth Year were placed in different villages of Research Stations/KVKs to learn and solve the practical problems of the adopted villages.
- 08 Gold medals were notified by the University, out of which 2 gold medals for M.Sc. (Ag.), 02 gold medals for M.Sc. (Hort.), 02 gold medals for B.Sc. (Ag.) and 02 gold medals for B.Sc. (Hort.).
- 23 students of the University qualified the JRF examination, out of which 01 student received Junior Reaserch Fellowship.
- 21 Students of the University have received National Talent Scholarship (NTS) as well as 25 students have also received scholarship under Vikramaditya Scholarship Yojna and 03 students have received scholarship under Gaon Ki Beti Yojna.
- During the year, 263 students of the University have received State Government Scholarship, out of which 132 students belonged to OBC, 58 SC and 73 ST categories.
- 352 students were enrolled in NSS (National Services Scheme) programme. Out of 352 sudents, 101 students were awarded "B" and 13 students were awarded "C" Certificate examination of NSS.
- Under NSS (National Service Scheme) programme, different activities like blood donation camp, Beti Bachao Abhiyan, Social Awareness Camp, Awareness about AIDS, Literacy, Pulse Polio Abhiyan and Environment Day were organized.
- Under National Cadet Corps (NCC) programme, 45 Cadets passed "B" certificate examination and 33 cadets cleared "C" certificate examination.
- During 2014-15, the Youth festival of the University was held at College of Agriculture, Indore. A total 125 students from the 5 constituent colleges of the University participated in this festival.
- In the Youth festival of the University, students of College of Agriculture, Gwalior were winners in One Act Play, Folk dance, Skit; students of College of Agriculture, Indore were winners in Elocution, Patriotic Song, Group Song, Rangoli competition, Mono acting, Cartooning, Poster Making; students of College of Agriculture, Sehore were winners in Debat, Solo Song; Students of College of Agriculture, Khandwa were winners in Extempore, Quiz Competition, On spot painting and students of College of Horticulture, Mandsaur were winners in Clay Modeling and Mime.
- Debate competition on topic "Commitment rather than employment is more important for youth empowerment" was held on 8/12/2014 at College of Agriculture, Indore.
- Intercollegiate Sports Competitions Programme "SPANDAN-2015" was successfully organized during 26th to 28th February 2015 at B.M. College of Agriculture, Khandwa in

which teams of five constituent colleges *viz.* Gwalior, Sehore, Indore, Mandsaur and Khandwa participated in six sports activities, namely, Badminton, Table Tennis, Volley-Ball, Kho-Kho, Chess and Carrom.

- Project "**FRAGRANCE**" was initiated at B.M. College of Agriculture, Khandwa to stimulate and sensitize the students for various competitive exams like JRF/SRF/ARS etc.
- Through campus interviews, 90 students have obtained jobs in leading private sectors, 17 students in Government/public sector and 02 students have created self employment.
- Through different libraries of the constituent Colleges, 129831 books were procured and available to the students out of which 3518 books and 16 e-books have been purchased during the reporting year. Apart from that, reports, thesis, CDs, e-books, periodicals etc. are also available in the library of constituent Colleges of the University.
- Total 9680 books were also made available to the students, teachers and scientists in the newly established library of the University.
- Several infrastructural facilities have been developed for up-gradation of teaching, such as model class rooms, internet network with CeRA and documentation services in library, Hi-tech horticultural units as well as innovative teaching aids. The hostels are equipped with internet facility.
- For updating the knowledge of their subjects, 42 scientists/teachers/extension personnels participated in various refresher courses and national training programmes conducted by ICAR/SAUs/UGC.
- The United Registrar of Systems awarded ISO 9001-2008 Certificate to the University on April 10, 2014.
- All India Coordinated Research Project on Dryland Agriculture, Main centre, College of Agriculture, Indore received the **Best AICRPDA Centre Award 2014** for outstanding contribution to dry land research during the biennium 2012-13 and 2013-14.
- Krishi Vigyan Kendra, Datia was awarded as the **Best NICRA KVK** for various climate resilient activities for the projected years 2011-2014 at CRIDA Hyderabad on November 29, 2014.
- KVK, Jhabua awarded with **"Utkrist KVK Samman(National) -2015"** of Mahindra & Mahindra Ltd. by Hon'ble Shri Radha Mohan Singh, Union Minister of Agriculture on February 24, 2015 in New Delhi.
- During the year (2014-15), 07 Scientists of the University went abroad to participate in various Conferences/ Meetings.
- Instructional orchards, herbal garden and seasonal crop cafeteria have been established and developed during the year.
- 81 research papers were published in referred journals of national and international repute.

RESEARCH:

- The new Pigeonpea Hybrid-RVICPH-2671 was developed by the University in collaboration with ICRISAT for cultivation in the medium vertisols soil of Madhya Pradesh. It takes 164-184 days to mature, is resistant to wilt and SMV, has high *dal* protein (24.7%) content and average yield is 2276-2852 kg/ha.
- Soybean variety RVS-2001-04 has been developed from JS-93-05 x EC-390981 by the University for Cultivation in the rainfed areas of Madhya Pradesh. It takes 92-95 days for maturity with an average yield of 2495 kg/ha.
- Lentil variety RVL-31 was developed by the University for timely sown rainfed conditions of Madhya Pradesh. It is early maturing (107 days) and is bold seeded with an average yield potential of 1200-1300 kg/ha.
- The varieties/hybrids of pearl millet RVB-1, cotton RVK-67, soybean RVS-2001-18, safedmusli RVSM-412, mustard RVM-1 and sorghum RVJ-1862 & RVICHS-28 were identified for release in the cultivation of Madhya Pradesh after assessment.
- Among the inter specific cotton hybrid tested in irrigated conditions, the highest seed yield (1815 kg/ha) was recorded by RHB-0708.
- In Bt Cotton hybrid Trial (5 Bt. CZ), the highest seed yield was found by the entry code No-3711 (1400 kg/ha).
- In Initial Hybrid and Advanced Varietal Hybrid Trial-I (IH&AVHT-I) highest yield of Safflower 3418 kg/ha was recorded by the entry IH-AVHT-13-6.
- Seven genotypes of Clusterbean were tested in AVT, out of these, genotypeRGr-12-5 gave significantly higher seed yield (815 kg/ha), net monetary return(₹ 25,224/ha) and BCR (2.46), over all the varieties.
- Mustard strain RMM-09-01-1 gave highest seed yield (2573 kg/ha) against zonal check RL-1359 (2497 kg/ha) and national check Kranti (2385 kg/ha).
- Entries of Chickpea *viz.* ICCV-03108, ICCV-03201, ICCV-03205, ICCV-03104, NBeG-47, ICCV-0810 IPC-12-242, IPC-12-227, IPC-12-194 and IPC-12-104 were identified as best tall and nonlodging high yielding entries.
- Under the AVT-I of Field pea (Tall) the genotype VIKASH recorded the highest seed yield of 2462 kg/ha followed by AMBICA (Ch) 2303 kg/ha.
- Maize entry Vivek Hybrid-9(c) and entry code No. 11 (6719 kg/ha) was the best among different entries.
- The entries of Ashwagandha *viz.* MWS-142, MWS-301, MWS-303, MWS-305, MWS-317, MWS-319, MWS-327, RAS-7, RAS-37 and RVA-100 were superior for dry root yield and entries MWS-106, MWS-130, MWS-131, MWS-206, MWS-207, MWS-217, MWS-316, MWS-319 and JA-134 were superior for highest seed yield.

- Highest seed yield of opium recorded by variety MOP-1090 (1088 kg/ha) followed by UOP-1285 (1000 kg/ha) and IC-15-28 (933 kg/ha).
- The maximum opium latex yield (56.5 kg/ha) was found in variety MOP-8 while the maximum latex yield (5.40 kg/ha) was recorded in variety MOP-1072.
- Fasciculated root yield of safed musali was recorded between 2111 kg/ha (MCB-409) to 3956 kg/ha (MCB-412).
- Among the table varieties of Grape, Pusa Urvashi performed better in terms of early bearing and high yielding. Under the colour seedless varieties, Flame Seedless and Kishmish Moldowsky gave more yield.
- Among the wine varieties, Shiraz, Tsimlasky chernyi and Grenache were found the best in terms of high yield, juice and acidity percentage.
- Among the white wine varieties of grapes, Chenin blance and Clariette were high yielder for berry and juice. Pusa Navrang stands first in term of high juice content and yield kg/vine.
- Dogridge rootstock was found the best for grafting of table varieties like Pusa Urvashi, Thompson seedless and new perlette. Flame seedless variety gave more yield on Salt creek rootstock.
- Variety JSI-97 of Safflower gave maximum yield (2200 kg/ha) under one irrigated condition.
- New entry of Wheat HI-8737 gave significantly higher grain yield (5623 kg/ha) under normal sown conditions followed by GW-322 (5130 kg/ha).
- Under the pearl millet-wheat cropping system, two hand weedings at 30 and 60 DAS gave maximum grain yield (4522 kg/ha) and net return.
- In Pigeonpea, *Rhizobium* strains *viz.* CPR-9 followed by GRR-12-11 showed constantly higher grain yield, over un-inoculated control.
- In Soybean crop, combination of Rynaxypyre 20EC + Imazethapyr 10SL was found better for yield and to control the weeds without adverse effect on soybean crop.
- A new molecule of herbicide, Sulfentrazone 48 SC @360 gram a.i./ha was found the best for weed control and increase the yeild of Soybean.
- In urdbean, application of Pendimethalin 30 EC + Imazethapyr 2 EC (Vallore 32) @ 0.75 kg/ha.-PE + Manual weeding at 35 DAS (day after sowing) gave highest yield (1238 kg/ha.).
- Six entries of Pearl millet *viz.* MH-1931, MH-1888, MPMH-17, RHB-173, HHB-146 and RIB-12-S-156 were found free from blast.
- In Pigeonpea, out of 60 entries, 8 entries *viz*. BSMR-736, BSMR-528, GRG-8118, BRG-3, WRP-1, GRG-2009, TS-3R and IP-8F were found resistant (below 10%) against *Fusarium udaum* in wilt sick plot.

- The minimum (8.59%) pod fly damage was recorded in profenophos+DDVP treated Pigeon pea plot while the maximum (46.13%) damage was recorded in control.
- The seed treatment of Mustard with carbendazim @ 2 gram/kg seed and 0.1% spray at 50 days after sowing gave 5.98% higher seed yield (1357 kg/ha) as compared to control (1115 kg/ha).
- The minimum (0.65 %) pod damage of chickpea by *Heliothis armigera* was recorded under treatment profenophos-rynaxypyre while the maximum (2.52 %) damage by *Heliothis armigera* was observed in control

EXTENSION:

- Krishi mela **'Krishi Vijay-2014'** was one of the mega event of the year, which served as a platform for interaction of farmers and scientists.
- For the assessment of new technologies generated by RVSKVV, other universities or agencies, 261 On Farm Trials (OFT_s) were conducted at farmers' field on various thematic areas related to crops, animals, machineries, PHM etc. that benefitted 2655 farmers.
- For the purpose of demonstration of new technologies**,** 609 Front Line Demonstrations (FLD) were carried out on crops, drudgery reduction, fisheries, live stock, vermi-compost, fodder, value addition, post harvest management, cropping system, malnutrition, farm machinery etc. by benefitting 5312 farmers.
- During the year, total 1942 training courses were organized which benefited 63,437 participants including farmers and farm women, rural youth, extension personnel and Govt. officials.
- In order to create awareness among farmers of the region, other extension activities like farmer fairs (37) were organized which benefited 73638 farmers.
- KVKs scientists collected and analyzed 5493 soil samples for the benefit of 6053 farmers of the region.
- Under mass communication measures, 72 Folders, 15 Booklets, 05 Leaflets, 29 Extension Bulletins, 01 Training Manual and 89 popular articles were brought out.
- Under Kisan Mobile Advisory Services, 1897 messages related to new technologies were sent to 5,49,894 beneficiaries.
- The Scientific Advisory Committee Meetings have been conducted twice in a year *i.e.* Pre Rabi and Pre Kharif season to review the activities of the KVKs and to formulate the action plan. The SAC has reputed farmers of the region and representatives from various government departments among its members. During the reporting year, 46 SAC meetings have been conducted and 1289 members were participated in the meetings.

- Directorate of Extension organized 5 training programmes and 4 workshops on different themes in which scientists, farmers and inservice personals were participated.
- A total of 1000 News letters, 300 Krishi Vijay-Kisan Mela Visheshank, 1000 New Year Diary-2015 and 1200 New Year Calendar-2015 were published by the Directorate of Extension Services.
- Total 5194.29 quintals seed of oilseed, pulses, vegetables, spices and cereals and 224710 planting materials were produced and supplied to the famers, government agencies and co-operative agencies.

कार्यकारी सारांश

राजमाता विजयाराजे सिंधिया कृषि विश्वविद्यालय, ग्वालियर (म.प्र.) की स्थापना १६ अगस्त २००८ को हुई। विश्वविद्यालय तभी से ही कृषि समुदाय की सभी आवश्यकताओं की पूर्ति में कार्यरत है। यह विश्वविद्यालय नवीन होने के बावजूद कृषि एवं कृषि सम्बंधी विज्ञानों के क्षेत्रों में अपनी उपस्थिती दर्ज करा रहा है।

विश्वविद्यालय का उद्देश्य कृषि क्षेत्र में शैक्षणिक, अनुसंधान एवं प्रसार कार्य; उचित समाधान एवं तकनीक को ध्यान में रखते हुए करना है। विश्वविद्यालय के अन्तर्गत पाँच महाविद्यालय (चार कृषि एवं एक उद्यानिकी महाविद्यालय), पांच आंचलिक कृषि अनुसंधान केन्द्र, चार क्षेत्रीय अनुसंधान केन्द्र, छः विशेष अनुसंधान केन्द्र, उन्नीस कृषि विज्ञान केन्द्र एवं सत्ताईस अखिल भारतीय समन्वित अनुसंधान परियोजनायें शामिल हैं जो कि म.प्र. के छः कृषि जलवायुवीय क्षेत्रों एवं छब्बीस जिलों में फैले हुये हैं। इसके साथ ही दूसरी परियोजनायें जैसे गैर-योजनाकृत, योजनाकृत, आदिवासी उप-योजना एवं अनौपचारिक परियोजनायें भी क्रियाशील हैं।

वर्ष २०१४-१५ के दौरान विश्वविद्यालय द्वारा गुणवत्ता बढाने एवं उद्देश्यों की पूर्ती हेतु नये कदम उठायें गये है, जो इस प्रकार हैः-

शिक्षणः-

- विश्वविद्यालय द्वारा कृषि एवं उद्यानिकी के विभिन्न विषयों में दो स्नातक पाठ्यक्रम, बी.एससी. (कृषि) एवं बी. एस.सी. (उद्यानिकी), ग्यारह स्नातकोत्तर पाठ्यक्रम तथा नौ विद्या वाचस्पिती विषयों में उपाधि प्रदान की जाती है। कुल ६६६ सीटों में से स्नातक की ३६४, स्नातकोत्तर की २६६ एवं विद्या वाचस्पति की ६३ सीटों पर नये विद्यार्थियों को प्रवेश दिया जाता है। स्नातक स्तर की ३६४ सीटों में से, ३०८ सीटें बी.एससी. (कृषि) एवं ५६ सीटें बी.एससी. (उद्यानिकी) उपाधि पाठ्यक्रम की हैं। स्नातकोत्तर स्तर की २६६ सीटों में से, १६७ सीटें एम.एससी. (कृषि) एवं ७२ सीटें एम.एससी. (उद्यानिकी) उपाधि पाठ्यक्रम की हैं। समानरूप से विद्या वाचस्पति की कुल ६३ सीटों में से ४६ सीटें कृषि की एवं १४ सीटें उद्यानिकी पाठ्यक्रम पर आधारित है।
- वर्ष २०१४-१५ में विश्वविद्यालय के अन्तर्गत कुल १६६० विद्यार्थियों (१३७७ छात्र एवं ६१३ छात्रायें) ने प्रवेश लिया, इनमें से, १४१२ विद्यार्थी (६६३ छात्र एवं ४४६ छात्राऐं) स्नातक पाठ्यक्रम में, ५०७ विद्यार्थी (३५८ छात्र एवं १४६ छात्रायें) स्नातकोत्तर पाठ्यक्रम में तथा ७१ विद्यार्थी (५६ छात्र एवं १५ छात्रायें) विद्या वाचस्पति पाठ्यक्रमों में अध्ययनरत हैं।
- स्नातकोत्तर विद्यार्थियों द्वारा १२० थिसिस मूल्यांकन हेतु प्रस्तुत की गई। जिसमें से ८० थिसिस एम.एससी.(कृषि) तथा ४० एम.एससी. (उद्यानिकी) पाठ्यक्रमों की है।

- विद्या वाचस्पति उपाधि पाठ्यक्रम के विद्यार्थियों द्वारा ०७ शोध प्रबंध (थीसिस) मूल्यांकन हेतु प्रस्तुत की गई जिसमे से ०४ शोध प्रबंध (थीसिस) शस्य विज्ञान, ०२ शोध प्रबंध (थीसिस) पौध प्रजनन और अनुवंशिकी एवं ०१ उद्यानिकी पाठ्यक्रम की है।
- अनुभवजन्य अधिगम कार्यक्रम के अन्तर्गत चतुर्थ वर्ष के ३३७ छात्र (स्नातक कृषि एवं स्नातक उद्यानिकी) पंजीकृत हुये। कार्यक्रम के अन्तर्गत विद्यार्थियों में वर्तमान प्रतिस्पर्धी युग में कृषि एवं उधानिकी के क्षेत्र में स्वयं एवं अन्य जनो हेतु व्यवसाय प्रबंध एवं उद्यमिता के द्वारा रोजगार के अवसर पैदा करने की क्षमता का विकास तथा छात्रों में बाजार के अन्दर टिक सकने की क्षमता विकसित की जाती है।
- अनुभवजन्य अधिगम कार्यक्रम के अनुखण्ड नामतः फसल उत्पादन, फसल संरक्षण, बागवानी, पौधशाला उत्पादन एवं प्रबंधन, उच्च मूल्य वाली सब्जियों की संरक्षित खेती, फूलो की खेती और भू-दृश्य वास्तुकला एवं उद्यानिकी फसलों में मूल्य संवर्धन सफलतापूर्वक चल रहें हैं।
- ग्रामीण कृषि/उद्यानिकी कार्यानुभव कार्यक्रम के अन्तर्गत चतुर्थ वर्ष के ३३७ विद्यार्थियों को विभिन्न गांवो, अनुसंधान केन्द्रों एवं कृषि विज्ञान केन्द्रों पर किसानों की समस्याओं को समझने एवं समाधान करने के लिये भेजा गया।
- विश्वविद्यालय द्वारा ०८ स्वर्ण पदक अधिसूचित किये गये है जिसमे दो एम.एससी. (कृषि), दो एम.एससी. (उद्यानिकी), दो बी.एससी. (कृषि) एवं दो बी.एससी. (उद्यानिकी) पाठ्यक्रमों के लिये है।
- विश्वविद्यालय के २३ विद्यार्थियों ने कनिष्ठ अनुसंधान अध्येतावृत्ति परीक्षा में अहर्ता प्राप्त की। इसमें से ०१ विद्यार्थी को कनिष्ठ अनुसंधान अध्येतावृत्ति प्राप्त हुई।
- विश्वविद्यालय में २१ विद्यार्थियों ने राष्ट्रीय प्रतिभा छात्रवृत्ति (एन.टी.एस.), २५ विद्यार्थियों ने विक्रमादित्य छात्रवृत्ति योजना एवं ०३ विद्यार्थियों ने गॉव की बेटी योजना में छात्रवृत्ति प्राप्त की।
- इस वर्ष विश्वविद्यालय के २६३ विद्यार्थियों को राज्य सरकार छात्रवृत्ति प्राप्त हुई जिनमे से १३२ छात्र अन्य पिछड़ा वर्ग, ५८ अनुसूचित जाति एवं ७३ अनुसूचित जनजाति वर्ग के है।
- राष्ट्रीय सेवा योजना के अन्तर्गत-३५२ विद्यार्थी शामिल हुये। ३५२ विद्यार्थियों में से १०१ विद्यार्थी “बी” प्रमाण पत्र एवं १३ विद्यार्थी “सी” प्रमाण पत्र से पुरस्कृत हुये।
- राष्ट्रीय सेवा योजना के अन्तर्गत विद्यार्थियों द्वारा विभिन्न गतिविधियों जैसे रक्तदान शिविर, बेटी बचाओं अभियान, सामाजिक जागरूकता अभियान, एड्स जागरूकता अभियान, शिक्षा, पल्स पोलियो अभियान एवं पर्यावरण दिवस आदि आयोजित की गई ।
- राष्ट्रीय केडेट कोर के अन्तर्गत ४५ छात्रों ने “बी” प्रमाण पत्र एवं ३३ छात्रों ने “सी” प्रमाण पत्र परीक्षा उतीर्ण की।
- वर्ष २०१४-१५ में विश्वविद्यालय का युवा महोत्सव कृषि महाविद्यालय, इन्दौर में आयोजित किया गया। इसमे विश्वविद्यालय के पॉचों संघटक महाविद्यालयों के कुल १२५ प्रतिभगियों ने भाग लिया ।
- वर्ष २०१४-१५ में विश्वविद्यालय के युवा महोत्सव में एकल नाटक, लोकनृत्य एवं गीत प्रतियोगिता में कृषि महाविद्यालय, ग्वालियर के विद्यार्थी; वाग्मिता, देशभक्ति गीत, समूह गीत, रंगोली प्रतियोगिता, एकल अभिनय, कार्टूनिंग, पोस्टर बनाने में कृषि महाविद्यालय, इन्दौर के विद्यार्थी; वाद-विवाद, एकल गायन में कृषि महाविद्यालय, सीहोर के

विद्यार्थी; आशु, क्विज प्रतियोगिता, हाजिर चित्रकला में कृषि महाविद्यालय, खण्डवा के विद्यार्थी एवं क्ले मॉडलिंग, नक्काली में उद्यानिकी महाविद्यालय, मंदसौर के विद्यार्थी विजयी रहे।

- कृषि महाविद्यालय, इन्दौर में "युवओं के सशक्तिीकरण के लिये रोजगार के बजाय प्रतिबद्धता अधिक महत्वपूर्ण है" विषय पर बहस प्रतियोगिता दिनांक ०८/१२/२०१४ को आयोजित की गई ।
- बी.एम कृषि महाविद्यालय, खण्डवा में २६ से २८ फरवरी २०१५ के दौरान **"स्पंदन-२०१५"** कार्यक्रम के तहत अर्न्तमहाविद्यालयीन खेल प्रतियोगितायें सफलतापूर्वक आयोजित की गई। जिसमे पांच संघटक महाविद्यालयों ग्वालियर, सीहोर, इन्दौर, खण्डवा एवं मंदसौर की टीमों ने छहः खेल गतिविधियों जैसे बैडमिंटन, टेबल-टेनिस, वाली-वॉल, खो-खो, शतरंज एवं कैरम में भाग लिया ।
- बी.एम. कृषि महाविद्यालय, खण्डवा में परियोजना **"FRAGRANCE"** से छात्रों को विभिन्न प्रतियोगी परीक्षाओं जैसे जेआरएफ/ एसआरएफ/ एआरएस आदि के लिए जागरूक करने की पहल शुरू की गई।
- विश्वविद्यालयीन परिसर साक्षात्कारों के द्वारा ६० विद्यार्थियों ने निजी, १७ विद्यार्थियों ने सरकारी एवं ०२ विद्यार्थियों ने स्वरोजगार क्षेत्रों में रोजगार प्राप्त किया।
- विश्वविद्यालय के विभिन्न महाविद्यालयों के पुस्तकालयों द्वारा विद्यार्थियों को १२६८३१ पुस्तकें उपलब्ध कराई गई, जिसमें से ३५१८ पुस्तकें एवं १६ ई-पुस्तके इस वर्ष क्रय की गई। इसके अलावा शोधग्रंथ अध्यापन, सघन संग्रहण इकाई, ई-पुस्तक एवं नियतकालिक पत्रिकायें भी सम्बन्धित महाविद्यालयों के पुस्तकालयों में उपलब्ध कराई गई।
- विश्वविद्यालय के नवस्थापित पुस्तकालय द्वारा छात्रों, शिक्षको और वैज्ञाकनिको को कुल ६६८० पुस्तके उपलब्ध कराई गई ।
- शिक्षण को उच्च स्तर का बनाने के लिये कई आधारभूत सुविधायें जैसे आदर्श कक्ष, इन्टरनेट की सुविधा, सी.ई.आर.ए. की सुविधा के साथ पुस्तकालय, उच्चस्तरीय उद्यानिकी इकाईयां एवं शिक्षण में नवाचार आदि विकसित की गई है। विद्यार्थियों के लिये छात्रावास में भी इन्टरनेट की सुविधा प्रदान की गई है।
- विश्वविद्यालय के ४२ वैज्ञानिकों/ प्राध्यापकों/ प्रसार कार्यकर्ताओं ने विभिन्न पुनश्चर्या पाठ्यक्रम एवं राष्ट्रीय प्रशिक्षण कार्यक्रमों, जो कि भारतीय कृषि अनुसंधान परिषद/राज्य कृषि विश्वविद्यालय/ विश्वविद्यालय अनुदान आयोग के द्वारा आयोजित किये गये, में भाग लिया।
- विश्वविद्यालय को यूनाईटेड रजिस्ट्रार ऑफ सिस्टम्स ने आईएसओ ६००१-२००८ प्रमाण पत्र से सम्मानित किया।
- शुष्क कृषि पर अखिल भारतीय समन्वित अनुसंधान परियोजना के मुख्य केन्द्र कृषि महाविद्यालय, इन्दौर को द्विवार्षिकी २०१२-१३ और २०१३-१४ के दौरान शुष्क भूमि अनुसंधान के क्षेत्र में उत्कृष्ट योगदान के लिये **सर्वश्रेष्ठ एआईसीआरपीडीए केन्द्र अवार्ड २०१४** से सम्मानित किया गया।
- कृषि विज्ञान केन्द्र, दतिया को प्रक्षेपित वर्ष २०११-२०१४ के लिये विभिन्न जलवायु स्थिति-स्थापक गतिविधियों के लिये केन्द्रीय शुष्क कृषि अनुसंधान संस्थान, हैदराबाद में २६ नवम्बर, २०१४ को **श्रेष्ठ निक्रा (जलवायु अनुरूप कृषि पर राष्ट्रीय नवाचार) कृषि विज्ञान केन्द** के रूप में सम्मानित किया गया।

- कृषि विज्ञान केन्द्र, झाबुआ को माननीय श्री राधामोहन सिंह, केबिनेट कृषि मंत्री के द्वारा महिन्द्रा एण्ड महिन्द्रा लिमि. के **'उत्कृष्ट कृषि विज्ञान केन्द्र सम्मान (राष्ट्रीय) महिन्द्रा समृद्धि पुरस्कार २०१५'** से २४ फरवरी, २०१५ को नई दिल्ली में सम्मानित किया गया।
- वर्ष २०१४-१५ के दौरान विश्वविद्यालय के ०७ वैज्ञानिक, सेमीनार/ परिचर्चा में शामिल होने के लिये विदेश गये।
- इस वर्ष के दौरान शैक्षणिक बगीचे, औषधीय एवं मौसमी फसल केफेटेरिया की स्थापना एवं विकास किया गया।
- ८१ शोध पत्र विभिन्न राष्ट्रीय एवं अर्न्तराष्ट्रीय शोध पत्रिकाओं में प्रकाशित किये गये।

अनुसंधानः-

- विश्वविद्यालय द्वारा, मध्यप्रदेश के मध्यम वर्टिसोल्स मृदा में खेती के लिए अरहर की नई संकर किस्म आर.वी.आई. सी.पी.एच.-२६७१ विकसित की गई। यह किस्म पकने के लिये १६४-१८४ दिन, विल्ट और एसएमवी के लिये प्रतिरोधी, उच्च दाल प्रोटीन (२४.७ प्रतिशत) के साथ २२७६-२८५२ किलोग्राम प्रति हेक्टेयर औसत उपज देने वाली है।

- विश्वविद्यालय द्वारा, मध्यप्रदेश के वर्षा आधारित क्षेत्रों में खेती के लिए सोयाबीन की किस्म आरवीएस-२००१-०४; जेएस-९३-०५ एवं ईसी-३६०९८१ किस्मों से विकसित की गई है। यह किस्म ९२-९५ दिनों में पककर २४९५ किलोग्रम प्रति हेक्टेयर औसत पैदावार देती है।

- मध्यप्रदेश में समय पर बुआई वाले वर्षा आधारित क्षेत्रों के लिए विश्वविद्यालय द्वारा एसपीएस के द्वारा मसूर की किस्म आरवीएल-३१ विकसित की गई है। यह जल्दी पकने (१०७ दिन), बड़े आकार के बीज और १२००-१३०० किलो प्रति हेक्टेयर औसत उपज क्षमता वाली किस्म है।

- बाजरा की आरवीबी-१, कपास की आरवीके-६७, सोयाबीन की आरवीएस-२००१-१८, सफेद मूसली की आरवीएसएम-४१२, सरसों की आरवीएम-१ तथा ज्वार की आरवीजे-१८६२ एवं आरवीआईसीएचएस-२८ प्रजातियों/ संकर किस्मों की मध्यप्रदेश में आकलन उपरांत जारी किये जाने हेतु पहचान की गई है।

- अंतरवंशीय कपास की संकर प्रजातियों के सिंचित परिस्थितियों में परीक्षण में आरएचबी-०७०८ द्वारा उच्चतम बीज उपज (१८१५ किलो प्रति हेक्टेयर) प्राप्त हुई।

- बीटी कॉटन संकर परीक्षण (५ बीटी सीजेड) में, प्रविष्ट कोड ३७११ द्वारा उच्चतम बीज उपज (१४०० किलो प्रति हेक्टेयर) प्राप्त हुई।
- प्रारंभिक संकर और उन्नत प्रजातीय संकर परीक्षण-I (IH&AVHT-I) में कुसुम की सबसे अधिक पैदावार ३४१८ किलोग्राम प्रति हेक्टेयर प्रविष्टि IH&AVHT-13-6 द्वारा प्राप्त हुयी।
- ग्वारफली के सात जीनोटाइप्स का एवीटी में परीक्षण किया गया, इनमें से जीनोटाइप आरजीआर-१२-५ में अन्य जीनोटाइप्स की तुलना में सबसे अधिक बीज उपज (८१५ किलोग्राम प्रति हेक्टेयर), शुद्ध लाभ (रू. २५,२२४ प्रति हेक्टयर) और लाभः लागत अनुपात (२.४६) प्राप्त हुआ।

- सरसो की लाईन आरएमएम-०६-०१-१ (२५७३ किलोग्राम प्रति हेक्टेयर) से जोनल चेक आरएल-१३५६ (२४६७ किलोग्राम प्रति हेक्टेयर) एवं राष्ट्रीय चेक क्रांति (२३८५ किलोग्राम प्रति हेक्टेयर) की तुलना में उच्चतम बीज उपज प्राप्त हुई।
- काबुली चने की प्रविष्टियों आईसीसीवी-03108, आईसीसीवी-03201, आईसीसीवी-03205, आईसीसीवी-03104, एनबीईजी-47, आईसीसीवी-0810 आईपीसी-12-242, आईपीसी-12-227, आईपीसी-12-194 और आईपीसी 12-104 की पहचान लंबी एवं नॉन-लॉजिग अधिक उपज देने वाली उत्कृष्ट प्रविष्टियों के रूप में की गई।
- एवीटी I में मटर (लंबी) के जीनोटाइप **'विकास'** के द्वारा अधिकतम बीज उपज (२४६२ किलो प्रति हेक्टेयर) प्राप्त हुई। इसके बाद **'अंबिका'** (चेक) द्वारा २३०३ किलोग्राम प्रति हेक्टेयर उपज प्राप्त की गई।
- मक्का की प्रविष्टि विवेक हाइब्रिड-६(सी) एवं प्रविष्टि संख्या ११ अन्य प्रविष्टियों के बीच सबसे अच्छी पायी गई।
- अश्वगंधा की प्रविष्टियॉ जैसे एमडब्ल्यूएस-142, एमडब्ल्यूएस-301, एमडब्ल्यूएस-303, एमडब्ल्यूएस-305, एमडब्ल्यूएस-317, एमडब्ल्यूएस-319, एमडब्ल्यूएस-327, आरएएस-7, आरएएस-37 और आरवीए-100, सूखी जडों के उत्पादन के लिये बेहतर पायी गई एवं प्रविष्टियॉ जैसे एमडब्ल्यूएस-106, एमडब्ल्यूएस-130, एमडब्ल्यूएस-131, एमडब्ल्यूएस-206, एमडब्ल्यूएस-207, एमडब्ल्यूएस-217, एमडब्ल्यूएस-316, एमडब्ल्यूएस-319 और जेए-134 अधिकतम बीज उत्पादन के लिये बेहतर पायी गई।
- अफीम की अधिकतम बीज उपज (१,०८८ किलोग्राम प्रति हेक्टेयर) एमओपी-१०६० प्रजाति से प्राप्त हुई। इसके बाद यूओपी-१२८५ (१००० किलोग्रम प्रति हेक्टेयर) एवं आईसी-१५-२८ (६३३ किलोग्राम प्रति हेक्टेयर) की उपज थी।
- अफीम में लेटेक्स की अधिकतम उपज (५६.५ किलोग्राम प्रति हेक्टेयर) एमओपी-८ प्रजाति से प्राप्त हुई जबकि न्यूनतम उपज (५.४० किलो प्रति हेक्टेयर) एमओपी-१०७२ प्रजाति से प्राप्त हुई।
- सफेद मूसली की फेसीकुलेटेड जडों की उपज २१११ किलो प्रति हेक्टेयर (एमसीबी-४०६) से ३६५६ किलोग्राम प्रति हेक्टेयर (एमसीबी-४१२) के बीच दर्ज की गई।
- अंगूर की टेबल प्रजातियों में से **पूसा उर्वशी** ने जल्दी फलने एवं अधिक उपज देने के मामले में बेहतर प्रदर्शन किया। अंगूर की रंगीन बीजरहित प्रजातियों में फ्लेम सीडलैस एवं किशमिश मोल्डोवोस्की से अधिक उपज प्राप्त हुयी।
- अंगूर की शराब वाली किस्मों में शिराज, सिमलैस्की चॅरनी एवं ग्रेनकी अधिक उत्पादन, रस एवं अम्लता प्रतिशत के लिये बेहतर पायी गई।
- अंगूर की सफेद शराब वाली किस्में जैसे चेनिन ब्लेन्स एवं क्लेरिटी; फलों एवं रस के अधिक उत्पादन वाली है। पूसा नवरंग, उच्च रस एवं उच्च उत्पादकता (किलोग्राम प्रति बेल) के मामले में प्रथम स्थान पर रही।
- डोगरिज मूलवृंत, अंगूर की टेबल प्रजातियों जैसे पूसा उर्वशी, थॉम्पसन बीजरहित एवं न्यू परलेट के उपरोपण के लिये सबसे अच्छा पाया गया। फ्लैम सीडलैश प्रजाति की मूलवृंत साल्ट क्रीक पर उपरोपण उपरांत सबसे अधिक पैदावार पायी गई।

- कुसुम की किस्म जेएसआई-९७ के द्वारा एक सिचाई के साथ अधिकतम उपज २२०० किलोग्राम प्रति हेक्टे.प्राप्त हुई।
- गेहूं की नई प्रविष्टि एचआई-८७३७ के द्वारा सामान्य बुआई की दशा मे उल्लेखनीय रूप से अधिक उपज (५६२३ किलोग्राम प्रति हेक्टेयर) प्राप्त हुई। इसके बाद जीडब्ल्यू-३२२ के द्वारा ५१३० किलोग्राम प्रति हेक्टेयर उपज प्राप्त हुई।
- बाजरा-गेहूं फसल प्रणाली के तहत बुआई के ३० और ६० दिनों पर हाथों के द्वारा दो बार निंदाई द्वारा अधिकतम अनाज उपज (४५२२ किलोग्राम प्रति हेक्टेयर) एवं शुद्ध लाभ प्राप्त हुआ।
- अरहर में अनुपचारित नियंत्रण की तुलना में, राइजोबियम स्ट्रेन्स जैसे सीपीआर-९ के बाद जीआरआर-१२-१ लगातार अधिक अनाज उत्पादन करने में सहायक पायी गई।
- सोयाबीन फसल में, संयुक्त रूप से राईनाएक्सीपाइरे २० ईसी + इमैजीथापयर १० एसएल, प्रतिकूल प्रभाव डाले बिना खरपतवारों को नियंत्रित करने हेतु अच्छे पाये गये।
- सोयाबीन फसल में शाकनाशी का एक नया मोलिक्यूल सल्फेनाट्रेजोन ४८ एससी @ ३६० ग्राम ए.आई. प्रति हेक्टेयर प्रयोग करने पर खरपतवार नियत्रंण एवं बीज उपज में वृद्धि पाई गयी।
- उड़द में पैन्डीमिथलिन ३० ई.सी.+ईमेजाथाइपर २ ई.सी. (वैल्लोर ३२) @ ०.७५ किलोग्राम प्रति हेक्टेयर पीई का प्रयोग + बुआई के ३५ दिन बाद हाथो से निराई करने पर १२३८ किलोग्राम प्रति हेक्टेयर उपज प्राप्त हुई।
- बाजरे की ०६ प्रविष्टियॉ जैसे एमएच-१९३१, एमएच-१८८८, एमपीएमएच-१७, आरएचबी-१७३, एचएचबी-१४६ और आरआईबी-१२-एस-१५६; ब्लास्ट से मुक्त पायी गई।
- अरहर की ६० प्रविष्टियों में से; ०८ प्रविष्टियॉ जैसे बीएसएमआर-७३६, बीएसएमआर-५२८, जीआरसी-८११८, बीआरजी-३, डब्ल्यूआरपी-१, जीआरजी-२००९, टीएस-३आर और आईपी-८एफ ने विल्ट ग्रसित भूखण्ड में फ्यूजैरियम उड्यम के विरूद्ध प्रतिरोधकता (१० प्रतिशत से कम) प्रदर्शित की।
- अरहर में प्रोफेनोफॉस + डीडीवीपी से उपचारित भूखण्ड में फली मक्खी के द्वारा न्यूनतम क्षति (८.५९ प्रतिशत) दर्ज की गई अधिकतम (४६.१३ प्रतिशत) क्षति अनुपचारित नियंत्रण में पायी गई।
- सरसों का कार्बेन्डाजिम @ २.०० ग्राम प्रति किलोग्रम बीज द्वारा बीजोपचार और बुआई के ५० दिनो बाद ०.१ प्रतिशत छिड़काव के द्वारा, नियंत्रित भूखण्ड की बीज उपज (१११५ किलोग्राम प्रति हेक्टेयर) की तुलना में ५.९८ प्रतिशत अधिक बीज उपज (१३५७ किलोग्राम प्रति हेक्टेयर) प्राप्त हुई।
- चने में प्रोफेनोफोस-राइनाएक्सपायरी के प्रयोग से *हेलियोथिस आरमीजेरा* के द्वारा फलियों की क्षति ०.६५ प्रतिशत पायी गई, जबकि अनुपचारित चेक में यह क्षति २.५२ प्रतिशत रही।

प्रसारः-

- कृषि मेला **'कृषि विजय २०१४'**, जो साल के बड़े आयोजनो में से एक था, जिसने किसानो एवं वैज्ञानिको की बातचीत के लिये एक मंच के रूप में कार्य किया।
- आर.व्ही.एस.के.व्ही.व्ही, दूसरे विश्वविद्यालयों एवं अन्य संस्थायों द्वारा खोजी गई नई तकनीकों के प्रभाव को जानने के लिए विभिन्न विषयक क्षेत्रों जैसे फसल, पशुपालन, कृषियंत्र, तुड़ाई उपरान्त प्रबन्धन पर आधारित २६१ खेत परीक्षण आयोजित किये गये जिससे २६५५ किसान लाभान्वित हुये ।
- नई तकनीकों के प्रदर्शन के उद्देश्य से फसल, खिचाव को कम करना, मछली पालन, पशुपालन, केचुंआ खाद, चारा, मूल्य संवर्धन, तुड़ाई उपरान्त प्रबन्ध, फसल पद्धति, कुपोषण एवं मशीनों पर ६०९ अग्रिम पंक्ति प्रदर्शन डाले गये। इससे ५३१२ किसान लाभान्वित हुये ।
- इस वर्ष १९४२ प्रशिक्षण आयोजित किये गये, जिससें ६३,४३७ किसान, ग्रामीण युवा, महिलायें, प्रसार कार्यकर्ता एवं सरकारी कर्मचारी लाभान्वित हुये ।
- क्षेत्रों के किसानों में जागरूकता लाने के उद्देश्य से ३७ किसान मेले आयोजित किये गये, जिससे ७३६३८ किसान लाभान्वित हुये ।
- कृषि विज्ञान केन्द्रों के वैज्ञानिकों ने ५४९३ मृदा नमूने एकत्रित किये एवं इनका विश्लेषण कर ६०५३ किसानों को लाभान्वित किया ।
- वृहद् संचार तंत्र के रूप में ७२ फोल्डर, १५ पुस्तिका, ५ पत्रक, २९ प्रसार बुलेटिन, १ प्रशिक्षण मैनुअल एवं ८९ लोकप्रिय लेख प्रकाशित किये गये ।
- किसानों की फसल उत्पादन एवं संरक्षण से सम्बन्धित समस्याएं को किसान काल सेंटर के माध्यम से कृषि विज्ञान केन्द्रों के वैज्ञानिकों के द्वारा लघु संदेश सेवा को भेज कर हल की गई ।
- किसान मोबाईल सहायता सेवा के द्वारा १८९७ नई तकनीक से सम्बन्धित संदेश भेजे गये, जिसमें ५४९८९४ किसान लाभान्वित हुये ।
- एक वर्ष में वैज्ञानिक सलाहकार समिति की बैठक दो बार, रबी एवं खरीफ की फसल की बुआई के पूर्व कृषि विज्ञान केन्द्र की गतिविधियों का प्रगति प्रतिवेदन प्रस्तुत करने एवं कार्ययोजना बनाने के लिये आयोजित की जाती है। इस समिति में क्षेत्र के किसान, विभिन्न सरकारी संस्थाओं/विभागों के प्रतिनिधि शामिल होते हैं। इस वर्ष ४६ विशेष वैज्ञानिक सलाहकार समिति की बैठकें आयोजित की गई, जिसमें १२८९ सदस्य शामिल हुये ।
- प्रसार निदेशालय के द्वारा इस वर्ष ५ प्रशिक्षण कार्यक्रम एवं ४ कार्यशालाऐं विभिन्न विषयों पर आयोजित की गई, जिसमें वैज्ञानिकों, किसानों एवं शासकीय कर्मचारियों ने भाग लिया ।
- प्रसार सेवा निदेशालय ने विश्वविद्यालय १००० समाचार पत्र, ३०० कृषि विजय-किसान मेला विषेषांक, १००० नववर्ष दैनन्दिनी-२०१५ और १२०० नव वर्ष केलेण्डर-२०१५ प्रकाशित किये।
- तिलहन, दलहन, सब्जियों, मसालें एवं खाद्यान फसलों के ५१९४.२९ क्विंटल बीज एवं २२४७१० विभिन्न प्रकार की पौधरोपण सामग्री उत्पादित कर शासकीय विभागों एवं सहकारी संस्थाओं को उपलब्ध कराये गये।

1. INTRODUCTION

1. Mission:

- To impart education, conduct research and extension activities for enhancing productivity, optimization of profit, sustainability of agriculture and allied sectors and improving rural livelihood in the state of Madhya Pradesh.

2. Mandate:

- To serve as a centre of higher education in the field of agriculture and allied sciences.
- To conduct basic, strategic, applied and anticipatory research in the field of agriculture and allied sciences.
- To disseminate of technologies to farmers, extension personnel and organizations engaged in agricultural development through various extension programmes.
- To produce and supply of genuine seed and planting material to the farmers.

3. Area of Jurisdiction:

RVSKVV, Gwalior is responsible for Agricultural Education, Research and Extension in following 26 revenue districts of the state.

Revenue Districts

Sheopur, Morena, Bhind, Gwalior, Shivpuri, Guna, Ashoknagar, Datia, Dewas, Ratlam, Shajapur, Mandsaur, Neemuch, Ujjain, Indore, Dhar, Jhabua, Alirajpur, Khargone, Badwani, Khandwa, Burhanpur, Bhopal, Sehore, Rajgarh and Agar Malwa.

The area under University jurisdiction is a part of the Deccan Plateau and comprises plateaus with mean elevation of 1600 feet above mean sea level; inter spread with the mountains of the Vindhya and Satpura ranges. The maximum height of 1350 m is recorded in Satpura range on the other hand 150 m height is found in Chambal Valley. The main river systems are the Betwa, Chambal, Narmada, Sindh and Tapti. Nearly one third of the state area is covered with tropical forest. The area contains three types of soils, varying from alluvial to medium and heavy black Vertisols with six agro climatic zones.

The geographical area of the state under the University jurisdiction is 137.16 lakh hectare out of this, 74.72 lakh hectare is under cultivation, 24.51 lakh hectare under Kharif and 36.45 lakh hectare under rabi fallow. Out of the total cultivated area, 49.42% is irrigated. However, the area under irrigation varies from as low as 18.85% in Jhabua district to as high as 75.63% in Datia district.

The economy of the area is primarily agriculture based. Nearly 75% population is engaged in agriculture. The Malwa region abounds in rich black cotton soil. The low lying areas of Gwalior and Bundelkhand have light soils, whereas the Narmada Valley is formed by deep rich alluvial deposits.

4. Climatic Conditions:

The overall climate varies from semiarid to sub humid with hot summer; cool and dry winter with an average annual rainfall ranging from 600 to1000 mm. Mean annual rainfall is 1029.21mm.

In general, aberrant monsoon behavior is the common feature in the region that usually create abnormal weather conditions including long dry spells of 8-20 days duration in the middle of the season.

5. Agro Climatic Zones

Out of 11 agro climatic zones of the state, following six are under the jurisdiction of RVSKVV, Gwalior:

- Gird Zone
- Malwa Plateau
- Nimar Valley
- Jhabua Hills
- Vindhya Plateau (Partial)
- Bundelkhand Zone (Partial)

6. Major Crops and Cropping Pattern

- The main food crops of the area are wheat, rice, mustard, lentil and millets. Important among commercial crops grown in the area are pulses, oil seeds and medicinal crops. The state is poised for a breakthrough in soybean cultivation.

- The area coverage of soybean, groundnut and cotton under the jurisdiction of the University is 69, 66 and 55 per cent, which contributes to about 68, 67 and 56 per cent in total production of these crops in the state respectively. Chickpea, pea, black gram and wheat contributes about 35, 24, 54 and 48 per cent of the total state production from an area of only 20, 05, 46 and 40 per cent, respectively. The productivity of these crops in the region is higher than the state average.

- Area under horticultural crops is showing an increasing trend under the University jurisdiction. Mandarin, sweet oranges and limes under assured irrigation and guava, ber, aonla and custard apple without irrigation in Gird region, orange, grape,

chiku, mosambi and acidlime in Malwa plateau; banana, papaya, lime and chiku in Nimar valley and lime, ber, guava, aonla and custard apple in Jhabua hills bloom well. Vegetables like Tomato, Potato, Sweet potato, Brinjal, Okra, Cole crops (Cabbage, Cauliflower), Drumstick, Radish, Carrot, Cucurbits, Arbi, Beans and Leafy vegetables etc. are grown in large acrage. Among the spice crops, turmeric, corriander, ajwaine, chillies, garlic, fenugreek and fennel have their own specialities in different agro-climatic zones. The area coverage under seasonal flowers is also showing an increasing rend.

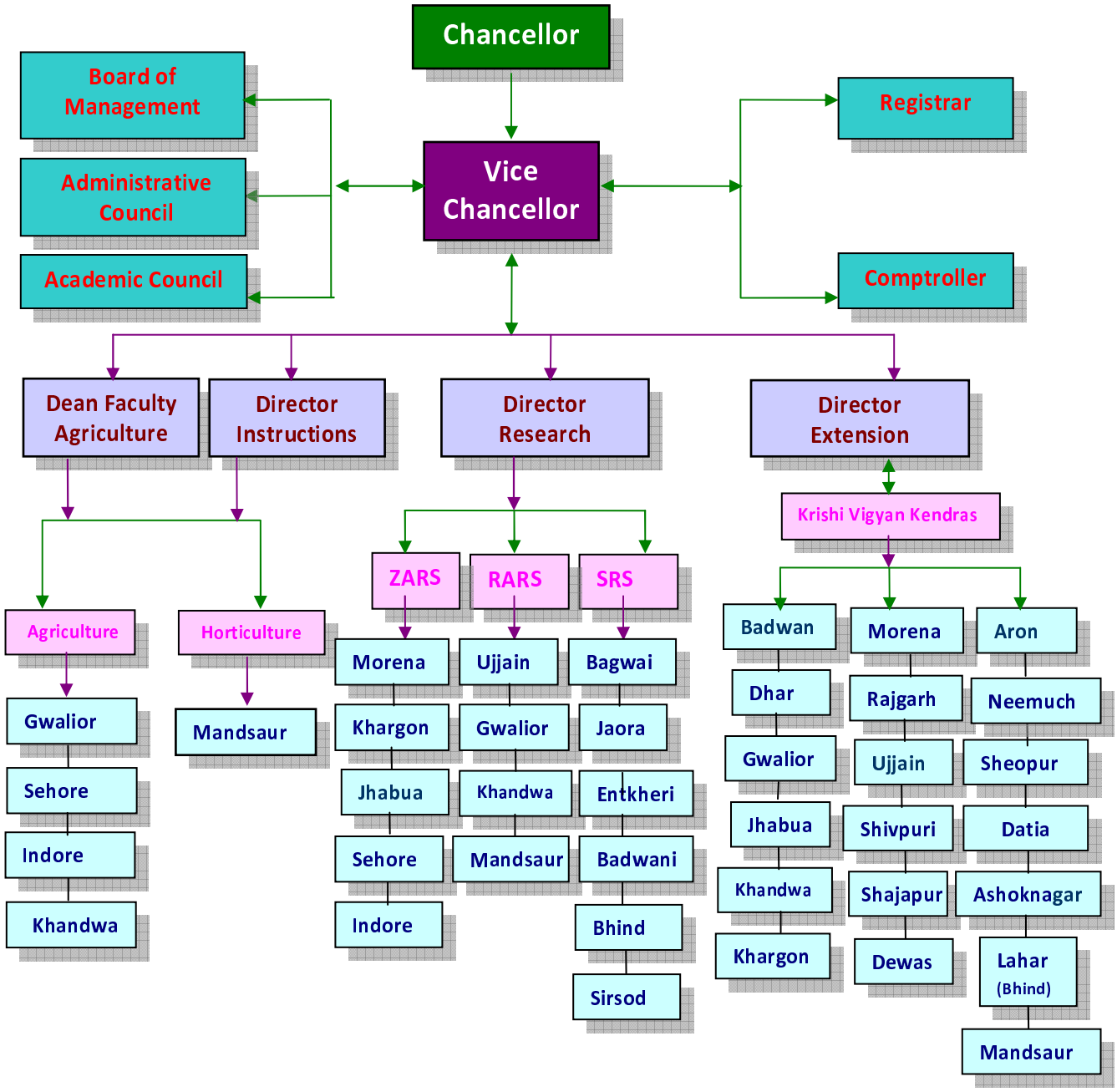
7. Organizational Setup:

His Excellency, the Governor of Madhya Pradesh, is the Chancellor of the University, and Vice-Chancellor is the Academic Head and Chief Executive of the University, who is supported by the following authorities:

- Board of Management
- Academic Council
- Administrative Council

The University comprises of Faculty of Agriculture headed by Faculty Dean. The constituent colleges are headed by respective Deans. Heads of the Departments are the key persons for teaching, research and extension of the respective discipline/department.

Director Instructions, Director Research Services and Director Extension Services are responsible University authorities for human resource development, research activities and extension activities, respectively. Registrar and Comptroller support the Vice-Chancellor in administration and financial matters. The organizational setup of the University is presented in the following flow chart.


Chancellor
Board of Management
Administrative Council
Academic Council
Vice Chancellor
Registrar
Comptroller
Dean Faculty Agriculture
Director Instructions
Director Research
Director Extension
Agriculture
Horticulture
Gwalior
Sehore
Indore
Khandwa
Mandsaur
ZARS
RARS
SRS
Morena
Khargon
Jhabua
Sehore
Indore
Ujjain
Gwalior
Khandwa
Mandsaur
Bagwai
Jaora
Entkheri
Badwani
Bhind
Sirsod
Krishi Vigyan Kendras
Badwan
Dhar
Gwalior
Jhabua
Khandwa
Khargon
Morena
Rajgarh
Ujjain
Shivpuri
Shajapur
Dewas
Aron
Neemuch
Sheopur
Datia
Ashoknagar
Lahar (Bhind)
Mandsaur

2. ACADEMIC HIGHLIGHTS:

Academic excellence is the backbone of every institute of higher learning. The responsibility increases many fold when the institute aspires for generating world class graduate with the competence to stand tall as a nation builder. It is through the dissemination of latest technologies and changing knowledge from the global prospective to grass root level, the desirable development in the broad area of agriculture can be attained. The demanding trends in Agriculture/Horticulture need to increase faculties in such field and disciplines with a tremendous market value so that the products of the University are not inclined to governmet jobs only but would be able to involve themselves in a variety of fields that can boost economy at the State and National level. Therefore resident instruction programme is carried out in the areas of Agriculture and Horticulture in four Agriculture colleges and one Horticulture College in the University.

2.1 Profile of the Colleges:

Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya offers undergraduate, post graduate and Ph.D. programmes in the faculty of Agriculture. At present, the University has four colleges of Agriculture and one college of Horticulture under the faculty of Agriculture. Four constituent Colleges of Agriculture are located at Gwalior, Indore, Sehore and Khandwa and one College of Horticulture is located at Mandsaur. All these colleges offer Under Graduate and Masters Degree Programmes in different disciplines. Ph.D. programme is offered only at College of Agriculture, Gwalior. The list of colleges with their location, year of establishment and degree programmes offered is given below.

CoA, Gwalior (1950)

CoA, Sehore (1952)

CoA, Indore (1959)

RAJMATA VIJAYARAJE SCINDIA KRISHI VISHWA VIDYALAYA, GWALIOR (2008)

CoA, Khandwa (1987)

CoH, Mandsaur (2002)

2.1.1 Details of the Colleges:

S. No.	Name of College with location	Year of Establishment	Degree Programme Offered
I	**Faculty of Agriculture**		
1.	**College of Agriculture, Gwalior**	1950	**(i) B.Sc. (Ag.)** **(ii) M.Sc. (Ag.)** (1) Agronomy (2) Entomology (3) Extension Education (4) Agriculture Economics & Farm Management (5) Plant Breeding and Genetics (6) Plant Pathology (7) Soil Science & Agricultural Chemistry (8) Fruit Science (9) Vegetable Science **(iii) Ph.D.** (1) Agronomy (2) Entomology (3) Extension Education (4) Agriculture Economics & Farm Management (5) Plant Breeding and Genetics (6) Plant Pathology (7) Soil Science & Agricultural Chemistry (8) Fruit Science (9) Vegetable Science
2.	**RAK College of Agriculture, Sehore**	1952	**(i) B.Sc. (Ag.)** **(ii) M.Sc. (Ag.)** (1) Agronomy (2) Entomology (3) Extension Education (4) Agriculture Economics & Farm Management (5) Plant Breeding and Genetics (6) Plant Pathology (7) Soil Science & Agricultural Chemistry (8) Vegetable Science
3.	**College of Agriculture, Indore**	1959	**(i) B.Sc. (Ag.)** **(ii) M.Sc. (Ag.)** (1) Agronomy (2) Entomology (3) Extension Education (4) Agriculture Economics & Farm Management (5) Plant Breeding and Genetics (6) Plant Pathology (7) Soil Science & Agricultural Chemistry (8) Vegetable Science
4.	**BM College of Agriculture, Khandwa**	1987	**(i) B.Sc. (Ag.)** **(ii) M.Sc. (Ag.)** Plant Pathology
5.	**KNK College of Horticulture, Mandsaur**	2002	**(i) B.Sc. (Hort.)** **(ii) M.Sc. (Hort.)** (1) Fruit Science (2) Vegetable Science (3) Plantation, Spices, Medicinal & Aromatic Crops (4) Floriculture & Landscape Architecture

Resident instruction programme is one of the mandates of the University i.e. impart education in Agriculture and Horticulture to produce gradutes and post gradutes ready to face the existing and new challenges in agriculture sector.

The University follows the semester system of education. Completion of a degree programme requires successful study of prescribed courses as approved by the Academic Council of the University. Course contents of all subjects are periodically updated and new courses are occasionally added to the degree requirement to cope up with the challenges of upcoming technology. The University follows 10 point scale evaluation system approved by ICAR. Individual attention of each and every student is ensured through the advisory system. At Under-Graduate level, for a group of 5-10 students, one faculty advisor is appointed for each class and at Post-Graduate level, for each student, an advisory committee consisting of 3-4 faculty members is appointed. The teacher/ advisory guide, supervises and monitors the academic performance of his/her advisees besides helping them in their personal problems. The advisor also maintains a close contact with parents/guardians of the students and informs them about the progress of their works/performance.

2.2 Admission Procedure

2.2.1 Under Graduate Programmes

Admission in first year of B.Sc. (Ag.) and B.Sc. (Hort.) is done on the basis of the merit list provided by the Professional Examination Board of the State Government, located at Bhopal. The board conducts a Pre-Agriculture Test (PAT) for B.Sc. (Ag.) and B.Sc. (Hort.). The roster for reservation of seats for UG and for PG as per provisions made by the State Government for different categories is strictly followed. All possible efforts are made to fill up all seats of different categories by repeated counseling of the students.

2.2.2 Post Graduate Programmes

Admissions in post graduate programmes are made by the University through joint entrance examination basis. As per merit list, admissions are given to the students in the subject of their choice; subject to the availability of seats. The roster of reservation is also followed for these admissions.

2.2.3 Ph.D. Programmes

Similarly, in Ph.D. programme admission is made through joint entrance examination basis.

2.3 Allocation of Seats and Roster:

During the academic year 2014-15, the total intake capacity was 696 out of which 364 were in undergraduate (UG), 269 in postgraduate (PG) and 63 in Ph.D degree programme. In the undergraduate level, out of 364 total seats, 308 seats were in B.Sc. (Ag.) and 56 in B.Sc. (Hort.) degree programme. In the post graduate level, out of 269 seats, 197 seats were in M.Sc. (Ag.) and 72 in M.Sc. (Hort.). Similarly, in Ph.D. programme, out of 63 total seats, 49 seats were in Agricultutre and 14 were in Horticulture discipline.

2.3.1 Intake Capacity (Degree wise):

S.No.	Faculty	Intake Capacity				Total
		Free seats	Payment seats	NRI	ICAR	
Dgree Programmes						
1.	B.Sc. (Ag.)	220	44	11	33	308
2.	B.Sc. (Hort.)	40	08	02	06	56
	Total	**260**	**52**	**13**	**39**	**364**
1.	M.Sc. (Ag.)	88	88	-	21	197
2.	M.Sc. (Hort.)	32	32	-	08	72
	Total	**120**	**120**	**-**	**29**	**269**
1.	Ph.D. Agriculture	28	14	**-**	07	49
2.	Ph.D. Horticulture	08	04	**-**	02	14
	Total	**36**	**18**	**-**	**09**	**63**
	Grand Total	**416**	**190**	**13**	**77**	**696**

*** Student Strength and Intake Capacity (College wise):**

S. No.	Name & Address of the College	Nomenclature of Degree Programme	Student Enrolled/ Strength			Intake Capacity of Students		
			UG (B+G)	PG (B+G)	Ph.D. (B+G)	UG	PG	Ph.D.
1.	College of Agriculture, Gwalior (M.P.)	B.Sc. (Ag.) M.Sc. (Ag./Hort.) Ph.D. (Ag./Hort.)	295 (214+81)	163 (120+43)	71 (56+15)	84	81	63 (49 Ag. + 14 Hort)
2.	College of Agriculture, Indore (M.P.)	B.Sc. (Ag.) M.Sc. (Ag./Hort.)	326 (218+108)	128 (75+53)	-	84	72	-
3.	RAK College of Agriculture, Sehore (M.P.)	B.Sc. (Ag.) M.Sc. (Ag./Hort.)	370 (242+128)	153 (118+35)	-	84	72	-
4.	College of Agriculture, Khandwa (M.P.)	B.Sc. (Ag.) M.Sc. (Ag.)	206 (144+62)	07 (06+01)	-	56	08	-
5.	KNK College of Horticulture, Mandsaur (M.P.)	B.Sc. (Hort.) M.Sc. (Hort.)	215 (145+70)	56 (39+17)	-	56	36	-
	Total	-	**1412 (963+449)**	**507 (358+149)**	**71 (56+15)**	**364**	**269**	**63**

2.3.2 Under Graduate: B.Sc. (Ag. /Hort.)

(A) B.Sc. (Ag.)

Allocation of Seats / Roster		Boys	Girls	Total
Free Seats	General	77	33	**110**
	ST	32	13	**45**
	SC	24	10	**34**
	OBC	20	11	**31**
Payment Seats		30	14	**44**
NRI Seats		-	-	**11**
Nominee/Fellow	ICAR	-	-	**33**
Total		**183**	**81**	**308**

(B.) B.Sc. (Hort.)

Allocation of Seats / Roster		Boys	Girls	Total
Free Seats	Gen.	14	06	20
	ST	05	03	08
	SC	05	02	07
	OBC	03	02	05
Payment Seats		06	02	08
NRI Seats		-	-	02
Nominee/Fellow	ICAR	-	-	06
Total		**33**	**15**	**56**

2.3.3 Post Graduate: M.Sc. (Ag. /Hort.):

(A) M.Sc. (Ag.)

S. No.	Department	Campus wise seats for PG programmes (Masters degree)											GRAND TOTAL
		Gwalior		Indore		Sehore		Khandwa		Total			
		F	P	F	P	F	P	F	P	ICAR	F	P	
1.	Agronomy	4	4	4	4	4	4	-	-	3	12	12	27
2.	Agril. Eco. & FM	4	4	4	4	4	4	-	-	3	12	12	27
3.	Entomology	4	4	4	4	4	4	-	-	3	12	12	27
4.	Extension Education	4	4	4	4	4	4	-	-	3	12	12	27
5.	Plant Breeding & Genetics	4	4	4	4	4	4	-	-	3	12	12	27
6.	Plant Pathology	4	4	4	4	4	4	4	4	3	16	16	35
7.	Soil Science & Agril. Chemistry	4	4	4	4	4	4	-	-	3	12	12	27
Total		**28**	**28**	**28**	**28**	**28**	**28**	**4**	**4**	**21**	**88**	**88**	**197**

(B) M.Sc. (Hort.)

S. No.	Department	Campus wise seats for PG programmes (Master degree)											
		Gwalior		Indore		Sehore		Mandsaur		Total			Total
										ICAR	TOTAL		
		F	P	F	P	F	P	F	P	F	F	P	
1.	Fruit Science	4	4	-	-	-	-	4	4	2	8	8	18
2.	Vegetable Science	4	4	4	4	4	4	4	4	4	16	16	36
3.	Plantation, Spices, Medicinal & Aromatic Crops	-	-	-	-	-	-	4	4	1	4	4	9
4.	Floriculture & Landscape Architecture	-	-	-	-	-	-	4	4	1	4	4	9
Total		**8**	**8**	**4**	**4**	**4**	**4**	**16**	**16**	**8**	**32**	**32**	**72**

2.3.4 Ph.D. (Ag./Hort.):

(A) Agriculture:

S.No.	Faculty	Intak Capacity				Total
		Free seats	Payment seats	NRI	ICAR	
1.	Ph.D. Agriculture	28	14	**-**	7	49

(B) Horticulture:

S.No.	Faculty	Intak Capacity				Total
		Free seats	Payment seats	NRI	ICAR	
1.	Ph.D. Horticulture	08	04	**-**	2	14

2.4 Students Strength:

2.4.1 Students Admitted:

S.No.	Degree Programme	No. of Students
1.	B.Sc. (Ag.)	289
2.	B.Sc. (Hort.)	52
	Total	**341**
1.	M.Sc. (Ag.)	203
2.	M.Sc. (Hort.)	27
	Total	**230**
1.	Ph.D. (Ag. /Hort.)	21
	Total	**21**
	Grand Total	**592**

2.4.2 Students Strength at a Glance:

During the year 2014-15, total 1990 students were on the roll of the University, out of which 1412 in UG 507 in PG and 71 in Ph.D. degree programmes.

S.No.	Degree Programme	No. of Students
1.	B.Sc. (Ag.)	1197
2.	B.Sc. (Hort.)	215
	Total	**1412**
1.	M.Sc. (Ag.)	451
2.	M.Sc. (Hort.)	56
	Total	**507**
1.	Ph.D. (Agri. /Hort.)	**71**
	G. Total	**1990**

2.4.3 Gender Wise Students Strength:

During the year 2014-15, a total of 1377 boys and 613 girls students were on the roll of the University, out of which, 963 boys and 449 girls were in UG, 358 boys and 149 girls in PG, and 56 boys and 15 girls were in Ph.D. degree programmes.

S.No.	Degree Programme	Gender Wise Students Strength		Total
		Boys	Girls	
1.	B.Sc. (Ag.)	818	379	1197
2.	B.Sc. (Hort.)	145	70	215
	Total	**963**	**449**	**1412**
1.	M.Sc. (Ag.)	319	132	451
2.	M.Sc. (Hort.)	39	17	56
	Total	**358**	**149**	**507**
1.	Ph.D. Agri./Hort.	56	15	71
	Total	**56**	**15**	**71**
	Grand Total	**1377**	**613**	**1990**

2.5 Teaching Status:

Completion of a degree programme requires successful study of the courses as approved by the Academic Council. Every student has to study a set of prescribed courses per semester. The semester wise courses offered and total credits covered in different undergraduate and postgraduate degree programmes are given below:

2.5.1 Under Graduate: B.Sc. (Ag. /Hort.)

(A) B.Sc. (Ag.)

B.Sc. (Ag.)	Courses offered (No.)		Total Credits	
	I Sem.	II Sem.	I Sem.	II Sem.
I Year	8	9	20 (14+6)	22 (14+8)
II Year	10	9	26 (15+11)	23 (13+10)
III Year	8	9	20 (13+7)	18 (10+8)
VI Year	5*	6**	20 (0+20)	20 (6+14)
Total	**26**	**33**	**86 (42+45)**	**83 (43+40)**

RAWE/RHWE*, ELP**

(B) B.Sc. (Hort.)

B.Sc. (Hort.)	Courses offered (No.)		Total Credits	
	I Sem.	II Sem.	I Sem.	II Sem.
I Year	11	09	21(13+8)	21(12+9)
II Year	10	09	25(14+11)	23(13+10)
III Year	08	08	19(11+8)	20(12+8)
VI Year	02	02	20(5+15)	20(5+15)
Total	**31**	**28**	**85**(43+42)	**84**(42+42)

2.5.2 Post Graduate: M.Sc. (Ag. /Hort.):

S. No.	Subject/Department	Courses offered (No.)		Total Credits	
		I Sem.	II Sem.	I Sem.	II Sem.
1.	Agronomy	11	09	21 (16+5)	19 (13+6)
2.	Agricultural Economics & Farm Management	10	11	17 (13+4)	22 (14+8)
3.	Entomology	10	11	16 (9+7)	21(13+8)
4.	Extension Education	10	09	18 (12+6)	18 (12+6)
5.	Plant Breeding & Genetics	10	09	20 (13+7)	16 (10+6)
6.	Plant Pathology	11	10	21 (14+7)	19 (12+7)
7.	Soil Science & Agricultural Chemistry	10	09	21 (14+7)	19(13+6)
8.	Fruit Science	10	09	22 (15+7)	16 (10+6)
9.	Vegetable Science	10	09	22 (15+7)	17 (11+6)
10.	Plantation, Spices, Medicinal & Aromatic Crops	10	09	22 (15+7)	17 (11+6)
11.	Floriculture & Landscape Architecture	10	09	22 (15+7)	18 (12+6)

2.5.3 Ph. D. (Ag./Hort.):

(A) Agriculture:

S. No.	Department	Course offered (No)		Total credits	
		I Sem	II Sem	I Sem	II Sem
1.	Agronomy	09	09	17(13+4)	14 (12+2)
2.	Agricultural Economics & FM	09	09	16 (11+5)	17 (11+6)
3.	Entomology	10	10	15 (11+4)	14 (10+4)
4.	Extension Education	09	09	16 (11+5)	18 (12+6)
5.	Plant Breeding & Genetics	09	09	12 (10+3)	16 (12+4)
6.	Plant Pathology	09	09	17 (11+6)	13 (10+3)
7.	Soil Science & Agricultural Chemistry	09	10	15 (12+3)	17 (14+3)

(B) Horticulture:

S. No.	Department	Course offered (No)		Total credits	
		I Sem	II Sem	I Sem	II Sem
1.	Fruit Science	09	08	17 (11+6)	13 (10+3)
2.	Vegetable Science	10	08	19 (12+7)	13 (10+3)

2.6 Experiential Learning Programme:

As per the recommendations of IV Deans' Committee that the B.Sc. (Ag.)/B.Sc. (Hort.) graduates must have adequate hands on experience on different aspects of agriculture/horticulture. For this purpose, the experiential learning programme has been introduced in the final year that includes different aspects of horticulture and agriculture.

Modules of Experiential learning programme	Nos. of students	Output
Module – I Crop Production	337	• Experience gained on production, protection and post harvest management of agri-horti commodity • Upgradation of Knowledge and Skills • Exposure and Practical experience to real work • Development of Analytical Attitude.
Seed Production Technology		
Remote Sensing, GIS & Land Use Planning		
Integrated Farming System		
Water Management		
Soil Management		
Management of Post Harvest Insect Pests & Diseases		
Module – II Crop Protection		
Integrated Pest & Disease Management		
Management of Post Harvest Insect Pests & Diseases		
Non Insect Pest Management		
Pesticides and Plant Protection Equipments		
Nursery Management of Horticultural Crops		
Integrated Farming System		
Module – III Horticulture		
Commercial Vegetable Production		
Commercial Floriculture		
Nursery Management of Horticultural Crops		
Processing & Value Addition of Horticultural Crops		
Integrated Pest & Disease Management		
Management of Post Harvest Insect Pests & Diseases		
Module IV		
Commercial Vegetable Production		
Nursery Management of Horticulture crops		
Protected cultivation of Horticultural crops and seed production of vegetable and flowers		
Processing and value addition of horticultural and crops		
Integrated Pest and Disease Management		
Mushroom cultivation		
Module V		
Nursery Production and management		
Module VI		
Protected cultivation of high value vegetable crops		
Module VII		
Floriculture & Landscape Gardening		
Module VIII		
Value addition in horticultural crops		

GLIMPSES OF EXPERIENTIAL LEARNING PROGRAMME

Pinching of shoots in protected cultivation of cucumber by students

Watering of Seedlings in Polyhouse

Sowing of ber seeds in Polyhouse

Prepration of Value added products under Experiential Learning Programme

Students with Experiential Learning Programme instructor

GLIMPSES OF EXPERIENTIAL LEARNING PROGRAMME

Pruning in Guava tree

Filling of Polybags in workingshed

Intercultural Operetons in Gailardia plot

Vegetable seedlings gown in Polybags

Root initiation in Guava Air layers

GLIMPSES OF EXPERIENTIAL LEARNING PROGRAMME

Students doing Staking in Tomato

Students doing Grading of Tomato grown in Polyhouse

Students doing cultural operations in Polyhouse

Students with Experiential Learning Programme

Value added products prepared by students under Experential Learning Programme

GLIMPSES OF EXPERIENTIAL LEARNING PROGRAMME

Students harvesting Cauliflower

Students selling Cauliflower

Nursery beds in the Greenhouse

Seedlings ready for transplanting

Harvesting of Tuberose Flowers

Selling of Tuberose flowers in the local flower market

GLIMPSES OF EXPERIENTIAL LEARNING PROGRAMME

Vegetable cultivation practices under Experential Learning Programme

Growing of vegetables under Learning by Doing Programme

Pruning in Pomegranate

Cultural practices in vegetable plots

Grading of vgetables

GLIMPSES OF EXPERIENTIAL LEARNING PROGRAMME

Cultural operations in Olericulture

Protected cultivation of vegetables

Drying of vegetables and fruits

Dried products of horticultural crops

Processing and value addition in horticultural crops by students unde Experential Learning Programme

GLIMPSES OF EXPERIENTIAL LEARNING PROGRAMME

Processed products prepared by students under Experential Learning Programme

Workshop on Mushroom production

Observation by students in Polyhouse

Crop production in polyhouse

Demonstration in Polyhouse

2.7 Rural Agricultural/ Horticultural Work Experience:

As a part of regular curriculum, the final year students of B.Sc. (Ag.) and B.Sc. (Hort.) are placed in rural areas for one semester in selected villages through Krishi Vigyan Kendras (KVKs) working in the region, where each student is attached to one host farmer for practical training with regards to crop production, crop protection, economics and also dynamics of the rural society. Further, some social activities were also performed by the students like sanitation in the village, plantation in the premises of primary and middle schools.

RAWE/RHWE AT A GLANCE

S. No.	Particular	Gwalior	Sehore	Indore	Khnadwa	Mandsaur
1.	**No. of student**	**(Boys+Girl) - 62**	**(Boys- Girls-)-91**	**(Boys-55+ Girls-32)-80**	**(Boys-34+Girls-14)-48**	**(Boys-Girls) -56**
2.	**Adopted villages/ KVKs**	KVK_s Shivpuri, Aron & Ashoknagar	KVK_s Dewas, Rajgarh & Shajapur	KVK_s Dhar, Jhabua & Ujjain	KVK_s Khargon & Barwani	KVK_s Neemuch & Jaora
3.	**Technologies Dessimenated**	Hybrid Verities of Bajra, Water conservation Technology, Seed treatment in rabi pulses, Spacing, Plant protection in soybean, Bajra, sesame, ground nut, pigeon pea. and mustard, Soil sampling, Application of Micro-nutrients	Soil testing, Use of improved seed, Seed treatment of different crops, Increase the use of organic manures, Different irrigation techniques, Water Harvesting, Biogas plant, Proposed improved cultural practices for Agricultural crops, vegetables and fruit crops, Mushroom production, Method and Result Demonstration of different agri.practices Collection of Germolasm, Tree plantation, Cleaning of village, Participation in Blood Donation Camp, Health Care Camp& Animal care Camp, Cleaning of Drinking Water, Participation in Adult Education programme, Giving Information about the cleanliness of Teeth, Cloths & Hand, Establishing a library in a village with the help of Sarpanch and young people of the village, Organizing Games, Sports, Social Service Clubs, Recreation clubs, kisan mandal, yuva mandal ,mahila mandal. & Bhajan mandals, Providing information through Bulletins, Charts, Graphs and samples, Repairing village Roads. Construction of soak pits and cleaning of drainage channels, The Case study of the beneficiaries of the various agricultural Development programmes like DPAP, IRDP, ATMA, TRYSEM, JRY, INDIRA AWAS YOJNA etc. Actively participation in Krishi Mahotsav 2014 with the department of Agriculture.	Study of Socio Economic Status of Farm Women, Innvoved in FLD Programs on Maize, Observe all Agronomical Practices Time to Time, Soil Sample collection for Testing, Gutti Budding in Ber, Mango and Aonla, Attended & Participated in all training program organized by KVK, Visited line Department *i.e.* Agriculture, Horticulture, ICDS, M.P. Agro, NGO, Cooperatives, Schools, Health Centre & Mandi, Performed social activity *i.e.* Nasha Mukti Abhiyan, Organized Krishak Sangoshthi, Learnd Indigenous Practices adopted by the farmers, PRA exercise and Bench Mark Survey, Collection of Germ plasm.	Demonstration of Improved varieties of Arhar, Cotton, Zinger, Chilly, Onion etc. on farmers' field, Drip Irrigation System, IPM, INM, Fruits and vegetable preservation, Post harvest management, Value addition of crops, Marketing strategies, Nursery Management etc.	Prepared Bordo mixer, improved cultivation of guava, Garlic, Onion, Chandrasur, Analysis of Soil sample, I.P.M. INM, storage techniques of Onion & Garlic & appropriate use of insecticide & fungicides.

2.8 Thesis Submitted:

2.8.1 M.Sc. (Agriculture/Horticulture):

S. No.	Title of the thesis	Name of the Student
(I) Department of Agronomy		
1.	Assessment of various weed management practices for soybean crop	Ramdas Rawat
2.	Integrated weed management against complex weed flora in barley (*Hordeum vulgare* L.)	Radha Morya
3.	Chemical and mechanical weed management practices in Blackgram (*Vigna mungo* L.)	Sawan Tayade
4.	Assessment of suitable post-emergence herbicides for clusterbean (*Cyamopsis tetragonoloba* L.)	Priyanka Sharma
5.	Effect of methods and time of nitrogen application on growth, yield attributes and yield of clusterbean [*Cyamopsis tetragonoloba* (L.)Taub]	Rakesh Dhakad
6.	Response of new wheat varieties in different dates of sowings, under Northern Madhya Pradesh	Ramswaroop Singh
7.	Assessment of post emergence hebricides for control of narrow-leaved weeds in sesame (*Sesamum indicum* L.)	Sourav Gupta
8.	Effect of date of sowing on oil content and yield of Safflower cultivars	Jyotimala Sahu
9.	Evaluation of different herbicides for control of weed flora in soybean [*Glycine max* (L.) Merrill]	Shivam Patidar
10.	Effect of land configuration integrated nutrient management and mulch on different cropping system in Malwa plateau in M.P.	Rani Hanwat
11.	Determination of suitable planting geometry and plant population of Safflower (*Carthamus tinctoeius* L.)	Ravindra Yada
12.	Evaluation of chickpea varieties under different moisture stress conditions	Sunil Khoiwal
13.	Effect of integrated nutrient management and mulch on soybean (*Glycine max* (L.) Morrill) Based inter cropping system	Pooja Rathore
14.	Contingent crop practices under aberrant monsoon conditions of Malwa region	Poonam Bansal
15.	Crop practices for higher productivity under aberrant monsoon conditions for malwa region	Swati Gokhle
16.	Effect of different post emergence herbicides on weed intensity and products of soybean (*Glycine Max* (L.) Merrill)	Suresh Kumar
(II) Department of Horticulture (1.Fruit Science 2. Vegetable Science 3. Plantation, Spices, Medicinal & Aromatic Crops 4. Floriculture & Landscape Architecture)		
17.	Effect of Preharvest Spray of Plant Growth Regulator & Urea on Growth Yield & quality of Ber	Baliram Karole

18.	Effect of Calcium Nitrate on Physicochemical Changes and Shelf Life of Aonla (*Embilica officinalis* Gaerth) fruit	Dhruv Kumar Lodhi
19.	Studies on Pre-harvest Spray of Ca, Zn & B for Prolonged Storability of Ber (*Zizyphus Mauritiana* Lamk.) cv. seb	Ajay Singh Rajput
20.	Effect of Foliar feeding on Fruit set Yield and Quality of Guava (*Psidium guajava* L.) cv. Chittidar	Seema Kewat
21.	Effect of Rooting media & Growth Regulator on Air Layering of Guava (*Psidium guajava* L.) cv. L-49	Jay Prakash Parmar
22.	Effect of Foliar Application of GA_3, Calcium & Borx on Shelf Life of Acid Lime (*Citrus Aurantifolia* Swingle)	Rajesh Maida
23.	Effect of Organic Media Indole-3 Butyric Acid and Colour of Polythene Wrapper On Success And Survival of Air Layering of Kagzi Lime (*Citrus Aurantifolia* Swingle)	Shyam Lal Charel
24.	Studies on Genetics Variability in Spine Gourd (*Momordica dioica* Roxb Ex.willd)	V. Prabhakar
25.	Effect of Integrated Nutrient management on growth, yield & quality of seed in French Bean (*Phaseolus vulgaris* L.)	Jayashri Barchiya
26.	Effect of Mulching on growth and curd yield of cauliflower (*Brassica oleracea* L. Var. *botrytis*)	Santosh kumar Maida
27.	Effect of Irrigation Regimes on growth and curd yield of cauliflower (*Brassica oleracea* var.*botrytis* L.)	Ashok Patlya
28.	Effect of plant growth Regulators on growth, yield and quality of summer Squesh (*Cucurbita Pepo* L.) under different growing condition	Sevekram Khajre
29.	Studies on weed management method in Rabi Onion (*Allium cepa* L.)	Chandni Patle
30.	Response of Gaillardia (*Gaillardia pulchella* foug.) cultivars to different Levels of Nitrogen	Bharat Parihar
31.	Effect of GA_3 on growth flowring and yield of Gaillardia (*Gaillardia pulchella* foug.)	Kailash Chouhan
32.	Effect of Spacing & Level of Potassium on growth & Flowering in Tuberose (*Polianthes tuberosa* L.) cv. Suringar	Ranglal Maida
33.	Effect of Nitrogen & Phosphorus on growth & Flowering in Tuberose (*Polianthes tuberose* L.)	Gajendra Singh Shekhawat
34.	*In vitro* Morphogenesis studies in *Gerbera jamesoni Bolus* ex Hooker F.	Deepa Bhatt
35.	Effect of Micronutrient on growth & flowering of Tuberose (*Polianthes tuberosa* L.)	Palak Jain
36.	*In vitro* propagation studies in *Amaryllis belladonna* L.	Tejaswini Veeraballi
37.	Microcloning Studies in Gladiolus (*Gladiolus hybridus* Hort.)	Ramkanya Malviya
38.	Response of Garlic (*Allium sativum* L.) Cultivars to Irrigation Level	Neeraj Silabut

39.	Influence of vermicompost & sulphur on growth, yield and quality of Garlic	Manish Patidar
40.	Study on Genetics Variabilty in Coriander (*Coriandrum sativum* L.)	Deepika Sharma
41.	Effect of Different Irrigation and Nitrogen Level on growth & Seed yield of Ajwain (*Trachyspermum ammi* L. sprayul)	Rajesh Meena
42.	Effect of phosphorus with and without zinc sulphate on growth, yield and quality of guava (*Psidium guajava* L.) cv. Gwalior-27	Dinesh Singh Dhakar
43.	Effect of growing media and GA_3 on seed germination, growth and survival of acid lime (*Citrus aurantifolia* Swingle) cv. Kagzi	Jeevendra Singh
44.	Effect of foliar spray of micronutrients on growth, yield and quality of guava (*Psidium guajava* L.) cv. Gwalior-27	Rahul Patidar
45.	Response of papaya (*Carica papaya* L.) to gibberellic acid and thiourea	T. Ranga Prasad Reddy
46.	Response of rooting hormone (IBA, IAA) and etiolation on airlayers of guava (*Psidium guajava* L.) cv. Gwalior-27	Vinod Yadav
47.	Effect of different concentration of IBA on the growth and survival of air layers of acid lime (*Citrus aurantifolia* Swingle) cultivars	Sunil Kumar
48.	Performance of different okra varieties/hybrids on growth, yield and quality parameters	Alok Chouhan
49.	Study on integrated nutrient management in Carrot (*Daucas carota* L.) under Malwa condition	Chetna Chouhan
50.	Suitability and adoptability of different genotype of Radish (*Raphanus sativus* L.) in Malwa region	Deepika Kori
51.	Study of pre-flowering foliar spray of plant growth regulator on growth, yield and quality parameters in Sweet pepper (*Capsicum annum* L.) under protected condition	Gurudayal Sahu
52.	Source of different organic manure and biofertilizers on morphological, phonological, yield and quality parameters in Tomato (*Lycopersicon esculentum* Mill.) hybrid Laxmi	Mukesh Kumar Meena
53.	Suitability and adoptability of different genotype of onion in kharif season under Malwa condition	Santosh Kasera
54.	Study on growth, yield and quality parameters of different varieties of Potato (*Solanum tuberosum* L.) suitable for Malwa region	Smita Agarwal
55.	Study on growth, yield and yield parameters of different genotypes of garlic (*Allium sativum* L.)	Sonali Asati
56.	Effect of spacing and varieties on growth and yield of late kharif onion (*Allium cepa* L.)	Rajesh Jatav
(III) Department of Entomology		
57.	Bio-efficacy of newer insecticides and bio-agents against insect pest of okra.	M.N. Anu
58.	Response of chick pea geno types to the infestation of pulse beetle *C. maculatus.*	Dheerendra Mahor

59.	Studies on insect-pest complex of brinjal (*S. melongena* L.)	Shantilal Patel
60.	Efficacy of insecticide/bioagent against shucking pest of tomato (*Lycopersicon esculentum*)	K.P. Gulya
61.	Performance of sorghum germplasm against insect-pests and succession of insect-pests in established varieties	P. Swathi
62.	Comparative field efficacy of combination insecticide against insect-pests of soybean (*Glycine max* (L.) Merrill)	Dilip Birla
63.	Influence of method and application time of nitrogen on pest incidence, reaction of sorghum genotypes for insect pests in timely sown crop	Neelesh Raypuriya
64.	Impact of alternation of insecticides use against major pests of Bt. Cotton	Narendra Badole
65.	Studies on the seasonal incidence nature of *Obereopsis brevis* in soybean	Hariram Patidar
(IV) Department of Plant Pathology		
66.	Evaluation of fungal toxicity of ginger (*Zingiber officinale*) extracts against some fungal pathogens	Manvendra Choudhary
67.	Evaluation of fungal toxicity of bael extracts against some fungal pathogens	Bhikaram Kushwah
68.	Studies on *Bipolaris sorokinia* (Sacc) shoemaker causing leaf blight of wheat	Sachin Patidar
69.	Evaluation of turmeric (*Curcuma longa*) against some fungal pathogens	Ravindra Singh Barsena
70.	Studies on integrated management of wilt disease (*Fusarium oxysporum* f. sp. *ciceri*) of chickpea	Lakhan Singh
71.	Identification and efficacy of native strains of *Trichoderma* tolerant to variable environmental condition and effectiveness against soil borne pathogens.	Lahari Karumuri
72.	Influence of intercropping on development of web blight in soybean	Raksha Vishwakarma
73.	Studies on anthracnose (*Colletotrichum truncatum*) of mungbean.	Mangilal Kag
74.	Studies on wilt (*Fusarium solani*) of chillies.	Tarun Birla
75.	Studies on influence of herbicides on web blight (*Rhizoctonia solani*) of soybean	Mukesh Kumar
(V) Department of Soil Science and Agricultural Chemistry		
76.	Effect of various tillage practices on yield of wheat crop and physico-chemical properties of soil under different cropping sequences	Bhawani Singh Pawar
77.	Response of organic manure, zinc and iron on wheat crop grown on inceptisols	Jai Prakash Manjhi

78.	Microbial Population, Carbon Biomass in rhizosphere as influenced by fertilizer management practices in *vigna mungo* grown on Inceptisols	Ravi Prakash
79.	Effect of different INM practices on growth and yield of Pearlmillet in an Alluvial Soil	Anita Bhadauriya
80.	DTPA-extractable micronutrient status of soils of Shivpuri district of Madhya Pradesh	Bhoopendra Singh Dhakad
81.	Evaluation of soil fertility in vertisols and associated soils of Nignoti village of Indore district of western M.P.	Parveena Panar
82.	Effect of micronutrients, organics and biofertilizers on growth, yield and nutrient uptake by soybean in vertisols	Avani K. Ashok
83.	Effect of gypsum, FYM and phosphorus application on yield of mustard and phosphorus availability in calcareous sodic soil	Dharmendra Yadav
84.	Effect of inorganic, organic, biofertilizers and molybeterun application on nutrients uptake and productivity of chickpea in vertisol	Brijesh Trivedi
85.	Effect of micronutrients organics and biofertilizers on symbiotic trails, yield attributes nutrient uptake and quality of soybean	Shobha Malviya
86.	Symbiotic trails, yield attributes nutrient uptake and productivity of black gram (*Vigna munga* (L.) *hepper*) as effected by different weed control treatments	Manju Sen
(VI) Department of Plant Breeding & Genetics		
87.	Evaluation of Genotypes for yield potential and stress adaptability under drought conditions induced chemically during post anthesis (*Triticum aestivum*)	Prakash Raghuwansi
88.	Agro morphological and Cytological studies of synthetic wheat and its cross with cultivated wheat.	Preeti Pachouri
89.	Genetic study in soybean (*Glycine max* L.)	Mahesh Meena
90.	Screening of Safflower (*Carthamus tinctorius* L.) genotypes for drought tolerance	Ajay Kumar Bagri
91.	Relative performance of chickpea genotypes under drought stress and non-stress situations	Jyoti Kumari
92.	Callusing and organogenesis in Dhaiman (*Cordia macleodii* Hook.)	Om Prakash
93.	Genetic divergence and association studies for yield and its attributes in Safflower (*Carthamus tinctorius* L.)	Rajesh Dau
94.	Callusing and organogenesis in Malkangni (*Celastrus paniculatus*)	Renuka Shivwanshi
95.	Callusing and organogenesis in *Pterocarpus marsupium* (Roxb.)	Yogeshwar Kharte
96.	Evaluation of plant growth regulators and seed primers for drought tolerance in pigeonpea (*Cajanus cajans* (L.) Millsp)	Manish Patidar

(VII) Department of Agricultural Economics and Farm Management		
97.	To study the economic viability of different farming system in district Bhind of Madhya Pradesh	Dilip Singh Suman
98.	A study of Agriculture diversification in Morena district of Madhya Pradesh	Kuldeep Singh Baghel
99.	Economics of production and marketing of soybean in Madhya Pradesh.	Mana Solanki
100.	Study on Cost-Return and production constraint of major crops in Hoshangabad Division of M.P.	Rita Kapil
101.	Economic analysis of drip irrigation system of Bt. Cotton in Barwani district of M.P.	Vikas Jat
102.	Impact of improved technology of soybean cultivation in Khandwa district of Madhya Pradesh	Jyoti Patel
103.	Economic analysis of market performance of cotton crop under drip irrigation system in Dhar district	Hemlata Alanse
104.	A study on relative profitability of different varieties of chickepa in Indore district of Madhya Pradesh	Sadhana Tiwari
105.	An analysis of growth and instability of cotton production in Madhya Pradesh	Shardhha Tiwari
(VIII) Department of Extension Education		
106.	A study on training needs of Potato growers in Gwalior district of Madhya Pradesh	Rajkumari Raghuwansi
107.	A study on Entrepreneurial Behaviour of Tomato growers in Shivpuri District of Madhya Pradesh	Deepali Gupta
108.	Study on onion production technology and marketing behaviour of onion growers of Dewas district	Prakash Jat
109.	Study of scientific temperament on Maize FLD through KVK, Jhabua	Taruna Bathri
110.	Impact on front line demonstration (FLD^{s}) on adoption behaviour of soybean growers in Ujjain district of M.P.	Dinesh Dour
111.	A study on level of perfection of farm women in agricultureal activities through MP Woman in Agriculture Project (MAPWA) in Jhabua district	Roshni Chouhan
112.	A study on impact of NAIP (National Agriculture Innovation Project) on wheat growers through IARI (Indian Agriculture Research Station)	Abhilasha Tiwari
113.	Impact of bio-gas plant in socio economic status of beneficiaries in Ujjain district of M.P.	Jinesh K. Jain
114.	A study on drip irrigation in Khandwa district of M.P.	Hansa Badole
115.	A study on level of perfection of farm women by improving agriculture technologies MAPWA in Jhabua district	Siyaram Solanki

116.	Study on decision making process with reference to risk taking behaviour of rural women vegetable growers in Jobat block of Alirajpur district in M.P.	Sarla Chouhan
117.	A study on impact of Atma programme on adoption and attitude of chilli growers in Khargone district of M.P.	Dharmendra Yadav
118.	A study on knowledge and Attitude on Beneficiaries Farmers about Atma Programme of Dhar district of Madhya Pradesh	Pawan Alawa
119.	Impact of farmer field school (fees) on knowledge and adoption level on improved crop production practices in Sehore District of M.P.	Sandeep Pawar
120.	A study on knowledge and adoption of improved soybean production technology by beneficiaries under atma programme in relation to socio-economics and psychological attributes in Sehore Distt. of M.P.	Vijesh Hariyale

2.8.2 Ph.D. thesis submitted to Director Instruction for evaluation:

S. No.	Department	Title of Thesis	Name of Student
1.	**Agronomy**	Effect of method and scheduling of irrigation on growth, yield attributes and yield of pigeonpea (*Cajuns cajan* L.)	Kiran Rawat
2.		Management of weed flora in wheat (*Triticum aestivum* L.) under various fertility levels in different combinations of herbicides	Janmejay Sharma
3.		Effect of sowing time and moisture conservation practices on yield attributes, yield quality and water use efficiency of mustard (*Brassica juncia*)	Brij Kishor Sharma
4.		Effect of mulching and fertility levels on growth and yield of clusterbean varieties	Nisha Bhadauria
5.	**Horticulture**	Influence of Organic and Inorganic Sources of Nutrients on Growth, Yield and Quality of Onion (*Allium cepa* L.)	Birendra Vikram Singh
6.	**Plant Breeding and Genetics**	Genetic assessments for yield potential and stress adaptation under drought condition induced chemically plants during post anthesis of wheat	Sunil Kumar Jatav
7.		Molecular characterization of inbreeds heterosis and Stability of their diallel cross in maize	Reshu Tiwari

2.9 Academic Excellence:

2.9.1 Student Performance in ICAR-JRF/SRF examination and other Scholarship/ Stipends:

S. No.	Name of Fellowship/Scholarship	No. of Students
1.	Junior Research fellowship received	**01**
2.	JRF qualified and admitted in different Universities of India without fellowship	**22**
3.	SRF Qualified without fellowship	**-**
4.	National Talent Scholarship	**21**
5.	Scholarship of Vikramaditya Yojna	**25**
6.	Scholarship of Goan Ki Beti Yojna	**3**
7.	Dr. Shyamaprasad Mukharji Scholarship	**1**
8.	Post Metric Scholarship	**314**
9.	State Government Scholarship	
	(i) OBC	**132**
	(ii) SC	**58**
	(iii) ST	**73**

2.9.2 Gold Medals notified:

S. No.	Degree Programme	Batch	Male	Female	OGPA
1.	B.Sc. (Ag.)	2009-10	-	✓	8.74
		2010-11	-	✓	8.62
2.	B.Sc. (Hort.)	2009-10	-	✓	8.34
		2010-11	-	✓	8.33
3.	M.Sc. (Ag.)	2012-13	-	✓	8.64
		2011-12	-	✓	8.62
4.	M.Sc. (Hort.)	2012-13	✓	-	8.59
		2011-12	✓	-	7.90

3. STUDENTS WELFARE ACTIVITIES:

3.1 National Service Scheme (NSS):

S. No.	Activity(s)	No. of volunteers participated					
		Gwalior	Sehore	Indore	Khandwa	Mandsaur	Total
1.	No. of students enrolled	**118**	**-**	**134**	**-**	**100**	**352**
2.	No. of students passed/cleared 'B' certificate examination	**-**	**58**	**25**	**-**	**18**	**101**
3.	No. of students passed/cleared 'C' certificate examination	**-**	**13**	**-**	**-**	**-**	**13**
4.	NSS day celebration	-	98	-	50	35	**183**
5.	Blood donation camp	-	02	7	-	43	**52**
6.	Pulse polio camp	-	-	-	-	-	**-**
7.	AIDs awareness day	-	52	-	60	155	**267**
8.	Beti bacho abhiyan	-	-	-	-	-	**-**
9.	Malnutrition day	-	-	-	-	-	**-**
10.	Parthenium eradication day	-	-	-	-	85	**85**
11.	Special camp	-	-	-	20	328	**348**
12.	Voter ID awareness camp	-	-	-	80	55	**135**
13.	State level camp	-	-	-	-	03	**03**
14.	Unit camp	-	50	-	-	45	**95**
15.	Rastriya Yuva Day	-	-	-	-	180	**180**
16.	Sansetization day	-	-	-	-	-	**-**
17.	Environment day	-	-	-	51	-	**51**
18.	Plantation day	-	-	150	100	115	**365**

GLIMPSES OF NSS ACTIVITIES

Organization of World AIDS Day

AIDS awareness programme under NSS

Organization of National Literacy Day

NSS Camp

Innugration of NSS camp at Raja Khedi

Poster prepared during NSS camp

GLIMPSES OF NSS ACTIVITIES

Sanitation work during NSS camp

Preparation of basin around plants

Blood donation during camp by faculty

Blood donation during camp by students

NSS Camp

3.2 National Cadet Corps (NCC):

S. No.	Activity(s)		Gwalior	Indore	Sehore	Khandwa	Total
1.	No. of students enrolled		90	-	44	-	**134**
2.	Exam. passed	'B' certificate	10	15	02	18	**45**
		'C' certificate	02	07	24	-	**33**
3.	No. of cadets attended the CATC camp		11	-	25	15	**51**

GLIMPSES OF NCC ACTIVITIES

Arms drill practice RVSKVV, Gwalior (M.P.)

NCC Cadet Pilots and NCC Officer receiving Hon'ble Vice-Chancellor, RVSKVV, Gwalior (M.P.)

Cadets presenting guard of honour to Hon'ble V.C. Prof A.K. Singh on Republic Day

Group Photograph of NCC cadets with Hon'ble V.C. and University Officers

Cleaning of campus by NCC Cadets

Group photograph of cadets at Unity Day

3.3 Students Counseling and Placement:

S. No.	Name of employer / Organization	No. of students employed					
		Gwalior	Indore	Khandwa	Sehore	Mandsaur	Total
1.	Government / public sector	9	6	-	-	02	17
2.	Private sector	37	26	5	13	09	90
3.	Self employed	02	-	-	-	-	02
Total		**48**	**32**	**5**	**13**	**11**	**109**

3.4 Cultural and Sports Activities:

3.4.1 Cultural Activities:

a) Youth festival for the year 2014-15 was held at College of Agriculture, Indore. Approximate 125 participants from 5 colleges took part in youth festival. Inaugural function was graced by the presence of Shri Chandra Shekar Azad as chief guest, Dean; Dr. A. M. Rajput was the chairperson.The programme was anchored by Dr. Sanjay Sharma and vote of thanks was passed by Dr. (Smt) Manorama Sharma.

b) Debate competition was held on 8/12/2014 on the topic "Commitment rather than employment is more important for youth empowerment" at the College of Agriculture, Indore.

c) B.M. College of Agriculture, Khandwa organized Inter Collegiate Indoor Games under the title ***(Spandan 2015***).Matches of Badminton, Table tennis, Carom, Chess and outdoor games namely Volley Ball and Kho-Kho were played among the various participating colleges of R.V.S.K.V.V. from 26 to 28 February 2015.

d) College of Agriculture Gwalior organised Inter Collegiate Athletics and Kabbadi tournament from 12 to 14 March 2015.

Youth Festival Events:

S. No.	Activity	Winner
1.	One Act Play	Gwalior
2.	Folk Dance	Gwalior
3.	Skit	Gwalior
4.	Elocution	Indore
5.	Patriotic Song	Indore
6.	Group Song	Indore
7.	Rangoli Competition	Indore
8.	Mono Acting	Indore
9.	Cartooning	Indore
10.	Poster Making	Indore
11.	Debate (Against)	Sehore
12.	Solo Song	Sehore
13.	Extempore	Khandwa
14.	Quiz Competition	Khandwa
15.	On spot Painting	Khandwa
16.	Clay Modeling	Mandsaur
17.	Mime	Mandsaur

GLIMPSES OF CULTURAL ACTIVITIES

GLIMPSES OF CULTURAL ACTIVITIES

GLIMPSES OF CULTURAL ACTIVITIES






3.4.2 Sports activities:

Intercollegiate Sports Competitions under the Name "**SPNDAN-2015**" was successfully organized during 26th to 28th February 2015 at B.M. College of Agriculture, Khandwa in which teams from five constituent colleges *viz.,* Gwalior, Sehore, Indore,

Mandsaur and Khandwa were participated in six sports activities namely, Badminton, Table Tennis, Volley- Ball, Kho-Kho, Chess and Carrom.

The performance of the various teams is as under:

S.No.	Activity	Winner	
		Male	Female
1.	Badminton	Indore	Indore
2.	Chess	Indore	-
3.	T.T.	Indore	Indore
4.	Volley ball	Indore	-
5.	Carrom	-	Sehor

GLIMPSES OF SPORTS ACTIVITIES

Intercollegiate Sports Competitions

GLIMPSES OF SPORTS ACTIVITIES

Intercollegiate Sports Competitions

GLIMPSES OF SPORTS ACTIVITIES

Intercollegiate Sports Competitions

4. RESEARCH HIGHLIGHTS:

The research network of the University spreads over six agro-climatic zones of Madhya Pradesh and covers 26 revenue districts. These agro-climatic zones are Gird, Malwa Plateau, Nimar Valley, Jhabua Hills, Vindhyan Plateau and Bundelkhand zones. Accordingly, five Zonal Agricultural Research stations, four Regional Agricultural Research Stations and five Special Research Stations have been operating to enhance the productivity and livelihood security of farming community. Presently, 27 All India Coordinated Research Projects on crop improvement, natural resource management and horticulture are running at different centers. Besides these, 7 plan, 12 non plan, 23 tribal sub plan, 5 Agromet Advisory services, 05 externally funded projects are the research strength of the University. The maintenance breeding of crop varieties and production of nucleus seed, breeder seed, hybrid seed and planting materials are managed with the help of twenty seven seed farms.

Research Stations of the University

S.No.	Particulars	No.	Location and Year of Establishment
1.	Zonal Agricultural Research Station	05	Indore (1924), Sehore (1952), Khargone (1964), Morena (1981) and Jhabua (1989)
2.	Regional Agricultural Research Station	04	Gwalior (1916), Khandwa (1964) Ujjain (1989) and Mandsaur (1964)
3.	Special Research Station	06	Enthkedi (1962), Jaora (1964), Bagwai (1964), Badwah (1969), Bhind (2010) and Sirsod (2011)

4.1 List of All India Coordinated Research Projects

S.No.	Name of Projects	Centre
1	AICRP on Water Management	Morena
2	AICRP on Groundnut	Khargone
3	AICRP on Rapeseed & Mustard	Morena
4	AICRP on Safflower	Indore
5	AICRP on Soybean	Sehore
6	AICRP on Cotton Improvement Project	Khandwa
7	AICRP on Cotton Improvement Project	Indore
8	AICRP on Sorghum improvement	Indore
9	AICRP on Chickpea	Sehore
10	AICRP on Pigeonpea	Khargone
11	AICRP on Pearl Millets	Gwalior
12	AICRP on Wheat Improvement Project	Gwalior
13	AICRP on Dryland Agriculture	Indore
14	AICRP on Medicinal and Aromatic Plants	Mandsaur
15	AICRP on Salt Affected Soils	Indore
16	AICRP on Weed Control	Gwalior
17	AICRP on Arid Legumes (Guar)	Gwalior
18	AICRP on Pigeonpea (Sub Centre)	Sehore
19	AICRP on MULLaRP	Sehore

20	AICRP on Integrated Cropping System	Indore
21	Indo-British Dryland Agriculture Research (ORP)	Indore
22	AICRP on Fruits (Grape)	Mandsaur
23	AICRP on Maize	Jhabua
24.	AICRP on Chickpea	Indore
25.	AICRP on Soybean	Morena
26.	AICRP on Onion & Garlic	Mandsaur
27.	ICAR Seed Project on Seed Production in Agricultural Crops	Gwalior

4.2 Research Schemes (Non Plan)

S. No.	Name of Scheme/Project	Centre
1	Agriculture Research Lab & Institute	Indore
2	Regional Research Station	Indore
3	Soil Testing Scheme	Indore
4	Regional Research Station	Sehore
5	Regional Research Station	Gwalior
6	Regional Research Station	Bagwai
7	Intensification of Research on Mango Guava & Citrus	Gwalior
8	Soil Testing Scheme	Gwalior
9	Intensification of Research on Mango, Guava & Citrus	Enthkedi
10	Horticulture Research Scheme (Seed production)	Jaora
11	Sugarcane Research Scheme	Indore
12	Potato Aphid Research	Sehore

Seed Farms (Non Plan)

S.	Name of Scheme/Project	Centre
1	Agriculture Research Farm	Mandsaur
2	Agriculture Research Farm	Khargone
3	Agriculture Research Farm	Khandwa
4	Agriculture Research Farm	Bagwai
5	Agriculture Research Farm	Gwalior
6	Agriculture Research Farm	Ujjain
7	Agriculture Research Farm	Jaora
8	Agriculture Research Farm	Indore
9	Agriculture Research Farm	Sehore
10	Live Stock Farm	Gwalior
11	Live Stock Farm	Sehore
12	Live Stock Farm	Indore

4.3 Research Schemes (Plan)

S. No.	Name of Scheme/Project	Centre
1	Fodder Research Scheme	Gwalior
2	Strengthening of MP Agriculture Research Institute	Khargone

3	Productivity Improvement of crops under rainfed area	Indore
4	National Agricultural Research Project	Sehore
5	Director of Extension Education	Sehore
6	National Agricultural Research Project	Ujjain
7	College of Horticulture	Mandsaur

4.4 Research Scheme (Tribal Sub Plan)

S. No.	Name of Scheme/Project	Centre
1	Improvement of Millets	Gwalior
2	Propagation of Aonla & Ber for Tribal	Khandwa
3	Intensive Extension Research Project	Gwalior
4	Intensive Extension Research Project	Sehore
5	Intensive Extension Research Project	Khandwa
6	Intensive Extension Research Project	Indore
7	Intensive Extension Research Project	Khargone
8	National Agricultural Research Project	Morena
9	National Agricultural Research Project	Khargone
10	National Agricultural Research Project	Khandwa
11	National Agricultural Research Project	Jhabua
12	Seed Production Programme of KVK	Shajapur
13	Seed Production Programme of KVK	Dhar
14	Seed Production Programme of KVK	Dewas
15	Seed Production Programme of KVK	Bhind
16	Seed Production Programme of KVK	Rajgarh
17	Seed Production Programme of KVK	Aron (Guna)
18	Seed Production Programme of KVK	Badwani
19	Seed Production Programme of KVK	Neemuch
20	Seed Production Programme of KVK	Shivpuri
21	Seed Production Programme of KVK	Ashok Nagar
22	Seed Production Programme of KVK	Sheopur
23	College of Agriculture	Khandwa

4.5 Indian Meteorological Department (GOI)

S. No.	Name of Scheme/Project	Centre
1	Agromet Advisory Services	Morena
2	Agromet Advisory Services	Khargone
3	Agromet Advisory Services	Jhabua
4	Agromet Advisory Services	Sehore
5	Agromet Advisory Services	Indore

4.6 Externally Funded Projects

S. No.	Title of the Project	Funding agency	Principal Investigator	Budget (Rs. in lakhs)
1.	Evaluation and demonstration of suitability of single super phosphate and Di-amonium phosphate as source of phosphorus in different crops of Madhya Pradesh	FCI Aravali Gypsum and Minerals, GOI, Jodhpur	Dr. S.K. Verma	4.95
2.	Utilizing chickpea genome sequence for crop improvement	DAC	Incharge AICRP on Chickpea	38.58
3.	Road construction at Agriculture Research Farm to Agriculture College, Sehore	Mandi Board, Bhopal	Dr. H.S. Yadava	119.14
4.	Establishment of DNA Fingerprinting Laboratory	DFWAD, Bhopal	Dr. H.S. Yadava	-
5.	Enhancing resource use efficiency in pulses based cropping system in central India.	ICAR, New Delhi	Dr. R.P. Singh	-

4.7 Salient Research Achievements:

Pigeonpea Hybrid- RVICPH-2671: It is the first CMS based brown seeded Pigeonpea hybrid notified vide Notification No.S.O.1146 (E). April 24, 2014 by Department of Agriculture and Cooperation, Ministry of Agriculture, Govt. of India for cultivation in the medium vertisols of Madhya Pradesh State. It's Matures in 164-184 days, Resistant to wilt and SMV, High *dal* protein (24.7%) Average yield is 2276-2852 kg/ha.

Soybean- RVS 2001-04: It is developed from JS 93-05x EC 390981 and notified vide Notification No.S.O.1146 (E). April 24, 2014 by Department of Agriculture and Cooperation, Ministry of Agriculture, Govt. of India for cultivation in the rainfed areas of Madhya Pradesh. It matures in 92-95 days with the average yield 2495 kg/ha.	
Lentil- RVL-31: This variety is developed by SPS from land race of Distt. Shajapur and notified vide Notification No.S.O.1146 (E). April 24, 2014 by Department of Agriculture and Cooperation, Ministry of Agriculture, Govt. of India for timely sown rainfed conditions of Madhya Pradesh. It matures early (107 days) and is bold seeded, with the average yield potential of 1200-1300 kg/ha.	

New varieties / Hybrids identified for release:

The varieties/ hybrids of pearl millet (RVB-1), cotton (RVK-67), soybean (RVS 2001-18) , safedmusli (RVSM-412), mustard (RVM-1) and sorghum (RVJ-1862 and RVICHS-28) were identified for release in the state of Madhya Pradesh after assessment of their yield potential and resistance against biotic and abiotic stresses. The proposals for the release have been submitted to State Seed Sub Committee, Government of Madhya Pradesh for general cultivation in Madhya Pradesh.

4.7.1 Crop Improvement:

- Ten coordinated breeding trials on cotton along with two station trials, evaluation of SPS, bulk material and multiplication programmes were carried out. In national trials like IET (Br.02 b) and in PHT (Br 05 b) 29 and 13 entries respectively were tested. Results of IET revealed the significant differences for various characters under study. The highest seed cotton yield was given by the entry CNH 7008 (2135 kg ha^{-1}), followed by IH-11 (2090 kg ha^{-1}), SCS-1213 (1894 kg ha^{-1}) and ARBH-1352 (1855 kg ha^{-1}). The ginning out turn ranged between 29.7 to 45.67% and it was higher in the BS 55 (44.6%). Entry IH-11 gave the highest average seed cotton yield (ranked 1st) in the country (1585 kg /ha in central zone and 2489 kg/ha in south zone) and promoted for further testing in south and central zones. Among 13 intra *hirsutum* hybrids (Br 05 b), the seed cotton yield ranged between 1252 to 2117 kg

ha^{-1} and it was highest in local check JK Hy-3 (2117 kg), which was significantly superior to rest of the hybrids tested. In another trial for Initial Evaluation of Compact genotypes (Rainfed), (Br.06 b), 12 entries were assessed and showed significant variation in days to opening of first boll. Genotypes CCH-7012, GSHV-1/1338 and ARBC-1351 showed early days to opening of first boll (93 days). The seed cotton yield ranged between 400 to 1367 kg ha^{-1} and it was highest in LC JK 4 in closer spacing (1367 kg) while the same genotype gave poorest yield in recommended spacing.

- Among the Inter specific cotton hybrid tested (Br 15 a) in irrigated conditions, yield and other characters showed significant differences for yield and other characters and the highest seed cotton yield (1815 kg ha^{-1}) was given by RHB-0708, which was significantly superior to the other entries.
- In ICAR sponsored Bt Cotton hybrid Trial (5 Bt. CZ), 03 Entries along with filler were tested in 6 replications. Data with respect to yield and component characters showed significant differences among genotypes with better germination (89 %) despite of late sowing. The highest seed cotton yield was given by the entry code 3711 (1400 kg ha^{-1}) which was significantly superior to the other entries, followed by code 3713 (1184 kg ha^{-1}) and code 3712 (868 kg ha^{-1}). Trend of lint yield commensurate with the trend of seed cotton yield. It was highest (494 kg ha^{-1}) in code 3711.
- In Initial Hybrid and Advanced Varietal Hybrid Trial –I (IH&AVHT-I) highest yield of Safflower 3418 kg/ha was recorded by the entry IH-AVHT 13-6 followed by IH-AVHT 13-4 (3357 kg/ha) and IH-AVHT 13-8 (3349 kg/ha)
- In Evaluation of Safflower CMS Hybrids, highest yield was recorded by DSH-282 hybrid of 3418 kg/ha followed by DSH-287 (3104 kg/ha) and DSH -276 (2862 kg/ha).
- In evaluation of Safflower germplasm for different cropping situations entry GMU 1551 recorded highest yield of 2778 kg /ha followed by GMU-3962 (2611 kg/ha) against the check PBNS-12 (2556 kg/ha)
- In evaluation of Safflower germplasm for high oil entry EC-755-669 recorded the highest yield of 3044 kg/ha) against the check NARI-57 (2867 kg/ha).
- In evaluation of two male sterile lines of Safflower under Indore conditions, 2A and 3A showed 96.8 % and 100% sterility respectively.

Wheat

- New bread wheat entries of Gwalior Centre, RVW-4204, RVW-4205 were tested in coordinated trial NIVT 3 and NIVT2 trials, respectively. RVW-4204 ranked 8th position out of 49 entries tested in irrigated late sown condition in central zone in NIVT3. It recorded significantly high grain yield of 48.2q/ha and significantly out yielded at Bilaspur, Gwalior, Jabalpur and Junagadh.

- Wheat entries RVW-4232, RVW-4233, RVW-4234, RVW-4235 and RVW-4239 identified resistant against black and brown rust in south zone. Whereas, entries RVW-4232, RVW-4233, RVW-4234, RVW-4235 and RVW-4239 recorded resistant for brown / stem rust in both south and north zones. RVW-4228, RVW-4229, RVW-4230, RVW-4236 and RVW-4237 recorded resistant for yellow / stripe rust in north zone.
- New entry of Wheat RAJ-4382 (6816 kg/ha) followed by DBW-146 (5720), GW-461 (5641 kg/ha) and UAS-362(5510kg/ha) produced significantly higher grain yield over other new entries and check varieties MACS-6222-C (4591 kg/ha) and GW-322-C (4069 kg/ha) In NIVT -2 trial

Pearl Millet

- Pearl Millet hybrid RVSBH-22 (98444AxJBR-13) tested in 15 locations of zone-A and 11 locations of zone-B of the country under trial of AICRP on Pearl millet. The Yield varied with the location to location from 13.67q/ha to 39.02q/ha, bloomed on an average of 44 days, with 78 days maturity.
- Out of 141 single cross station's hybrids of Pearl Millet tested during Kharif 2013, five single cross hybrids namely; 98444Ax15510, 98444 Ax14162, 98444Ax 15762, 94111×RVS08/7 and 96222 AxRVS08/6 have been found higher yielding and appeared promising as compared to check (86 M 86).

Arid Legume (Guar)

- Seven genotypes were tested in AVT, out of these, genotype RGr-12-5 gave significantly higher seed yield (815 kg/ha), net monetary return (₹ 25,224/ ha) and BCR (2.46) of Clusterbean, over all the varieties. The lowest seed yield (455 kg/ha) was noted by RGr-12-3 entry but at par with RGC-1033 (C) variety.
- Fourteen genotypes were tested in IVT, out of these, genotype RGr-13-2 gave significantly highest seed yield (640 kg/ha), net monetary return (₹ 16,010 /-ha) and BCR (1.93) of Clusterbean, over all the varieties, but at par with HG-13-1, GAUG-13-2, X-8, CAZG-13-1, RGr-13-5 and RGC-1033 (C) entries .

Pigeonpea

- Under the hybridization programme of Pigeonpea 14 parents were used, through which 94 F_1's were developed
  i. CMS based 374 fresh crosses were attempted during 2013-14. F_1 generation will be raised in Kharif 2014-15 for evaluation purpose.
  ii. Maintenance of CMS lines: 18 A lines were maintained in Pollination chamber with B lines. Crosses were made in A x B lines to maintain the CMS lines in respective A lines.
- Highest yield of Pigeonpea was recorded in the entry TDRGE-5 (2873 kg/ha) followed by AKTE-11-3(2212 kg/ha) and SKNP-1005 (2115 kg/ha). These entries

were significantly superior to the other test entries and all the checks. Entry UPAS-120 [NC] matured in the shortest span of 164 days. Highest 100 grain weight of 13.1 gram was recorded in the entry GRG-2009-1.

- Highest yield of Pigeonpea was recorded in the entry UPAS-120 [NC] (2106kg/ha) followed by GT-101 [LC] (2102 kg/ha) and GRG-333 (2003 kg/ha). These entries were significantly superior to the other test entries. Check entry UPAS-120 matured in

  the shortest span of 143 days. Highest 100 grain weight of 11.6 gram was recorded with the entries GRG-333 & AKTE.
- In early duration hybrid evaluation trial of 9 entries of Pigeonpea with 3 checks from ICRISAT, maturity of the entries ranged from 100 days in ICP 88039 (Check) to 128 days of the hybrid ICPH 2433. The yield performance of entries was compared on the basis of continuous testing of last two years. The hybrid ICPH 2433 gave highest mean yield of 1650 kg ha^{-1} with maturity of 128 days. It was significantly higher by 21.9 % over the common check UPAS 120 (1181 kg ha^{-1}). It was closely followed by ICPH 2429 (1623 kg ha^{-1}) and ICPH 2431 (1605 kg ha^{-1}). These two higher yielding hybrids have been included for evaluation in Preliminary Hybrid Evaluation Trial as RVICPH 2433 and RVICPH 2364.

Rapeseed & Mustard

- In toria, RMT–08-10 strain gave the highest seed yield (1562 kg/ha.) which was at par with national check [(PT-303) 1524 kh/ha.) and TL-15 (ZC, 1477kg/ha.)] in IVT. This strain had highest oil yield (42.2%) as compare to checks PT 303 (41.9 %) and TL-(42%). This strain was tested in ACRIP net work of zone II (Chatha, Ludhiana, Bathinda, Karnal, Hisar, Bawal, Balawol, Bawal, Navgaon, Sriganganagar, IARI).
- Mustard strain RMM-09-01-1 gave (2573 kg/ha.) and RMM-09-04 (2605 kg/ha.) seed yield against zonal check (RL-1359; 2497 kg/ha.) and national check (Kranti; 2385 kg/ha.). However, RMM-09-1-1 yielded 1020 kg/ha. oil yield. This is higher than national check Kranti (950 kg/ha) and zonal check (RL-1359; 1001 kg/ha.). Similarly, RMM-09-01-1 and RMM- 09-04 had seed index of 5.06 (g) and 5.02 (g); whereas, checks namely; Kranti and RL-1359 have seed index of 4.37 (g) and 4.32 (g) respectively. This strain was tested in AICRP net work of zone II (Chatha, Ludhiana, Bathinda, Karnal, Hisar, Bawal, Balawol, Navgaon, Sriganganagar, IARI).

- Mustard strain RMM-09-4 has given seed yield 2329 (kg/ha.) and oil yield 876 (kg/ha.) against Kranti (NC) checks (1889 kg/ha) *i.e.* 18.8% increase and oil yield 737 kg/ha. respectively. This strain was tested under IVT in AICRP net work of zone IV (Jobner, Bikaner, Junagarh, S K Nagar, Kalgaon and Nagpur) under timely sown condition.

Chickpea

- The variation in seed yield of Chickpea was 1286 to 2899 Kg/ha among the tested pea shaped genotypes. The SGAL 303 was recorded the highest seed yield followed by SGAL 298 and SGAL 305.
- Best tall and non lodging entries of Chickpea were ICCV 03108, ICCV 03201, ICCV 03205, ICCV 03104, NBeG 47 and ICCV 0810 IPC-12-242, IPC 12-227, IPC 12-194 and IPC12- 104. The yield potential of ICCV 03201, ICCV 03205, NBeG 47 AND ICCV 08102 was promising as compare to check JG 11.
- Among 24 recommended varieties and 24 advanced best tall entries of Chickpea at Sehore centre, the entries JG 33, JG 6, RVSSG 22 , RVSJKG 102, RKG 160, JGK 1 and Dollar were identified for tall and upright plant type.

Soybean

- In advance varietal trial: II, Five entries of Soybean with checks were grown in randomized block design with four replications. The highest yield was exhibited by entry RVS 2001-18 (1124.3 kg/ ha) followed by check JS 97-52 (977.0 kg/ha).
- On Station initial trial, 43 newly developed bulks with check JS 335 were evaluated for yield performance of Soybean. The entry RVS 2009-17 gave maximum yield (1888.8kg/ha) followed by RVS 2009-13 (1833.3kg/ha) than check JS 335(1472.2kg/ha).
- On Station advance trial of Soybean, Sixteen advance bulk were evaluated under yield test in randomized block design with three replications, keeping JS 335 as check The result showed that RVS 2007-6 gave more yield (1718.7kg/ha) followed by RVS 2007-11 (1500 kg/ha.) than check JS 335(968.7 kg/ha).

MULLaRP

- The lentil genotypes RVL 13-5 recorded the highest seed yield of 1519 kg/ha followed by RVL 13-7 (1319 kg/ha). RVL 13-5 and RVL 13-7 were observed early maturing (112 days). Seed sizes of all tested genotypes were ranged from 2.8 to 3.4 g/100 seeds.
- Under the advance Varietal Trial 1 (AVT 1) Fieldpea Tall: The genotypes VIKASH recorded the highest seed yield of 2462 kg/ha followed by AMBICA (Ch) 2303 kg/ha. AMBICA and Vikash were observed early maturing. Seed sizes of all tested genotypes were ranged from 15.82 to 18.66 g/100 seeds.
- Under the advance Varietal Trial 1 (AVT 1) Fieldpea Dwarf: The genotypes IPFD 12-2 recorded the highest seed yield of 2833 kg/ha followed by Pant P 195 (2620 kg/ha). IPFD 11-5 was observed early maturing (107days). Seed weight of all tested genotypes was ranged from 15.4 to 20.2 g/100 seed.

- Lentil genotypes X 2007S128, X 2007S134, IG 5127, IG 4195, IG 5093, IG 5096, IG 5102, IG 5139 and X2007s121 were identified as early maturing (98-100 days) genotypes.

Maize

- Maize entry Vivek Hybrid 9 (c), entry no. 11 (6719 kg/ha) was found best and it was at par with AH-1212, entry no. 09 (6704 kg/ha) and Vivek Hybrid 21, entry no. 12 (6696 kg/ha.).
- Maize entry Seedtech-2324 (C) , entry no. 13 (Yield 8089 kg/ha) was found best and it was at par with FMH-11195, entry no. 1 (Yield 8084 kg/ha)

Medicinal & Aromatic Plants

- Out of 120 germplasm of Ashwagandha tested for higher dry root yield, seed yield and quality root characters, the entries *viz.,* MWS-142, MWS-301, MWS-303, MWS-305, MWS-317, MWS-319, MWS-327, RAS-7, RAS-37 and RVA-100 are found superior for dry root yield and entries MWS-106, MWS-130, MWS-131, MWS-206, MWS-207, MWS-217, MWS-316, MWS-319 and JA-134 are found superior for highest seed yield.
- Highest seed yield of opium recorded by 1088 kg/ha (MOP-1090) followed by 1000 kg/ha (UOP-1285) and 933 kg/ha IC-15-28.
- Opium Latex yield kg/ha ranged from 5.40 kg/ha (MOP-1072) to 56.5 kg/ha (MOP-8). Highest latex yield recorded by entry MOP-8 (56.5 kg) followed by IC-42, MOP-509 (54.64 kg), MOP-187 (51.5 kg). The NC-57950, NC-57955, NC-57948, MOP-187, UOP-1285, UOP-55, IC-95 recorded higher latex yield more than 40.0 kg/ha. As compared to check JOP-540 & JA-16 (35.2 kg/ha).
- Among the 24 lines of Safed Musli tested during the year 2013-14 fasciculated root yield ranges from 2111 kg/ha (MCB-409) to maximum 3956 kg/ha (MCB-412). The superior genotypes for fasciculated root yield and sapoganine content identified are MCB-412, followed by RVSM-414, MCB-401, MCB-405 and MCB-406. MCB-412 was found superior in fresh fasciculated root yield to the existing variety during 2009-10 to 2013-14 at Mandsaur centre.

Grape

- First year crop data shows that among the table varieties of Grape Pusa Urvashi performed better in terms of early bearing and high yielding. Under the colour seedless varieties Flame Seedless and Kishmish Moldowsky varieties give more yield. Among the wine varieties Shiraz, Tsimlasky chernyi and Grenache were found best in terms of high yield, juice and acidity %. Among the white wine varieties of

grapes Chenin Blance and Clariette were high yielder for berry and juice. Pusa Navrang was stands first in term of high juice content and yield kg/vine.

- Dogridge rootstocks were found best for grafting of table varieties like Pusa Urvashi, Thompson Seedless and New Perlette. Flame seedless variety gave more yields when grafted on Salt Creek rootstock.

4.7.2 Crop Production Technologies:

Cotton

- Among the cotton genotypes the GSB-40 recorded significantly higher yield 1324 kg ha^{-1} over 1124 kg ha^{-1} in DB-12 and being at par to RHCb -011 (1177 kg ha^{-1}).
  In case of net returns and B: C ratio the cotton genotype GSB-40 recorded highest net return of Rs.27361 ha^{-1} with B: C ratio of 2.44 as compared to Rs. 20948 ha^{-1} and B: C ratio of 2.13 with DB-12.
- Sowing of Cotton at the closer spacing of 60x30 cm recorded higher yield 1336 kg ha^{-1} as against 1195 kg ha^{-1} and 1095 kg ha^{-1} when crop was planted at 60x45 cm and 60x60 cm spacing respectively. Closer spacing 60x30 cm was found more remunerative by net returns of Rs. 27376/- ha^{-1} with B:C ratio of 2.41 as compared to Rs. 23343/- ha^{-1} and Rs. 20392/- ha^{-1} with 60x45 cm and 60x60 cm spacing respectively.
- The application of 150% RDF to Cotton crop gave significantly higher yield of 1648 kg ha^{-1} as compared to 1475 kg ha^{-1} with RDF of NPK. Similar trend was also noted in case of net return Rs. ha^{-1} and B: C ratio.

Safflower

- The yield maximization in safflower, under a large plot of 2000 m^2 on JSI-97 variety, the obtained seed yield was 2200 kg/ha, under (one) irrigated condition.
- Under the cropping system experiment different rabi inter-crop in (3:1) ratio of chickpea, linseed, wheat in safflower crop the safflower equivalent yield recorded significantly highest seed yield (2477 kg/ha.) in wheat and safflower inter crop (3:1) ratio as compare to other intercrop and sole crop. The intercropping whit wheat have highest gross return Rs. 74330, net return Rs. 55811 per hectare and B:C ratio (4.01).
- Safflower variety Annigeri gave the significantly highest seed yield 1142 kg/ha. no. of capitula weight, test weight with highest net return Rs. 20260/ ha. and B:C ratio (1:2.24).

Wheat

- New entry of Wheat HI-8737 gaves significantly higher grain yield (5623 kg/ha) under normal sown conditions which was followed by GW-322 (5130 kg/ha). The mean yield obtained under normal planting (4981 kg/ha) was significantly higher than late planting (4398 kg/ha).

- Under rain-fed situation, wheat genotype WH-1142 out yielded over other entries across the nitrogen levels gave the highest yield (2617 kg/ha.) at 60 kg N and 30 kg P_2O_5/ha followed by NIAW-1885 (2527 kg/ha) and MP-3288 (2415 kg/ha).

Weed Management

- Under long term herbicidal trial on pearl millet-wheat cropping system, hand weeding twice at 30 and 60 DAS (weed free) treatment gave maximum grain yield 4522 kg/ha. With the net return Rs. 47436/ha followed by IPU + one hand weeding at 60 DAS (Rs. 46174 /ha). Consequently application of Isoproturon @ 0.75 kg/ha + 2, 4-D @ 0.5 kg/ha was also found effective weed management practices for control of mixed weed flora in wheat crop with highest B:C ratio of 2.76.
- Herbicides Isoproturon 0.75 kg/ha PoE, Isoproturon + 2,4-D 0.75 + 0.5 kg/ha PoE and Isoproturon 0.75 kg/ha PoE + 1 HW at 25 DAS applied to wheat, under long

  term herbicidal trial on Pearl millet-wheat cropping system, persisted in soil up to 45 days. No residues of herbicides were left after harvest of crop as per bioassay method using cucumber as test crop.
- Herbicides Atrazine @ 500 g/ha PE & 2,4-D @ 500 g/ha PoE and Atrazine @ 500 g/ha PE + 1HW at 30 DAS applied to Pearl millet persisted in soil up to 45 days. No residues of herbicides were left after harvest of crop as per bioassay method using barley as test crop.
- Herbicides Clodinofop 60 g/ha PoE, Carfentrazone 20 g/ha, Sulfosulfuron 25 g/ha, Metsulfuron 6 g/ha, Metribuzine 250 g/ha, Isoproturon 750 g/ha + 2,4-D 500 g/ha, Clodinofop 60 g/ha + Metsulfuron 6 g/ha and Lodinofop 60 g/ha + Metribuzine 125 g/ha applied to barley do not leave any residue in soil after harvest of crop as evident by the growth of succeeding cucumber and maize crops.

Pigeonpea

- Response of the *Rhizobium* strains in pigeonpea revealed that *Rhizobium* strains *viz.,* CPR-9 followed by GRR-12-11 showed constantly, higher grain yield, over un-inoculated control. These results indicated that these *Rhizobium* strains *i.e.* CPR-9 and GRR-12-11 having potential of saving at least 20 kg N/ha.
- Bio inoculants treatment Rhizobium+PSB+PGPR+AM followed by Rhizobium + PSB + PGPR + KRB showed higher grain yield, over control. However, plant dry wwight was recorded higher in the treatment Rhizobium+PSB+PGPR+KRB followed by treatment Rhizobium+ PSB + PGPR+AM.

Rapeseed & Mustard

- The maximum seed yield of mustard (1974 kg ha^{-1}) was observed with the treatment 150% NPK which showed significantly superior to 50% NPK (1597 kg ha^{-1}) and control plot (1128 kg ha^{-1}).
- Foliar application of KNO_3 @ 1% at 50% flowering + 50% pod filling stage of Mustard produced yield of 1458 kg ha^{-1}. Whereas, the control plot was found very poor (878 kg ha^{-1}).

Chickpea

- Irrigation management for chickpea under different land configuration showed that the sowing of chickpea on BBF + One row of intercrop (wheat- Sujata) gave significantly higher grain yield (2742 kg/ha) over flat bed sowing. Two irrigation one each provided at pod development stage and branching gave significantly higher grain yield (2543 kg/ha over rest of the two treatments).
- Two chickpea *Rhizobium* strains were isolated in laboratory screening. Under field screening of locally isolated *Rhizobium* strains isolate RVSGRS 119 yielded 18.5% higher over control (1947 kg/ha) which was identical with 20 kg N/ha applied through fertilizer. *Rhizobium* Isolates RVSGRS-121 showed growth in 0.5% NaCl and RVSGRS-119, RVSGRS-120, RVSGRS-121, RVSGRS-122 and RVSGRS-117 showed growth at pH 8 and none at pH4.0.

Soybean

- Management of major insect pests and weeds of soybean through insecticide herbicide combinations, combination of Rynaxypyre 20EC + Imazethapyr 10SL was found better for yield and to control the weeds without adverse effect on soybean crop. This combination gave highest weed control efficiency of 77.48%.
- A new molecule of herbicide, Sulfentrazone 48SC @360g ai/ha was found best next to for increasing of Soybean grain yield.

MULLaRP

- In urdbean, application of Pendimethalin 30 EC + Imazethapyr 2 EC (Vallore 32) @ 0.75 kg/ha -PE. + Manual Weeding at 35 DAS (day after sowing) yielded 1238 kg/ha which was intern at par with pendimethalin 0.75 kg/ha (1160 kg/ha).
- Urdbean varieties KU-96-3 recorded maximum seed yield 597 kg/ha which is at par with RBU 38. Row to row spacing 30 cm gave significantly higher seed yield 641 kg/ha than the 45 cm spacing.
- Among all the components application of INM+IWM+IPM recorded grain yield (1602 kg/ha) of lentil followed by INM+IPM (1153 kg/ha) and was found at par with two hand weeding (1272 kg/ha). The yield recorded in control plot is 554 kg /ha.
- In lentil, application of two foliar spray of thiourea 500 ppm sprayed at pre flowering and pod initiation stages of crop recorded significantly higher grain yield (1598 kg/ha).
- In Lentil, seed inoculation with Ammonium molybdate @ 1.0 g/kg seed + Rhizobium + PSB along with application of recommended dose of fertilizer an 25 kg ZnSO4 recorded significantly higher grain yield of 1104.63 kg/ha as compared to all other treatments.

Natural Resource Management (NRM)

- An experiment for enhancing water productivity in micro –watershed, Soybean and sweet corn for green cobs were sown in *kharif* season. Whereas, Sweet corn for green cob, Potato, Tomato were planted in *Rabi* season. *Rabi* crops were managed through drip irrigation system by using harvested rain water in tank. The highest monitory return was obtained by Sweet corn- Tomato cropping sequence which gave Rs 2,73,157 net return per ha as against the traditional cropping sequence of Soybean –Chickpea (net return of Rs 42228/ha.). The per cent increase in net return recorded by Sweet corn- Tomato cropping sequence was 56.7% over soybean–chickpea sequence.

- In an experiment on contingent crop planning, seven *Kharif* / late *Kharif* crops *viz.*, Maize variety NK-6240 and maize (Hy. 555 Pionear Co.) for seed, Finger millet (H -563), Soybean (JS-95-60), Mothbean (Local), *Kulthi* (Local) and *Ragi (*Local) were planted to identify the suitable and remunerative *kharif* crop as an alternative of soybean at Indore. The maximum net returns (Rs. 13562/- ; B: C ratio 2.04) recorded with Maize Hy. 555, followed by Maize *cv*. NK-6240 (Rs. 8180/-; 1.63 B: C ratio)
- Contingent crops practices under aberrant monsoon condition of *Malwa* region, to combat the abiotic stress the effect of spraying of VAM-C 50 % SL @ 375 ml ha^{-1}; potassium Solution @ 2%; thio-urea @ 250 g ha^{-1} at the reproductive stage of the crop were study on four crops *viz.* ,Black gram, Maize, Soybean, and Horsegram. The spray of VAM-C 50 % SL @ 375 ml ha^{-1} on Soybean, Maize, Blackgram and Horsegram recorded 73.0, 19.8, 27.9 and 33.2% followed by Polythene mulch in Soybean- 55.8, maize-10.3, Blackgram- 4.1 and Horsegram-35.7% higher seed yield respectively, then control.
- Different crops under different Agri-Horti system was evaluated and yield was data computed in terms of Soybean equivalent yield (SEY) revealed that among the cropping systems, Sole pigeonpea recorded the highest SEY 1235 kg ha^{-1} and net return Rs. 22536 followed by, soybean – chickpea (SEY 1203 kg $ha^{-1}$and net return Rs. 21584 ha^{-1}). The seed yield of Soybean was low due to continuous rains during the growth period. The fruit yield received during year 2013-14 was as by Aonla (1312 kg), Custard Apple (154 kg), Guava (309 kg) and Phalsa (124 kg) and received gross return of Rs. 44467/-. The highest fruit yield (1312 kg ha^{-1}) with return 26248 ha^{-1} was recorded by aonla.
- Survival percentage and yield of vegetable crops decreased with the increasing ESP. The maximum survival percent was observed in brinjal followed by cabbage and cauliflower at ESP-25. Highest yield was recorded in case of cabbage (15.70 t/ha) followed by brinjal (10.50 t/ha) and cauliflower (9.80 t/ha) at ESP-25. The survival percentage of cabbage and cauliflower was less than 50 % at ESP-45, however the survival percentage of brinjal was more than 50 % even at ESP-55.

- Grain and straw yield of paddy decreased significantly with increase in soil ESP. Incorporation of green manure significantly enhanced the paddy yield (grain and straw) over control. Maximum grain and straw yield of paddy was recorded in case of dhaincha (2.03 and 4.50 t ha^{-1}) followed by sunhemp (1.92 and 4.12 t ha^{-1}) at soil ESP of 25, while, lowest yield was observed in control plots.
- Application of Raw Spent Wash @5.0 lakh L ha^{-1} registered 93.9 and 88.5 % increase in grain and straw yield of wheat over control. The reduction in ESP was noticed in case of Raw Spent Wash @ 5.0 lakh L ha^{-1} form 38.4 to 22.8 as compared to control.
- The highest gross return and soybean equivalent yield (Rs 1,02,383 and 2925 kg/ha.) were recorded in the minimum tillage. This was followed in conventional tillage (Rs 95,245 and 2721 kg/ha.). Soybean-wheat system recorded the highest gross return and soybean equivalent yield (Rs 1,11,797 and 3194 kg/ha) followed by maize-wheat cropping system.
- Spraying of VAM-C 50 % SL @ 375 ml/ha. at prior to reproductive phase exhibited 73.0, 19.8, 27.9 and 33.2%, higher yield of soybean, maize, black gram, horse gram respectively than control.
- The seed yield of Gram significantly influenced due to application of irrigation at (0.6 IW/CPE): Produced seed yield 2765 Kg/ha and gave net return of Rs. 84877/ per ha.

4.7.3 Crop Protection Technology:

Sorghum

- The timely sown crop observed 41.5 to 95.5% shoot fly and 43.1 to 74.2 % stem borer infestation, whereas in late sown crop 50.7. to 87.7. % shoot fly damage observed. The aphid infestation level was noticed in traces at all the situations in general crop. Comparatively less head worms to be regular (moderate 3-9 %) and head bugs population was ranged from 4.0 to 15.4 bugs per panicle but infestation level showed an increasing trend.
- Selected 20 genotypes received from ICRISAT were screened out for their reaction to the sorghum pests to identify the suitable materials for future need following materials were noted promising ICSV-12002, ICSV-12003, ICSB- 444 and ICSV-705 for shoot borer and ICSV-12001, ICSV-12003 and 25026 for shoot pests .

Pearl Millet

- Six entries viz; MH-1931, MH-1888, MPMH-17, RHB-173, HHB-146 improved and RIB-12S156 were found free from blast.
- Pearl millet seed dressing with Apron SD 35 @ 6 g/kg is most effective as it significantly reduce downy mildew incidence. Bio–agent viz; *Bacillus pumulis* and *Pseudomonas fluorescence* also reduce the incidence of downy mildew at dough stage of the crop growth. Chitosan was not found effective.

Pigeonpea

- In Pigeonpea out of 60 entries 8 entries viz BSMR-736, BSMR-528, GRG-8118, BRG-3, WRP-1, GRG-2009, TS-3R IP-8F showed resistant (below 10%) against *Fusarium udaum* in wilt sick plot. Wilt % ranges from 0 % to 81%. In the susceptible check ICP-2376 wilt incidence was 83.87%.28 entries were recorded moderate resistance reaction (10-30%) against wilt. LSI was 30.81% of AVT entries in the wilt sick plot.
- The Pigeonpea pod damage by pod fly was minimum (8.59%) in profenophos+ DDVP treated plot as against maximum 46.13% in untreated control. Whereas the pod damage by pod borer was less (4.84%) recorded in Indoxacarb-15.8 EC followed by Rynoaxipyr-18.5 SC and Porfenophos + DDVP. The higher grain yield (1985 kg/ha.) was of Indoxacarb 115.8 EC treated plot followed by Profenophos + DDVP and Rynoaxipyr-18.5 SC treated plot.

Rapeseed & Mustard

- In case of White-rust of Mustard the maximum 76.4% disease severity was recorded in 19 November sowing date, maximum 37.8% and 74.1% DM and SH was observed in 19 November & 26 November sowing date respectively.
- The highest seed yield 1031 kg/ha was recorded in application of single spray of Mancozeb @ 0.2% and single spray of Hexaconazole 25 EC (0.05%) followed by single spray of Mancozeb @ 0.2% and single spray of Metalaxyl 8% + Mancozeb 64% WP @ 0.2% recorded 995 kg/ha seed yield and single spray of Propiconazole 25 EC @ 0.05% are recorded at par with treatment 6 (951 kg/ha seed yield).
- The seed treatment of Mustard with carbendazim @ 2 gram/kg seed and 0.1% spray at 50 days after sowing gave 5.98% higher seed yield (1357 kg/ha) as compared to control plot (seed yield 1115 kg/ha).

Chickpea

- In Chickpea the effect of eco-friendly insecticides on the larvae of *H. armigera*, the pod damage ranged from 0.65 per cent (profenophos-rynaxypyre) to 2.52 per cent (untreated check). The lowest pod damage (0.65 per cent) and highest grain yield (2239 kg/ha) were recorded in the treatment profenophos-rynaxypyre.
- Chickpea entries ICCV-990126 (*Deshi*) and SG-97311 (*Kabuli*) recorded lowest number of eggs *i.e.* 17.36 and 24.4, respectively, per cohort of 30 seeds. The highest fecundity (34.35 eggs) was recorded from ICCV-07301 (*Kabuli*). The *Kabuli* genotype SG-950226 was found the most suitable for the development of the test insect, as the maximum number (5.7) of adults emerged from the seeds. The developmental period taken for the beetles to emerge was shortest (25.8 days) in

ICCV-07301 making it the most susceptible genotype. The index of susceptibility was observed higher (2.68) on *Kabuli* genotypes. The higher protein content recorded in SG-950226 and ICCV-07301 were much preferred by the pest.

Soybean

- Yield losses in Soybean due to girdle beetle were influenced by crop stage and infestation level. Up to 10% infestation level by girdle beetle yield reduction at all the crop stage, was 2.6 to 3.75% in all the observation. But the crop between 35 and 42 days after germination yield losses recorded to the tune of 7.50 and 7.47% due to 20% infestation, 11.27 and 11.20% losses due to 30% infestation, 15.03 and 14.97% losses due to 40%, and 20.09 and 19.97% losses due to 50% girdle beetle infestation, respectively.

MULLaRP

- In lentil, seventy four F6 (RIL) PL02 x Precoz were screened for wilt resistance in wilt sick plot. Four lines were found resistant against wilt, which were ILL-10897, ILL-10922, ILL-10926 and ILL-10938.

4.8 Linkage and Collaborations with National and International Organizations:

- MOU signed between this University and ICARDA, New Delhi, vide letter no. DRS/MOA/ICARDA/2014/1256 dated 17.7.2014 for implementation of the project entitled " Increasing food legumes production by small farmers to strengthen food and nutrition security through adoption of improved technologies and governance within South-South Cooperation"

- MOU signed between this University and M.P. State Marketing Board, Bhopal, vide letter no. DRS/2014/961 dated 26.06.2014 for implementation of the project entitled " Establishment of Bio Technology Center"

- MOU signed between this University and FCI, Aravali Gypsum and Minerals, GOI, Jodhpur, vide letter no. DRS/IMD/2014/1604 dated 26.08.2014 for implementation of the project entitled "Evaluation and demonstration of suitability of single super phosphate and Di-amonium phosphate as source of phosphorus in different crops of Madhya Pradesh"

- MOU signed between this University and M.P. State Marketing Board, Bhopal, vide letter no. DRS/2014/2106 dated 15.10.2014 for implementation of the project entitled "Road construction at Agriculture Research Farm to Agriculture College, Sehore"

4.9 Activities of Seed Production Farms:

RVSKVV is also making sincere efforts to generate cutting edge technology for enhancing crop productivity. Thrust is also farm seed replacement in the state by producing quality seeds of important crops. It is worthwhile to mention that RVSKVV has produce 7750.00 q seeds with different crops during 2014-15 which helped the farmers in a big way for seed replacement and there by enhancing the productivity of crops.

The seed activities in the University are managed with the help of twenty seven seed farms, which are located in twenty four districts and six agro-climatic zones of Madhya Pradesh. Out of the total farm area of 1210.85 ha., only 64.45% (780.37 ha.) is under cultivation. Among the cultivated area, 13.39 and 34.59% is irrigated and partially irrigated, respectively. Rest of the cultivated area is under rainfed farming. The area under plantation crop is about 82.02 ha. Rests of the farm area is fallow or pasture land or occupied by road and buildings.

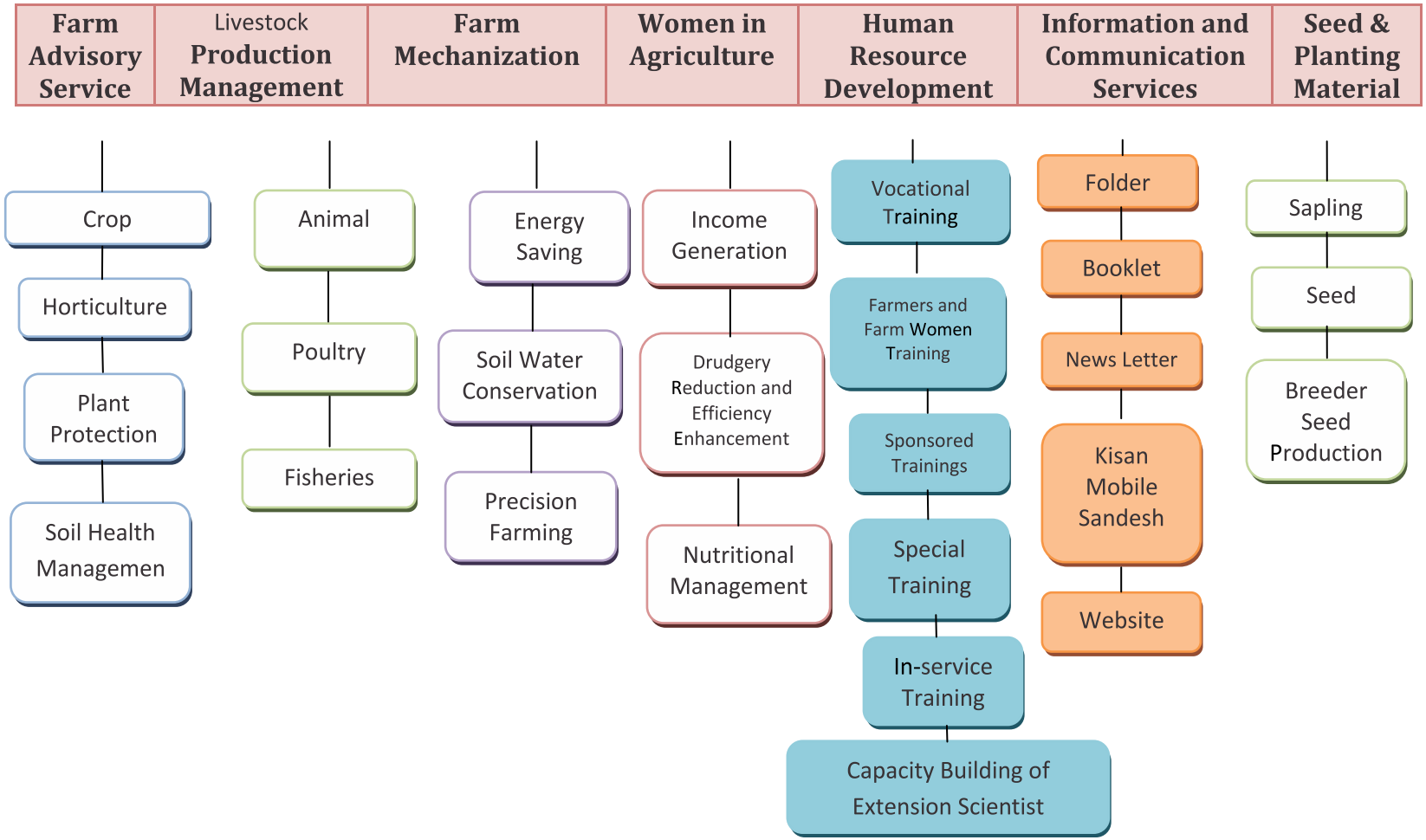
Breeder seed produced in Kharif and Rabi crops:

S. No.	Crops	Qty. (q.)
Kharif crops		
1.	Soybean	2136.0
2.	Green gram	230.0
3.	Black gram	30.0
4.	Sorghum	6.9
5.	Paddy	980.0
6.	Pigeonpea	22.5
	Total	3405.4
Rabi crops		
1.	Wheat	2733.0
2.	Gram	1532.0
3.	Lentil	3.0
4.	Rapeseed and mustard	76.6
	Total	**4344.6**
	Grand Total	**7750.0**

5. Highlights of Extension Education Services:

The Directorate of Extension Education has the mandate to promote the use of advanced Agricultural technologies among the farmers. The Directorate focuses on effective transfer of technologies, development of human resources through knowledge enrichment and development of skills, entrepreneurship development, sustainable use of rich resources and enhancing the income of farmers of the region.

5.1 Services Provided:



5.2 On Farm Testing:

The KVKs conducted 261 On Farm Trials on new technologies generated by RVSKVV Gwalior, other Universities and ICAR Institutes for the assessment and refinement as per requirement of the district. A total of 2655 farmers were direct beneficiaries of the OFTs as their fields/units chosen for conducting the trials.

KVK	No of OFTs	Beneficiaries
RVSKVV	213	2046
NGOs	48	609
Total	**261**	**2655**

5.3 Front Line Demonstrations:

Frontline Demonstrations on 585 new technologies/interventions were conducted with 5312 beneficiaries during the year.

KVK	No of FLDs	Beneficiaries
RVSKVV	525	4576
NGOs	84	683
Total	**609**	**5312**

5.4 Training Programmes:

S. No.	Training	KVK					
		RVSKVV		NGOs		Total	
		No.	Benf.	No.	Benf.	No.	Benf.
1.	Farmers	1056	27972	200	4389	1256	32361
2.	Farm Women	92	2391	35	832	127	3223
3.	Rural Youth	87	2315	33	699	120	3014
4	In-service	100	2763	34	858	134	3621
5.	Vocational	53	1363	21	338	74	1701
6.	Sponsored	198	15028	33	4489	231	19517
Total		**1586**	**51832**	**356**	**11605**	**1942**	**63437**

5.5 Extension Activities:

Field Day

S. No.	KVKs	Field Day	
		Number	Beneficiaries
1.	RVSKVV	128	4711
2.	NGOs	46	1301
Total		**174**	**6012**

Kisan Mela

S. No.	KVKs	Farmers' Fair	
		Number	Beneficiaries
1.	RVSKVV	34	67345
2.	NGOs	03	6293
Total		**37**	**73638**

Kisan Gosthi

S. No.	KVKs	Kisan Gosthi	
		Number	Beneficiaries
1.	RVSKVV	673	31859
2.	NGOs	23	1150
Total		**696**	**33009**

5.6 Production and Supply of Technological Inputs:

Name of KVK	Production of Technological Inputs	
	Seed (Qt.)	Planting Material Produced (Nos.)
RVSKVV		
Ashoknagar	59.98	-
Badwani	35.0	2000
Bhind (Lahar)	13.46	-
Datia	-	-
Dewas	347.93	62 Kg Veg. Pea
Dhar	416.0	
Guna	153.8	365
Gwalior	Vegetable Seed = 827.05	71239 Seedlings/Saplings Seed of spices, vegetables etc. =10.31 Kg.
Jhabua	413.00	20000
Khandwa	-	-
Khargone	442.82	-
Mandsaur	164.0	-
Morena	501.24	
Neemuch	98.0	-
Rajgarh	180.0	102
Shajapur	308.0	-
Sheopur	44.0	-
Shivpuri	133.0	-
Ujjain	469.10	40000
ICAR		
Bhopal	**Report not received**	
NGOs		

Burhanpur	42.62	22500
Indore	110.33	6000
Ratlam	82.55	13700
Sehore	280.10	48804

5.7 Soil and Water Sample Analysis:

KVKs	Soil Analysis		Water Analysis		Total	
	Sample	Beneficiaries	Sample	Beneficiaries	Sample	Beneficiaries
RVSKVV	4049	4819	04	04	4053	4823
NGOs	1444	1230	-	-	1444	1230
Total	**5493**	**6049**	**04**	**04**	**5497**	**6053**

5.8 Technology Transmitted through Electronic Media

KVKs	Radio Talk	TV Talk	Total
RVSKVV	200	67	267
NGOs	34	78	112
Total	**234**	**145**	**379**

5.9 Kisan Mobile Advisory Services

KVKs	No. of SMS sent	No. of Beneficiaries
RVSKVV	1554	441541
NGOs	343	108353
Total	**1897**	**549894**

5.10 SAC Meetings

KVKs	SAC Meeting	
	Number	Participation
RVSKVV	38	1109
NGOs	08	180
Total	**46**	**1289**

5.11 Exhibitions

KVKs	Exhibitions	
	Number	Beneficiaries
RVSKVV	60	64195
NGOs	30	6363
Total	**90**	**64558**

5.12 News letters published

5.13 Publications from KVKs

S. No.	Type of Publication	No. of Publications		
		KVKs under RVSKVV	KVKs under NGOs	Total
1.	Folder	56	16	72
2.	Booklet	14	01	15
3.	Leaflet	04	01	05
4.	Extension Bulletin	14	15	29
5.	Training Manual	01	-	01
6.	Popular Article	78	11	89
7.	Electronic Media	10	01	11
Total		**177**	**45**	**222**

5.14 Activities of Directorate of Extension Services:

5.14.1 Training programmes organized by Directorate:

S. No.	Date	Place	Particulars	Organizers	No. of Participants
Capacity building Programme					
1.	March 24-25, 2015	IISS, Bhopal	Soil health management for sustainable production	DES, RVSKVV, Gwalior	25
2.	March 16-17, 2015	College of Agriculture, Khandwa	Hi-tech horticulture	DES, RVSKVV, Gwalior	25
3.	March 01-02, 2015	RVSKVV, Gwalior	Extension strategies for entrepreneurship development in agriculture	DES, RVSKVV, Gwalior	24
4.	October 27-28, 2014	RVSKVV, Gwalior	Crop diversification under changing environment	DES, RVSKVV, Gwalior	24
5.	August 12-13, 2014	RVSKVV, Gwalior	Climate resilient agriculture for enhanced production	DES, RVSKVV, Gwalior	24

5.14.2 Workshops/Meeting organized by Directorate:

S. No.	Date	Place	Particulars	Organizers	No. of Parti-cipants
1.	March 19-20, 2015	College of Agriculture, Indore	Review meeting for Preparation of Agriculture Plan for Malwa Plateau under changing climate	DES, RVSKVV, Gwalior	45
2.	Decemb er 16-18, 2014	RVSKVV, Gwalior	Human Resource Development	EEI, Anand and DES, RVSKVV, Gwalior	35
3.	June 17, 2014	RVSKVV, Gwalior	Review meeting for finalization of "Mukhya Mantri Khet Tirtha Yojana Action Plan"	DES, RVSKVV, Gwalior	24
4.	May 13-14, 2014	RVSKVV, Gwalior	Action Plan Workshop - 2014	DES, RVSKVV, Gwalior and ZPD (Zone VII), Jabalpur	

5.14.3 Collaborative Programmes:

S. No.	Title of the Project	KVKs involved	Collaborating Institutes
1.	Tribal Sub Plan on Rapeseed-Mustard	Jhabua	ICAR-Directorate of Mustard Research, Bharatpur
2.	Tribal Sub Plan on Soybean	Jhabua, Badwani and Dhar	ICAR-Directorate of Soybean Research, Indore
3.	Tribal Sub Plan on Pulses	Jhabua, Badwani and Dhar	ICAR-Indian Institute of Pulses Research, Kanpur
4.	Tribal Sub Plan on Maize	Jhabua, Badwani and Dhar	ICAR-Directorate of Maize Research, Ludhiana
5.	National Initiative on Crop Resilient Agriculture (NICRA)	Datia, Guna and Morena	ICAR, CRIDA, Hyderabad
6.	Training cum Awareness Programme on PPV & FRA, 2001	Badwani, Datia, Gwalior, Dhar, Jhabua, Mandsaur and Shajapur	PPV & FRA, New Delhi
7.	Awareness Programme on Agricultural Marketing	Gwalior, Morena, Bhind, Shivpuri and Datia	National Institute of Agricultural Marketing, Jaipur

5.14.4 Publications of Directorate:

S. No.	Type of Publication	Number
1.	University News letter (four issues)	1000
2.	Krishi Vijay–Kisan Mela Visheshank	300
3.	New Year Diary- 2015	1000
4.	New Year Calendar -2015	1200

6. LIBRARY AND DOCUMENTATION SERVICES:

Library system of different Constituent Colleges of Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, Gwalior continued to play the pivotal role in dissemination of information across the University.

Entire academic Community continued to harness the benefits of this useful information system. Textbooks, Reference books, Competitive examination books, digital library e-books, scientific periodical, thesis, report, encyclopedias, CDs relevant to teaching and research activities etc. have been stocked in the library of constituent Colleges of the University.

Books and Journals available:

S.No.	Particulars	No. of books
1.	Total No. of books available in different College Library of Vishwa Vidyalaya.	129831
2.	New books purchased during 2014-15	3518
3.	E-Books	16

Central Library: The fund provided by ICAR has been utilized by the Central Library of the University. The much awaited and highly needed books on various subjects have been purchased. The basic infrastructural facility has been developed that has made the academic atmosphere of the libraries more conductive for the research scholars, students and teachers alike. The computerization of all the e-libraries of Vishwa Vidyalaya has made the functioning smoother now, therefore each and every user is assisted promptly. The e-library is fully functional connecting the local user through World Wide Web to the global scenario of knowledge. The good quality book cases keep study material safe and intact, and the comfortable furniture is a kind of great relief to the voracious readers. There are 9680 books (Textbooks & Reference books) of Agriculture, Horticulture, Animal Husbandry and other disciplines are available in Central Library of the University.

7. INFRASTRUCTURE DEVELOPMENT:

College of Agriculture, Gwalior:

- Purchased Refrigerated Incubator with Illumination and Shaker Electronic analytical,
- Balance make CAS and Mode CAUWD2209002340 QIAXPert Micro volume spectro photo meter Lab Scientific Instrument
- Simphiamp Thermal CyclerA24811 Invitogen

- Ice Flakers Palleting Machine
- Elisa Reader with washer make ASPEN Diagnostics Low temperature deep Freezer - 20^0C
- Centrifuge 5424 R (Refrigerated) knob version incubator and HPLC
- Developed computer lab for PG. & Ph.D. students in the newly allotted hall to Department of Statistics,
- Uploaded the data on AISHE portal related to year 2013-14 and 2014-15 and on NISAGENET portal related to year 2013-14 of all the colleges and University.

College of Agriculture, Indore:

- Construction of Training Hall at DARP building & renovation of existing DARP building including internal electrification.
- Renovation of internal electrification of new girl's hostel.
- Construction of Boundary wall at Farm area.
- Renovation of bituminous road of college campus.
- Construction of cement concrete paving path around lawn infront of Guest House, at CoA, Indore
- Renovation of Agronomy deptt. at CoA, Indore
- Renovation of Crop Physiology deptt. at CoA, Indore
- Renovation of Regional Research Project on pulses office building at CoA, Indore.

College of Agriculture, Sehore:

- In Horticulture Research farm- Poly house, Net house, Irrigation lines, fencing of horticulture nursery.

College of Agriculture, Khandwa:

- Cement Concrete (CC) road of 1200 m (3.75m wide) connecting Jaswadi Road to Bhandaria Road internally has been constructed and a 100 m CC road on Research Farm has also been constructed.
- A 1400 running meter Boundary wall on college premises and Research farm has been erected.
- Sport complex with modern facilities for all indoor games have become functional alongwith modern gymnasium equipments.
- A seminar hall and three laboratories in college premises are about to complete upto July 2015.
- The inmate capacity of 50 students, the Boys' hostel is under construction.
- One hectare area on Research Farm has been demarcated and developed especially for organic farming which will lead to take trials on organic cotton for identification and screening of verities from 2015-16.
- Four units of vermi compost pit on farm and one in KVK is functional. Production of Azolla from 2 units in KVK has started.

- 40 acres of area on research form have been brought under drip irrigation (50% of total area is under drip irrigation). 90% area of the farm is under assured irrigation. 80% area of the farm is under mechanized cultivation.
- Under large scale demonstration of wheat under drip irrigation 53Q/ha. wheat production has been obtained at a spacing of 90 cm (Var-MP1203).
- A total of 8338 plants of 147 plant species have been conserved
- Under ***'Krishi Tirth'*** Programme Pomegranate, ultra high density mango (14 varieties), oranges, lemon and guava orchard have been developed on college and farm premises. Demonstration unit of vegetable cultivation have been developed. Okra, Cowpea, Onion, Amaranthus, Cabbage, Cauliflower, Cucumber, Coriander, turmeric etc. have been successfully planted. About one lakh revenue has been obtained by selling vegetables.
- Automation and fertigation system have been strengthened and 40 acres have been brought under drip irrigation.

College of Horticulture, Mandsaur:

- Modernization of UG (First year) classrooms new godrej furniture (Dual bench and desk) fitted in the class room.
- Renovation and modernization of PG class room.
- Purchase of furniture (chairs desk and storage).
- Purchase of distillation unit, weighing balance, electric conductivity meter, and refrigerator.
- Purchase of photo copier machine.

8. GENERAL ADMINISTRATION AND FINANCE:

8.1 General Administration

The Board of Management (BoM) of RVSKVV is the apex-body, empowered to make policy decisions with the Vice-Chancellor as its Chairperson who is also the Executive Head of the University. The composition of BoM is given below:

BOARD OF MANAGEMENT

Shri Rajesh Rajora
Principal Secretary

Prof. A.K. Singh
Vice-Chancellor

Shri Aniruddhe Mukharji
Finance Secretary

Dr. M. Mahadeovappa

Dr. Punjab Singh

Shri Jaibhan Singh Pawaiya

Shri Lakhan Singh Yadav

Shri Satpal Singh Sikarwar 'Nitu'

Dr. K.M.L . Pathak

Dr. K.K. Singh

Shri Bhagban Singh Shaktawat

Shri Ram Patidar

Smt. Parveen Saba

Shri Rajendra Rajput

Er. K.K. Tiwari

Shri H.S. Mehar
(Secretary)

ACADEMIC COUNCIL

Academic Council is vested with the responsibility of implementing and monitoring all the academic programmes. The council is headed by the Vice-Chancellor, as chairperson and consists of Dean Faculty, Director Instructions, Director Research and Director Extension, University Head of Departments and Professors as members. The composition details are given below:

S. No.	NAME AND ADDRESS OF MEMBERS	OFFICIALS
1.	Dr. A.K. Singh Vice-Chancellor RVSKVV, Gwalior	**Chairman**
2.	Dr. B.S.Baghel Dean Faculty of Agriculture RVSKVV, Gwalior	Member
3.	Dr. H.S. Yadava Director Research Services RVSKVV, Gwalior	Member
4.	Dr. S.K. Shrivastava Director Extension Services RVSKVV, Gwalior	Member
5.	Dr. R.L. Rajput Director Instructions and Dean Student Welfare RVSKVV, Gwalior	Member
6.	Dr. R.A. Khan, Retd. Director Instructions, JNKVV, Jabalpur In front of Dr. Mardan Ali, Ayyaz Ali Marg, Goghar Distt. Rewa (M.P.)	Member
7.	Dr. R.S. Pachauri Ex. Director of Extension Services JNKVV, Jabalpur.	Member
8.	Dr. A.K. Singh, Prof. and Head, Department of Plant Breeding & Genetics RVSKVV, Gwalior	Member
9.	Shri H.S. Mehar Registrar, RVSKVV, Gwalior	**Secretary**

ADMINISTRATIVE COUNCIL

S. No.	NAME AND ADDRESS OF MEMBERS	OFFICIALS
1.	Dr. A.K. Singh Vice-Chancellor RVSKVV, Gwalior	**Chairman**
2.	Dr. B.S. Baghel Dean Faculty of Agriculture RVSKVV, Gwalior	Member
3.	Dr. H.S. Yadava Director Research Services RVSKVV, Gwalior	Member
4.	Dr. S.K. Shrivastava Director Extension Services RVSKVV, Gwalior	Member
5.	Dr. R.L. Rajput Director Instructions and Dean, Student Welfare RVSKVV, Gwalior	Member
6.	Dr. Y.M. Kool, Executive Engineer/In-charge of Work section RVSKVV, Gwalior	Member
7.	Shri Devendra Kumar Gupta Comptroller RVSKVV, Gwalior	Member
8.	Two Deans of Colleges nominated by the Vice-Chancellor for a period of one year by rotation 1. Dr. S.S. Tomar Dean, College of Agriculture, Gwalior 2. Dr. A.M. Rajput Dean, College of Agriculture, Indore	Member
9.	Two Heads of Department from Agriculture Faculty, in rotation according to the seniority for a period of one year- 1. Dr. M.M. Patel, Prof. & Head, Ext. Edu., RVSKVV, Gwalior 2. Dr. S.K. Verma, Prof.&Head, Soil Science, RVSKVV, Gwalior	Member
10.	Shri H.S. Mehar Registrar, RVSKVV, Gwalior	**Secretary**

Finance:

(Rs. in Lakhs)

1.	**Opening Balance (01/04/2014)**		1808.81
2.	Received Grant in aid from M.P. Govt.		-
	A. Agriculture Department		
	I.	Agriculture Plan	2200.00
	II.	Tribal Sub Plan	500.00
	III.	Special Component Plan	400.00
	IV.	Agriculture Non-Plan	1786.00
	V.	Mukhya Mantri Kheti Tirth Yojna	104.94
	(B) Others		
	I.	Rashtriya Krishi Vikas Yojana (RKVY)	348.00
	II.	Government of India (GOI), other Scheme	24.80
	III.	M.P. State Agriculture Marketing Board (Mandi Board)	894.55
	IV.	Other	205.79
3.	I. Indian Council of Agricultural Research(ICAR& KVKs)		2416.75
	II. Development grant (ICAR)		270.20
	III. Government of India (GOI)		-
4.	Internal & Other Resources of University		1184.36
Total Received Amount			**12144.20**
5.	**Total Expenditure on Pay & Other Allowances etc.**		**10563.17**
6.	**Closing Balance on 31/03/2015**		**1581.03**

9. IMPORTANT EVENTS:

9.1 Events/ Inaugurations:

(i) 6TH FOUNDATION DAY OF RVSKVV

The 6th Foundation Day of Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, Gwalior was observed with a day long programme on Aug. 19, 2014. On this occasion, Hon'ble Sh. Narendra Singh Tomar, Union Minister for Mines, Steel, Labour and Employment, Govt. of India, New Delhi was present as Chief Guest of the program, Dr. G.S. Davar, Managing and Technical Director, Tropilite Foods Pvt. Ltd., Gwalior was the Guest of Honour and Sh. Gajanan Wakankar, Ex-Ambassador, Govt. of India, New Delhi presided over the function. Hon'ble Prof. A.K. Singh, Vice Chancellor highlighted the University's achievements.

(ii) SWACHH BHARAT ABHIYAN

University headquarters and other campii under the jurisdiction of the university celebrated Gandhi Jyanti Oct. 02, 2014 as Swachh Bharat Abhiyan. Hon'ble Vice-Chancellor Prof. A.K. Singh took the oath along with senior officers and staff of the University for a Clean Campus. On this occasion it was also decided all the units under the jurisdiction of the University would become "Clean and Green".

(iii) INAUGURATIONS
ADMINISTRATIVE BUILDING OF SPECIAL RESEARCH STATION, BHIND

Administrative building of Special Research Centre, Bhind was inaugurated on Jul. 7, 2014 by Hon' ble Vice Chancellor Prof. A.K. Singh, RVSKVV, Gwalior (M.P.)

SEED TECHNOLOGY LABORATORY

Seed Technology, laboratory at College of Agriculture, Sehore was inaugurated by Dr. Mahmoud El-Solh, Director General, ICARDA, Beirut- Lebanon on Aug. 10, 2014 in gracious presence of Prof. A.K. Singh, Vice Chancellor, RVSKVV, Gwalior, Dr. Kamel Shideed, ADG (I.C.), Dr. B.B. Singh, ADG (Pulses and Oil Seeds) ICAR, New Delhi and Dr. H.S. Yadava, Director Research Services, RVSKVV, Gwalior.

MUSHROOM TRAINING AND SPAWN PRODUCTION UNIT

Prof. A.K. Singh Hon'ble Vice Chancellor inaugurated the mushroom training and spawn production unit at College of Agriculture, Indore on Sept. 05, 2014.

FARMER'S TRAINING CENTRE AND AUTOMATIC FERTIGATION

The Unit was inaugurated by Dr. Panjab Singh, former Secretary DARE and Director General, ICAR, New Delhi on Dec. 27, 2014 at College of Agriculture, Indore in the gracious presence of Prof. A.K. Singh, Vice Chancellor, RVSKVV, Gwalior, Dr. Ch. Srinivasa Rao, Director, CRIDA, Hyderabad and Dr. H.S. Yadava, Director (Research Services), RVSKVV, Gwalior.

9.2 Seminars/ Symposia/ Workshops/ Conferences/ Meetings Organized:

(I) NATIONAL SYMPOSIUM ORGANIZED

A national symposium on **"Dryland Farming and Food Security in India"** was jointly organized by RVSKVV, Gwalior and IAUA, New Delhi during Aug. 30-31, 2014. The programme was inaugurated by Hon'ble Shri Gauri Shankar Bisen, Minster, Farmer Welfare and Agricultural Development, Govt. of M.P.; Hon'ble Smt. Maya Singh, Minster, Women and Child Development, Govt. of MP; Hon'ble Shri Narayan Singh Kushwah, MLA, Gwalior South; Hon'ble Shri Bharat Singh Kushwah, MLA, Gwalior Gramin and Smt. Samiksha Gupta, Mayor Municipal Corporation, Gwalior were the Guests of Honour in the function. The symposium was inaugurated under the Chairmanship of Dr. Panjab Singh, Ex-Secretary, DARE, Govt. of India and Director General, ICAR in the gracious presence of Prof. A. K. Singh Hon'ble V.C., RVSKVV, Gwalior and Dr A. K. Srivastava, President, IAUA, New Delhi. About 200 scientists/researchers from SAUs and ICAR Institute participated in this symposium.

(II) NATIONAL SEMINAR ORGANIZED

A National Seminar in Hindi on "कृषि उद्यानिकी एवं पशुपालन हेतु जलवायु परिवर्तन के सन्दर्भ में प्राकृतिक संसाधनों का समुचित दोहनः चुनौतियाँ एवं अवसर" was jointly organized by RVSKVV, Gwalior and Bhartiya Krishi Anusandhan Samiti, Karnal during Dec. 5-7, 2014. The Seminar was inaugurated by Dr. A. Subba Rao, Ex. Director, IISS, Bhopal and Professor A.K. Singh, Vice Chancellor, RVSKVV, Gwalior presided over the inauguration function.

A National Seminar on **"Innovative Saline Agriculture in Changing Climate"** was jointly organized by Indian Society of Soil Salinity and Water Quality, Karnal; Department of Soil Science, RVSKVV, Gwalior and Central Soil Salinity Research Institute, (ICAR) Karnal, during Dec. 12-14, 2014 at RVSKVV, Gwalior. The seminar was inaugurated by Prof. A.K. Singh, Vice Chancellor, RVSKVV, Gwalior. About 145 delegates/scientists from different part of the country participated in the event.

A National Seminar on "**Extension Innovations and Methodologies for Market-led Agricultural Growth and Development**" was jointly organized by Indian Society of Extension Education (ISEE), IARI, New Delhi and Department of Extension Education, RVSKVV, Gwalior during Feb. 26-28, 2015 at RVSKVV, Gwalior. The seminar was inaugurated by Dr. S.N. Puri Ex Vice Chancellor CAU, Imphal. About 300 delegates/scientists from different part of the country participated in the event.

(III) WORKSHOP ORGANIZED

30th Annual Workshop of the All India Network Project on Arid Legumes was organised on June 7-8, 2014 by RVSKVV, College of Agriculture, Gwalior. The programme was inaugurated by chief guest Dr. Sangeeta Shukla, V.C., Jiwaji University, Gwalior under the chairmanship of Prof. A.K. Singh, V.C., RVSKVV, Gwalior. Eminent scientists Dr. B.B. Singh ADG (O&P) ICAR, New Delhi and Dr. A. Henry (Project Co-ordinator) were present and presided over the sessions. Dr. G.S. Rawat (Principal Scientist, Agronomy) acted as Organizing Secretary of the program.

A Workshop on **"Quality Planting Material and Supply Systems"** was jointly organized by Ministry of Agriculture, Govt. of India, ICRAF-Regional office for South Asia, New Delhi and ITC during 16-17 Jan., 2015. Dr. D.N. Tiwari, President, Vigyan Parishad, Prayag, Allahabad was the chief guest of the program. Dr. V.P. Singh (from ICRAF), Mr. Ramesh Dhiman (from Winco Pvt. Ltd.), Mr. Jagdish Tamak (from ITC Ltd.), Mr. Parth Joshi (from YES Bank), Mr. Rajkumar (from Central Bank of India) and Mr. Jay Nigam (from NABARD) also gave their presentations on various aspects in this event.

XXIV Biennial Workshop of All India Coordinated Research Project on Dryland Agriculture (AICRPDA) was organized at College of Agriculture, Indore during Dec. 26-29, 2014. The workshop was inaugurated by Dr. Panjab Singh, Former Secretary, DARE and DG, ICAR, New Delhi; Dr. Masood Ali, Former Director, IIPR, Kanpur and Dr. Ch. Srinivas Rao, Director, ICAR-CRIDA, Hyderabad were guest of honor. Prof. A.K. Singh Vice-Chancellor presided over the inaugural function.

(IV) FARMER'S FAIR AND EXHIBITION "KRISH VIJAY 2014"

Farmers Fair and Agricultural Exhibition **"Krishi Vijay - 2014"** was organized by the University in collaboration with Department of Farmers Welfare and Agriculture Development, Bhopal, Govt. of M. P., National Horticulture Board, Gurgaon (Haryana) and Madhya Pradesh State Agriculture Marketing Board, Bhopal (M. P.) during September 27-29, 2014. About 7500 farmers from different parts of the country participated in the fair. Latest techniques were demonstrated through the stalls of different companies and departments. Agriculture entrepreneurs and officials from different allied departments also participated in, "Krishi Vijay - 2014". This fair was inaugurated by Hon'ble Cabinet Minister Shri Narendra Singh Tomar and the formally concluded by the by Hon'ble Minister of Agriculture, Govt. of M. P. Shri Gaurishankar Bisen.

10. HUMAN RESOURCE DEVELOPMENT:

Participation of Scientist in National/International Seminars/Symposia/ Conferences/ Short term Courses /Trainings/Workshops/Summer and Winter Schools etc.

S. No.	Particular	No. of Participants nominated
1.	Winter/Summer School/ CAFT trainings (ICAR)	42

11. AWARDS AND RECOGNITIONS:

BEST AICRPDA CENTRE AWARD 2014 	All India Coordinated Research Project on Dryland Agriculture, Main centre, College of Agriculture, Indore was awarded with the **Best AICRPDA Centre Award 2014** for outstanding contribution in dry land research during the biennium 2012-13 and 2013-14.
BEST NICRA KVK AWARD 	Krishi Vigyan Kendra, Datia was awarded as the Best NICRA KVK on Novemner 29, 2014 at CRIDA Hyderabad for various climate resilient activities for the projected years 2011-2014.
Utkrist KVK Samman (National) Award 	Hon'ble Shri Radha Mohan Singh, Union Minister of Agriculture, GoI awarded KVK, Jhabua with **"Utkrist KVK Samman (National) Award"** on 24th February, 2015 at New Delhi.
KVK, JHABUA AWARDED 	KVK, Jhabua was awared with "Apprciation Certificate" during KVKs Zonal Workshop at IGKVV, Raipur for their significant achievements on July 09, 2014.

YOUNG SCIENTIST AWARD 2014

	Dr. S.K. Badodiya was awarded Young Scientist Award 2014 at Umium Meghalaya by the Society of Extension Education Agra.
	Dr. I.S. Naruka awarded honors for recognition in the field of **Horticulture Research and Education** by the **Hon'ble Minister, Govt. of India Shri Narendar Singh Tomar** on the foundation day of the University RVSKVV, Gwalior on August 19, 2014.
	Dr. R.P. Sharma Programme Coordinator, KVK, Dewas received 3rd Prize for poster presentation during the XXI Zonal Workshop of KVK's at IGKV, Raipur on Sept. 5-7, 2014.
	B.M. College of Khandwa is maintaining about 8338 plants of 147 Plant species. The conservation of such a vast variation of crop species has been recognized and the college received the **Excellent Biodiversity Garden Award 2014,** by the State Biodiversity Board in 2014.

BEST KVK PROFESSIONAL AWARD

Society of Extension Education confers Dr. Rupendra Kumar Singh, I/c Programme Coordinator KVK, Lahar with Best KVK Professional Award in Meghalya for his contribution in the field of the transfer of technology.

ACHIVERS AWARD-2014

Dr. Rekha Tiwari, Scientist at Krishi Vigyan Kendra, Ujjain conferred upon the prestigious Achievers award-2014 on dated Feb. 28, 2015 by the Society for the Advancement of Human and Nature (SADHNA), Dr. Y.S. Parmer University of Horeticulture and Forestry, Nauni Solan (H.P.)

- Dr. M. Yasin; Dr. H.S. Yadava; Dr. P. Joshi and Dr. R.K. Gupta won First Prize for poster presentation of their paper entitled "State Seed Mission: Co-operation and Co-ordination to Reach Destination" in 7th National Seed Congress on Quality Seed for Successful Agriculture organized by DAC- MPSSFDC in Bhopal on Sept. 25–27, 2014.
- Dr. S.C. Gupta and Dr. B. Trivedi were awarded first prize for poster presentation in National Conference on Pulses organized from Sep. 29 to Oct. 01, 2014 at JNKVV, Jabalpur.
- Dr. M.M.Patel Professor Head, Department of Extension Education, received the Indian Society of Extension Education Fellow award and recognition for organizing ISEE National Seminar Successfully.
- Dr. V S. Kandalkar received appreciation award in the field of quality wheat variety development by Gwalior Vikas Samiti, Gwalior MP, on the occasion of 37thAbhinandan ceremony held on 15 August, 2014
- Dr. U.R. Khandkar, Principal Scientist, won First prize in Poster presentation AICRPDA Indore center awarded Best Centre for 2014-15.
- Dr. R. C. Jain, received Four awards achieved during 2014-15
  - **(i)** 3rd prize from National Symposium on Dry land Farming and Food Security in India at RVSKVV, Gwalior.
  - **(ii)** Best paper award Aug. 2014 in national seminar at RVSKVV, Gwalior.
  - **(iii)** Best performance Award during Krishi Mahostsav Nov. 2014 by Distt. Collector, Sehore.
  - **(iv)** Second Position in Akhil Bhartiya Kisan Mela and Krishi Pradarshani Sep. 2014.
- Dr. K. N. Tambi was awarded in Krishi Utthan Mela, 2014.
- College of Agriculture, Khandwa received an Honour of the Excellent Biodiversity Garden Award 2014 by the M.P. State Biodiversity Board, Bhopal in a graceful function held on 22nd May, 2014 on the occasion of the International Biodiversity

Day at the RCPV Naronh Administrative Academy, Bhopal. The team headed by the Dean received a Trophy, a certificate and a Cash prize of Rs. 5000/- in the form of DD in favor of the Dean, College.

- Dr. Om Singh received young scientist award -2015 by Bioved Research Institute of Agriculture & Technology, Allahabad (U.P.).
- Patidar, S. L.; Tripathi, M. K.; Tiwari, G.; Patel, R. P. and Singh, O.P. were awarded second prize for the best poster presentation of research on Production of plumbazin in *Plumbago zeylanica* L. through callus and cell suspension culture in National Symposium on Dryland Farming and Food Security in India at RVSKVV, Gwalior (2014).
- Patidar, S. L.; Tiwari, G.; Tripathi, M. K.; Patel, R. P. and Singh, O.P. were awarded third prize for the best poster in faculty category of research on *In vitro* induction and quantification of plunbazin in *Plumbago zeylanica* L. in National Conference on Biotechnology for sustainable Agriculture at Biotechnology Centre, JNKVV, Jabalpur, (M.P.) (2014).
- Malviya, Ramkanya.; Tripathi, M. K. and Vidhyashankar M. were awarded for third prize for the best poster in student category of research on efficient plantlet regeneration in gladiolus (*Gladiolus hybridus* Hort.) in National Conference on Biotechnology for sustainable Agriculture at Biotechnology Centre, JNKVV, Jabalpur, (M.P.)(2014).
- Dubey, Rajiv received best poster presentation award in national seminar on Challenge and opportunities for Agricultural Crop Productivity under Climate Change organized by JNKVV College of Agriculture, Rewa (M.P.) on 21-22 September 2014.

Farmers Honoured

	Fifteen farmers were nominated by the University on during September 30, 2014 for, **"Samay Annapoorna Puraskar"**. Two progressive farmers Shri Balram Patidar and Smt. Vasu Bai under the aegis of Krishi Vigyan Kendra, Jhabua received the award.
	Shri Radhamohan Singh, Hon'ble Union Minister of Agriculture, DARE, Ministry of Agriculture, Govt. of India appreciated Smart Farmer Shri Chhatrapal Pateriya of Krishi Vigyan Kendra, Datia for his work on Climate Resilient Activities in Research Symposia organized by ICAR at IGKV, Raipur, Chhattisgarh during Oct. 17-18, 2014.
	Progressive farmer of Dewas District Shri Narayan Singh received award from Sh. Radha Mohan Singh, Hon'ble Union Minister of Agriculture, Department of Agricultural Research and Education, Ministry of Agriculture, Govt. of India and Hon'ble Chief Minister of Chhattisgarh Shri Raman Singh during the ICAR Regional Committee Meeting Zone VII at IGKV, Raipur from Oct. 17-18, 2014.
	Shri Prakash Singh Solanki, Farmer, Nignoti village, Indore was awarded with **Best Farmer Award** for his outstanding contribution in the field of rainwater harvesting and recycling in crop husbandry, crop diversification and fish rearing on Dec. 27, 2014 in XXIV Biennial Workshop of AICRPDA organized by CoA, Indore.

12. VISITS ABROAD:

- Dr V.S. Gautam, Dean and Dr. A.N. Tikle, Senior Scientist (Plant Breeding), R.A.K. College of Agriculture, Sehore attended the attended the annual review meeting and presented the progress of IFAD project "Sustainable management of crop based production system for raising agricultural productivity in rainfed Asia" from May 20-22, 2014 at Kathmandu, Nepal.
- Dr. M.Yashin, Principal Scientist, RAK College of Agriculture, Sehore attended Integrated Breeding Multi Year Course IIrd (IBMYC) from September 15-26, 2014 at Zaragoza, Spain.
- Dr. A.N. Tikle Principal Scientist, RAK College of Agriculture, Sehore attended The 6th International Food Legume Research Conference and 7th International Conference on legume genetics and Economics From July 07-11, 2014 at University of Saskatchewan at Sakatoon, Canada.
- Dr. S.K. Sharma, Senior Scientist, Soil Science & Agriculture Chemistry visited Japan under M.P. JICA Project.
- Dr. S. R. Ramagiry visited Japan for nine days under M.P., JICA Project.
- Prof. A.K. Singh visited Korea on Sept. 18, 2014 to participate in the International Workshop of INWEPF Working Group 2 on **"Agriculture Heritage of Paddy Field"**.
- Prof. A.K. Singh visited Vietnam from Nov. 5-7, 2014 to attend the 11th Streering Committee Meeting of INWEPF and International Symposium on "**Multifunctional role of irrigation management in paddy production and minstreaming diseaster risk management in the context of climate change**".
- Dr. Shobhana Gupta visited Italy and Germany under the Mukhyamantri Kisan Videsh Adhyayan Yatra Yojna alongwith 17farmers and 04 farm women during November 25 – December 08, 2014.

13. DISTINGUISHED VISITORS:

- Dr. B. Gangwar, Former Director ICAR-Indian Institute of Farming Systems Research Modipuram, Meerut-250 110, Uttar Pradesh
- Dr. R.K. Rattan, Ex. President, Journal Indian Society of Soil Science, New Delhi.
- Dr. S.S. Tomar, Director Research Services, JNKVV, Jabalpur M.P.
- Prof. Jagdish Prasad, Principal Scientist, ICAR-National Bureau of Soil Survey and Land Use Planning, Amravati Road, Nagpur-440033
- Dr. K. K. Sahu, Department of Soil Science and Agricultural Chemistry, Indira Gandhi Agriculture University Raipur, Chhattisgarh
- Dr. B.L. Sharma, Professor Department of Soil Science & Agricultural Chemistry JNKVV, Jabalpur M.P.

- Dr. D. R. Biswas, Principal Scientist, Division of Soil Science and Agricultural Chemistry, Indian Agricultural Research Institute, New Delhi – 110 012
- Dr. Muneshwar Singh, Project Coordinator-Long Term Fertilizer Experiments, ICAR-Indian Institute of Soil Science, Bhopal M.P.
- Dr A. S. Tiwari invited guest lecturers with regards to Biometrical genetics courses at PG/Ph.D levels in the Department.
- Dr. Phundhan Singh invited for JRF/Net preparations to PG and Ph.D. students.
- Dr. S. M. Puri, Ex-Vice chancellor, Central Agricultural University, Imphal visited wheat trials on dated 26 February, 2015.
- Dr. Panjab Singh, Former Secretary DARE and the DG, ICAR for 26-27 December, 2014.
- Dr. Ch. Srinivasa Rao, Director CRIDA, 26-27 December, 2014.
- Dr. V.S. Tomar, Vice-Chancellor, JNKVV, Jabalpur M.P.
- Dr. Sarkar and Dr. Martein from ICARDA, ICARDA, Regional Office, New Delhi (visited three times).
- Shri Bagwan Singh Shaktawat, Member, Board of University, RVSKVV, Gwalior, 19th November 2014, visited College of Horticulture, Mandsaur.
- Dr. A. Subharao, Ex-Director, IISS, Bhopal visited KVK, Morena on May 28, 2014.
- Dr. J.C. Dagar, Ex-ADG, NRM, ICAR, New Delhi visited KVK, Morena on May 28, 2014.
- Dr. V.B. Singh, Principal Scientist, GBPUAT, Pantnagar, visited KVK, Morena on June 09, 2014.
- Dr. B. B. Singh, ADG (Pulses and Oil Seeds), ICAR, New Delhi visted RVSKVV, Gwalior on June 08, 2014.
- Dr. A. Henery, Project Coordinator, All India Arid Pulses Research Project, Jodhpur visited RVSKVV, Gwalior during June 07-08, 2014.
- Dr. B. B. Singh, ADG (O&P), ICAR, New Delhi visited College of Agriculture, Sehore on July 27, 2014.
- Dr. A. Sarker, Regional Coordinator, ICARDA, Regional Office, New Delhi visited College of Agriculture, Sehore on July 27, 2014.
- Dr. Mohmoud El-Solh, Director General, ICARDA, Beirut- Lebanon visited College of Agriculture, Sehore on August 10, 2014.
- Dr. Kamel Shideed, ADG (International Cooperation and Communication), ICARDA, Beirut- Lebanon visited College of Agriculture, Sehore on August 10, 2014.
- Dr. B.B. Singh, ADG, ICAR visited College of Agriculture, Sehore on August 10, 2014.

- Smt. Kanchan Jain, Principal Secretary, Govt. of M.P. visited KVK Dewas on October 14, 2014.
- Dr. C. Chattopadhyay (Director, NCIPM), NCIPM ICAR, New Delhi visited Khargone and Badwani Districts on November 14, 2014.
- Dr. S.A. Patil, Advisor, IMFLI, ICARDA visited College of Agriculture, Sehore on December 23, 2014.
- Dr. Immadeddin Rouni, ICARDA visited College of Agriculture, Sehore on December 23, 2014.
- Dr. Panjab Singh, Former DG, ICAR & Secretary DARE, ICAR, New Delhi visited College of Agriculture, Indore on December 27, 2014.
- Dr. Masood Ali, Former Director, IIPR, Kanpur visited College of Agriculture, Indore on December 27, 2014.
- Dr. Ch. Sriniwas Rao, Director, CRIDA, Hyderabad visited College of Agriculture, Indore on December 27, 2014.
- Dr. G. Ravindra Chary, Project Coordinator, AICRPDA, CRIDA, Hyderabad visited College of Agriculture, Indore during December 27-28, 2014.
- Dr. S.N. Puri, Ex-Vice Chancellor, CAU, Imphal, visited College of Agriculture, Gwalior during February 26-28, 2015.

14. PUBLICATIONS:

Research papers/Abstract (Presented & Published)/Books/Book Chapters/ Teaching Manual/ Popular Articles etc.

S.No.	Category of publication	Nos
1.	Paper Published in National and International Journals	81
2.	Research paper presented in the seminar/ Souvenir	64
3.	Abstract Published in Seminar/Symposia/Conferences	34
4.	Book	06
5.	Book Chapter	02
6.	Teaching Manual	20
7.	Popular articles	45

14.1 Papers Published in National and International Journals:

1. Arora, Asha and Dubey, S.K. (2014). Persistence of pendimethalin and chlorimuron-p-ethyl in soil and its impact on soil microorganisms. *Pesticide Research Joumal* 26(2): 189-192.

2. Bangar, K.S.; Yadhona, D.; Khandkar, U.R. and Khaddar, V.K. (2014). Cadmium adsorption by vertison and inceptison irrigated with tube well water and sewage effluent. *Annals of Plant and Soil Research* 16(1): 15-20.

3. Bangar, K.S.; Yashona, D.; Khandkar, U.R. and Khaddar, V.K. (2014). Cadmium adsorption by Vertisols and Inceptisol irrigated with tube well water and sewage effluent. *Annals of Plant and Soil Research* 16(1): 15-20.

4. Barholia, A.K. and Yadav, Sangeeta (2014). Fruit quality characters and their relation with weight per fruit in mango over years. *Orient Journal of Chemistry*, 30(3):1421-1427.

5. Barholia, A.K. and Yadav, Sangeeta (2014). Genetic merit based genotype selection for physical fruit traits in mango. *Turkish Journal of Agriculture-Food Science and Technology*, 2(6): 260-262.

6. Bathri, T.; Chouhan, R.; Choudhary, S. and Swarnkar, V.K. (2014). Impact of Front Line Demonstration on Scientific Temperament of Maize Growers in Jhabua District (M.P.). *IOSR Journal of Agriculture and Veterinary Science (IOSR-JAVS).* 7(10): 1-4. E-ISSN: 2319-2380, p-ISSN: 2319-2372. www.iosrjournals.org.

7. Bhaure, M.; Tiwari, Gyanendra; Jhankare, A.; Tiwari, R. and Singh, O. P. (2014). Influence of plant growth regulators on phenology, growth and root yield of Ashwagandha (*Withania somnifera* (L.) DUNAL.). *International Journal of Current Research*, 6 (5):6743-6755.

8. Bhadauria, Nisha; Rajput, R.L. and Bhadauria, Ajay (2014). Effect of mulching, varieties and nutrient management on yield attributes and yield of clusterbean. *Bhartiya Krishi Anusandhan Patrika* 29 (4): 181-184, N R: 2.46

9. Bohane, Lesha and Tiwari, Rajesh (2014). Effect of integrated nutrient management on physico-chemical parameters of ber under Malwa plateau conditions. *Annals of Plant and Soil Research,* 16 (4): 346-348. (NAAS rating in 2014-3.66).

10. Chaudhary, R. K.; Swathi, P.; Upadhyay, S.; Singh S.B. and Sharma; M. (2014). Efficacy of insect growth regulators against diamond back moth and tobacco caterpillar infesting cabbage crop. *Annals of Plants and Soil Research*, 16(4): 308-11.

11. Damar, Dilip; Barholia, A.K.; Lekhi, R. and Haldar, A. (2014). Effect of growth regulators and bio-fertilizers on survival of pomegranate (*Punica granatum* L.) stem cuttings. *Plant Archives*, 14(1): 347-350.

12. Dohare, A.; Choudhary, S. and Swarnkar, V.K. (2014). Study on Knowledge about Organic Farming Practices Possessed by Farmers of Khargone District, Madhya Pradesh, India. *International Journal of Science and Research*, 3(3): 148-149 www.ijsr.net , ISSN (Online): 2319-7064.

13. Dwivedi, Shailendra K.; Joshi, V. K. and Mishra, Vigya (2014). Yield and economics of different soybean verities under rainfed condition of Madhya Pradesh. *Research Journal of Agriculture and Environmental Management*, 3(6): 274-280.

14. Gowa, S.; Choudhary, S. and Swarnkar, V.K. (2014). Entrepreneurial and Marketing behavior of Garlic producers in Agri-export Zone, Malwa Plateau, in Madhya Pradesh, India-A Study. International *Journal of Academic Research* 1(3): 33-37.

15. Haldar, Ajay; Naruka, P.S.; Rathore, S.S. and Kanpure, R.N. (2014). Foliar application of antioxidants on quality attributes and pungency principles of garlic (*Allium sativum*). *Plant Archives*, 14 (2): 1061-1064.

16. Jain, Goldi: Kushwah, S. S.; Singh, O. P. and K. S. Verma. (2014). Effect of different doses of nitrogen sulphur on growth yield and quality of onion (Allium cepa). *Indian Journal of Agricultural Sciences* 84 (11): 1352-57.

17. Jarman Mahesh; Ramagiry S.R. and Yadav S. K. (2014). Study of gene action and combining ability for physiomorphic and traits in Soybean (*Glycine max* (L.) Merrill), *Soybean Research,* 12(2):57-63.

18. Jat, P.; Tiwari, A.; Choudhary, S. and Swarnkar, V.K. (2014). Production technology and availability of marketing facilities Of Onion in dewas district of Madhya Pradesh, India. *Quest Journals Journal of Research in Agriculture and Animal Science*, 2(6): 10-13 ISSN (Online): 2321-9459 www.questjournals.org.

19. Joshi, Arun; Gupta, J.K.; Choudhary, S.K. and D.K.Paliwal (2014). Efficiency of different nitrogen sources doses and split application on growth and yield of maize (Zea mays L.) in the malwa region of M.P. *IOSR Journal of Agriculture and Veterinary Science* 2 (2/1): 39-42.

20. Kalne, Abhimannyu; Khan K. Alam; Ghurde, N.A. and Kalmegh, V.B.(2014). Optimization and Standardization of process technology for preparation of Soy Coffee. *Soybean Research Special issue* 2.

21. Kujur, Anjana; Bhadauria, Nisha and Rajput, R.L. (2014) Effect of weed management practices on seed yield and nutrient (NPK) uptake in Cowpea. *Legume Research* Accepted by ARCC/LR-3264.

22. Kushwaha, B.B.; Thakur, N.S.; Saxena, U.; Shrivastava, D.K.; Kataria, V.P.; Upadhyay, S.N. and Choudhary, R.K. (2014). Effect of fertility levels, farmyard manure levels and bioinoculants on growth yield and uptake of nutrients by sorghum (*Sorghum bicolor* L. Moench). *Annals of Plant and Soil Research*, 16(2): 139-142.

23. Kushwaha, B.B.; Thakur, N.S.; Saxena, U.; Shrivastava, D.K.; Upadhyay, S.N.; Choudhary, R.K. and Kataria, V.P. (2014). Physiological growth parameters of sorghum as influenced with fertility, FYM and bioinoculants. *Annals of Plant and Soil Research.* 16(2): 170-171.

24. Kushwaha, P.; Jaiswal, R.K.; Gupta N.K. and Sharma, S.K. (2014). Performance of potato genotypes for morphological parameters and tuber yield under Malwa region of Madhya Pradesh. *Annals of Plant and Soil Research* 16(4): 376-377.

25. Mansoori, Nazma; Bhadauria, Nisha and Rajput, R.L. (2013) Effect of weed control practices on weeds and yield of blackgram *(Vigna mungo). Legume Research* Accepted ARCC/LR-3277.

26. Meena, Dinesh; Tiwari, Rajesh and Singh, O.P. (2014). Effect of nutrient spray on growth, fruit yield and quality of Aonla. *Annals of Plant and Soil Research.* 16 (3): 242-245.

27. Mishra, J.S.; Thakur, N.S.; Singh, P.; Kubsad, V.S.; Kalpana, R.; Alse, U.N. and Nemade, S.M. (2014). Tillage and integrated nutrient management in rainy season grain sorghum (*Sorghum bicolor*). *Indian Journal of Agronomy*, 59(4): 619-623.

28. Panwar, T. S.; Singh, S.B. and Upadhyay, S. N. (2014). Population dynamics of aphid, Aphis gossypii (Glover) in relation to weather factors in Bt and non Bt cotton in Maiwa region. *Annals of plant and Soil Research*, 16 (4):338-341.

29. Parmar, M.; Ramagiry, S. R. and Shahay, S. (2014). Economic traits determining seed yield in indigenous collection of Soybean (*Glycine max* (L.) Merrill), *Journal Soil & Crops*, 24(2):259-267.

30. Parsai, S.K.; Moghe, V.; Patidar, M. and Vijyan, J (2014). Bio-efficacy of insecticide against termite on chickpea as seed treatment. *Environment and Ecology* 32 (4A): 1490-1493.

31. Patel, Vipin and Tiwari, Rajesh (2014). Effect of pre-harvest spray of nutrients on delayed ripening and prolonged stroreability of guava fruits. *Annals of Plant and Soil Research,* 16 (4): 327-329.

32. Patidar M.; Baraiya B.R.; Moghe, V. and Malgaya, J. (2014). Pest Succession and avoidable losses to major insect pests on Sesame (*Seasanmum indicum* L.). *Research journal of Agriculture Sciences* 05(4) 834-835.

33. Patidar, Jitendra; Naruka, I.S.; Shaktawat, R.P.S. and Verma, K.S. (2014). Integrated Nutrient Management in Ashwagandha *(Withania somnifera* L. Dunal). *Environment and Ecology*, 32 (4A): 1465-1469.

34. Pawar, K.; Mishra, S.P. and Singh, R.K. (2015). Efficacy of bioagents and fungicides against seed borne microflora of soybean. *Annals of Plant & Soil Research,* 17: 77-81.

35. Preeti, Chouhan; Vidhya, Sankar M. and Mishra, S. N. (2015). Effect of chemical solutions on vase life, quality and biochemical parameters of gerbera *(Gerbera jamesonii* Bolus ex Hooker F*). Green Farming* 6(1):186-188.

36. Rajput, Beerbal Singh; Bhadauria, U.P.S. and Rajput, R.L. (2014) Dry matter content in mungbean *(Vigna radiata* (L.) WILCZECK) genotypes. **BIOINFOLET** 11(1B): 243-246.

37. Rajput, Beerbal Singh; Bhadauria, U.P.S. and Rajput; R.L. (2014) Study on specific leaf area and its relation with leaf area dry weight and seed yield in Mungbean *(Vigna radiata* (L.) WILCZECK). BIOINFOLET 11(1B):247-250.

38. Rajput, R.L. and Rawat, G.S. (2014) Effect of different fertility levels on yield and yield attributes of Pea (*Pisum satiava* L.). *Bhartiya Krishi Anusandhan Patrika* 29 (3): 116-118.

39. Rajput, Beerbal Singh and Rajput, R.L. (2015). Response of promising rainy summer season greengram (*Vigna radiata* L.) genotypes to phosphorus fertilization. *Legume Research* (Accepted).

40. Rajput, Beerbal Singh and Rajput, R.L. (2015). Effect of genotypes and phosphorus levels on growth analysis parameters of greengram (*Vigna radiata* L.) *Legume Research* (Accepted).

41. Ramagiry, S. R.; Raidas, D. K.; Khandwe, R.; Tsuiji, K. and Kobayasi, S. (2014). Evaluation of Soybean varieties of high plant density in western Madhya Pradesh. *Soybean Research,* 12(2):293-297.

42. Ranade, D.H. (2014). Economic evaluation of irrigation through water harvesting tanks in Malwa region. *Indian Journal of Soil Conservation* 42(2): 208-215.

43. Ranade, D.H. (2014). Utility and impact of supplemental irrigation from water harvesting tanks in Malwa region. *Journal of Agricultural Research and Technology* 40(1):123 -128.

44. Rawat, G.S.; Barholia, A.K. and Rawat, Upama (2014). Effect of Different Varieties of Clusterbean on yield attributing characters, Productivity and Economics. *Bhartiya Krishi Anusandhan Patrika* 29 (1): 14-16

45. Rawat, G.S.; Rawat, Upama and Rajput, R.L. (2014) Evaluation of suitable post emergence herbicides for clusterbean [*Syamopsis tetragonoloba* (L.) Taub.]. *Bhartiya Krishi Anusandhan Patrika* 29 (3): 123-125.

46. Rawat, G.S.; Rawat, Upama and Rajput, R.L. (2014). Effect of different varieties of clusterbean on yield attributes, yield and economics in Northern Madhya Pradesh. *Bhartiya Krishi Anusandhan Patrika* 29 (4): 177-180.

47. Rawat, G.S.; Rawat, Upama and Rajput, R.L. (2015). Effect of different varieties of clusterbean on yield attributes, yield and economics in gird region. *Bhartiya Krishi Anusandhan Patrika* 30 (1): 15-17.

48. Rawat, Kiran and Rajput, R.L. (2014). Effect of method and irrigation scheduling on growth, moisture deplition and uptake of nitrogen, phosphorus and potash. *Bhartiya Krishi Anusandhan Patrika* 29 (2): 70-72.

49. Rawat, Upma; Rajput, R.L.; Rawat, G.S. and Garg, S.K. (2015). Effect of varieties and nutrient management on growth analysis parameters and nutrient uptake of clusterbean [*Syamopsis tetragonoloba* (L.) Taub.]. *Green Farming* 6(1): 70-73.

50. Rawat, Upma; Rajput, R.L.; Rawat, G.S. and Garg, S.K. (2015). Effect of Vermicompost and Varieties on yield, qualitative attributes and nutrient uptake of clusterbean [*Syamopsis tetragonoloba* (L.) Taub.] in *Gird region. India. Eco. Env. & Cons.* 21(1): 179-183.

51. Sandhu, P.S.; Brar, K.S.; Chauhan, J.S.; Meena, P.S.; Awasthi, R.P.; Rathi, A.S.; Kumar, A.; Gupta, J.C.; Kolte, S.J. and Manhas, S.S. (2014). Host Pathogen interactions of Brassica genotypes for white-rust (*Albugo candida*) disease severity under aided epiphytotic conditions in India. *Springer- phytopararitica*.

52. Saxena, U.; Kataria, V.P.; Saxena, M.K.; Shrivastava, D.K.; Thakur, N.S.; Kushwaha, B.B.; Choudhary, R.K. and Upadhyay, S.N. (2014). SPV 1862 – A dual purpose sorghum variety. *Annals of Plant and Soil Research.* 16(2): 135-138.

53. Sharma, Brij Kishore; Yadav, K.S. and Rajput, R.L. (2015). Yield, quality and water use efficiency of rainfed mustard (*Brassica Juncea* L.) in relation to sowing time and moisture conservation practices in Northern Madhya Pradesh. *Green Farming* (6):1-4.

54. Sharma, D. K.; Kushwah, S. S. and Verma, K.S. (2015). Effect of Sulphur on growth, yield and economics of potato cultivars. *Annals of Plants and Soil Research*, 17 (1): 45-47.

55. Sharma, K.L.; Shankar, G.R.M.; Chandrika, D.S.; Grace, J.K.; Sharma, S.K.; Thakur, H.S.; Jain, M.P.; Sharma, R.A.; Chari, G.R.; Shrinivas, K.; Gajbhiye, K. P.; Venkatravamma, Kumar, K.M.; Rani, T.S.; Reddy, K.U.; Reshma Shinde, K.S.; Korwar, G.R. and Venkatesswarlu, B. (2014). Effect of conjunctive use of organic and inorganic source of nutrients on soil quality indicators and soil quality index in sole maize, maize-soybean and sole soybean cropping systems in hot semi arid tropical Vertisols. *Communication in Soil Science and Plant Analysis* 45 (16): 2118-2140.

56. Sharma, Sandeep; Khandwe, Nanda and Nema, K.K. (2014). Chemical Control of *Helicoverpa armigera (*Hübner) in Chickpea. *Annals of Plant Protection Science* 22 (1): 85 – 87.

57. Sharma, U.C.; Srivastava, S.C.; Shaktawat, R. P. S.; Badodiya S. K. and Yadava H. S. (2014). Performance of wheat (*Triticum aestivum*) and chickpea (*Cicer arietinum*) intercropping systems vis–a–vis their sole crops as influenced by crop geometry and nutrient management under rainfed condition of M.P. *Environment and Ecology* 33 (2): 698-704.

58. Sharma, Brij Kishore; Yadav, K.S. and Rajput, R.L. (2015). Root parameters and nutrient uptake by rainfed mustard as influenced by sowing time and moisture conservation practices in an alluvial soil. *Ecology, Environment and Conservation* 21(3): 1-5.

59. Shrivastava D.K. and Srivastava S.C. (2014). Cultivation of Aswagandha (*Withania somnifera* Dunal) during Rabi season is more economical as compared to kharif season. *Medicinal Plants-An International Journal of Phytomedicines and Related Industries 6*(3): 181-184.

60. Shukla, R; Soni, N.; Kureel, M.K.; Shulka, Y.K., (2014). Preparation, evaluation and keeping quality assessment of flavored aonla candy (2014). *Flora and Fauna,* 20 (1).

61. Silabut, Neeraj; Naruka, I.S.; Shaktawat, R.P.S.; Verma, K.S. and Seyie, Azeze (2014). Response of Garlic Cultivars to irrigation levels. *Indian Journal of Horticulture,* 71(3): 354-359.

62. Singh, Om; Pathak, Sanjay; Singh, Richa and Singh, Pratiksha (2014). Changes in chemical constitute and overall acceptability of aonla-mango low calorie blended beverages during storage. *The Asian Journal of Horticulture,* 9(2):328-333.

63. Singh, Om; Singh Richa and Singh Pratiksha (2014). Development and evaluation of bael- aonla low calorie ready to serve (RTS) drink. *The Asian Journal of Horticulture,* 9 (2): 364-367.

64. Singh, Om; Singh, Richa and Singh, Pratiksha (2014). Studies on preparation of aonla based blended RTS & Squash from different fruits using Stevia for low calorie. *The Asian Journal of Horticulture,* 9(2): 328-333.

65. Singh, S. B.; Choudhary, R. K.; Upadhyay, S. N. and Sharma, M. (2014). Biological study of cotton jassid, *Amrasca bigullula biguttula* (Ishida) on Bt cotton under invivo condition, *Annals of Plant and Soil Research*, 16 (1): 29-32.

66. Solanki, Mana; Srivastava, S.C.; Jaulkar A.M. and Raghuvanshi J.S. (2014). Economics of soybean cultivation and its marketing pattern in Malwa plateau of Madhya Pradesh. *International Journal of Farm Sciences* 4 (2):192-201.

67. Solanki, S. C.; Parmar, R. K.; Ahirwar, L. M. and Ramagiry, S. R. (2014). Stability analysis for yield and its traits in Soybean (*Glycine max* (L.) Merrill), *Journal of Soils and Crops*, 24(2):268-272.

68. Srivastava S.C. and Mishra P.K. (2014). Analysis of Growth of Soybean cultivation in Madhya Pradesh. *International Journal of Agricultural and Statistical Sciences*. 10(2): 451-456

69. Srivastava, S.C.; Singh, Rajeev Kumar; Tomar, Sudeep S. and Jain, Sudhanshu (2014). Costs, margins and price spread of cotton in Nimar Valley agro-climatic zone of Madhya Pradesh. *Journal of Cotton Research and Development* 29(1): 159-162.

70. Swaroop, I. and Holkar, S. (2014). Physiological and yield performance of chickpea genotypes under drought stress. *Indian Journal of Dryland Agricultural Research and Development,* 29(1): 23-26.

71. Swarup, Indu and Holkar, S. (2014). Physiological and yield performance of Chickpea Genotypes under drought stress. *Indian Journal of Dryland Agricultural Research and Development* 29(1): 23-26.

72. Tiwari, D. K. and Jain, R. C. (2014). Influence of micronutrient and bio-fertilizer application on Soybean growth, yield and economics in black soil of central India. *International Journal of Agricultural and Statistical Sciences,* 10(1):197-200.

73. Tiwari, D. K. and Jain, R. C. (2014). Response of Soybean to micronutrient application on symbiotic traits, yield and nutrient composition (Zn, B & Mo) with and without biofertilizer. *International Journal of Agricultural and Statistical Sciences,* 10(1):249-252.

74. Tiwari, M.K.; Soni, N.; Patidar, D.K. and Paul Veldman (2014). Participatory forest development and management in the Shahabad region of Rajasthan state, India. *Flora and Fauna,* 20(1).

75. Tiwari, Rajesh and Baghel, B.S. (2014). Effect of intercropping on plant and soil of Dashehari mango orchard under low productive environments. The *Asian Journal of Horticulture,* 9 (2) 439-442.

76. Tomar, S.P.S.; Tomar, Sudeep S. and Srivastava, S.C. (2014). Yield and yield component response of wheat (*Triticum aestivum* L.) genotypes to different sowing dates in Gird region of Madhya Pradesh. *International Journal of Farm Sciences* 4 (2):1-6.

77. Tyagi, S. K.; Jian, R. C. and Tiwari, D. K. (2014). Effect of integrated nutrient management of yield, yield attributes and economics of Banana (*Musa acuminata*) under Nimar plains conditions of Madhya Pradesh. *International Journal of Agricultural and Statistical Sciences,* 10(1):271-274.

78. Uikey, D. S.; Tiwari, G.; Tripathi, M. K. and Patel, R. P. (2014). Secondary metabolite production of Reserpine and Ajmalicine in *Rauvolfia Serpentina* (L.) Benth. through callus and cell suspension. *International Journal of Indigenous Medicinal Plants* 47(2):1633-1646 ISSN: 2051-4263.

79. Uikey, D.S.; Tripathi, M.K.; Tiwari, G.; Mishra, S.N.; Pandey, A.; Patidar, H. and Pandey, G.N. (2014). *In vitro* plant regeneration via organogenesis in *Rauvolfia serpentina* (L.) Benth.. Plant Cell Biotechnology and Moleculer Biology, 15: 136-149 ISSN: ISSN: 0972-2025.

80. Uikey, Devi Singh; Tiwari, Gyanendra; Tripathi, M.K. and Patel, R.P. (2014). Secondary Metabolite Production of Reserpine and Ajmalicine in Rauvolfia Serpentina (L.) Benth through Callus and Cell Suspension Culture. *International Journal of Indigenous Medicinal Plant* 47:1634-1646.

81. Yadav, K.S.; Bhadauria, Nisha; Rajput, R.L.; Bhadauria, Ajay (2015). Effect of herbicides with and without surfactant against grassy and broad leaf weeds in wheat. *Annals of Plant and Soil Research* 17(1): 37-40.

14.2 Research papers presented in the seminar/ Symposium:

1. Aragal, S.K.; Sharma, S.K. and Jain, M.P. (2014). Erosion Index analysis for Indore district of Malwa region of Madhya Pradesh. National symposium on dryland farming and food security in India. Extended Summaries. August 30-31, 2014 RVSKVV, Gwalior. pp 32.
2. Arora, Asha (2014). Evaluation of leaching behavior of oxyfluorfen in FYM amended and un-amended sandy clay loam soil. Biennial Conference ISWS on "*Emerging Challenges in Weed Management*" February 15-17, 2014. DWSR, Jabalpur, (M.P.).

3. Bharvey, H.C. and Sharma, R.N. (2015). Study of M.Sc. Thesis in Floriculture and Landscape Architecture, Department at K.N.K. College of Horticulture, Mandsaur (M.P.). National Conference on Contrivance of Academic Library in Digital Era 2015.

4. Bharvey, H.C. and Sharma, Ram Niwas (2015). Importance of RFID Technology in Libraries and Role of Librarian. Bilingual International conference Information Technology: yesterday, today and tomorrow.

5. Bharvey, H.C.; Sharma, Ram Niwas and Dubey, R. (2015). Descriptive Study of M.Sc. Thesis in Fruit Science. Bilingual International conference Information Technology: yesterday, today and tomorrow.

6. Chaturvedi, Roopesh (2014). Talking Sense about English Teaching: Learning Language the Natural Ways, 9th International & 45th Annual ELT@I Conference on English from Classes to Masses, held at Department of English VGU, Jaipur.

7. Chaturvedi, Roopesh (2014). Contemporary Relevance of the Thoughts and Teachings of Swami Vivekanand 59th All India English Teachers' Conference held at Department of English Rajasthan Technical University Kota.

8. Chouhan, Preeti and Vidhya, M. Sankar (2014). Effect of chemical solutions on vase life of gerbera (*Gerbera jamesonii* Bolus ex Hooker F) Pink and Red Star. Book of Abstracts pp 434.

9. Chouhan, Preeti; Vidhya, M. Sankar and Mishra, S. N. (2014). Effect of chemical solutions on vase life, quality parameters and biochemical of gerbera (*Gerbera jamesonii* Bolus ex Hooker F) cv. Pink and Red Star. Souvenir of Abstracts pp 161.

10. Choudhary, R, K.; Raypuriya, N.; Upadhyay, S. N. and Singh, S. B. (2014). Influence of method and application time of nitrogen on sorghum pest incidence. Paper presented in National Seminar on "Management of economical important insects in India", held on 16th August, 2014 at Directorate of Research Services, JNKVV, Jabalpur (M.P.).

11. Chouhan, Preeti and Vidhya Sankar, M. (2014). Effect of chemical solutions on vase life of gerbera (*Gerbera jamesonii Bolus ex Hooker* F) Pink and Red Star. Indian Horticulture Congress: Horticluture for inclusive Growth, TNAU, Coimbatore (TN) pp 343.

12. Chouhan, Preeti; Vidhya Sankar M. and Mishra, S.N. (2014). Effect of chemical solutions on vase life, quality parameters and biochemical of gerbera (*Gerbera jamesonii* Bolus ex Hooker F) cv. Pink and Red Star. International Symposium on Innovations in Horticulture for Nutritional Security, Conserving Biodiversity and Poverty Alleviation, Babasaheb Bhimrao Ambedkar University, Lucknow (UP) pp161.

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5. Management of Degraded lands and Soil Health by Verma, S.K.; Trivedi, S.K.; Singh, Akhilesh and Tomar, Avinash S.
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14.8 Folder:

1. केंचुआ खाद, मिर्च, गेंहूँ, चना, अरबी, सोयाबीन, टमाटर, कपास, मक्का, अरहर एवं प्याज २०१४।
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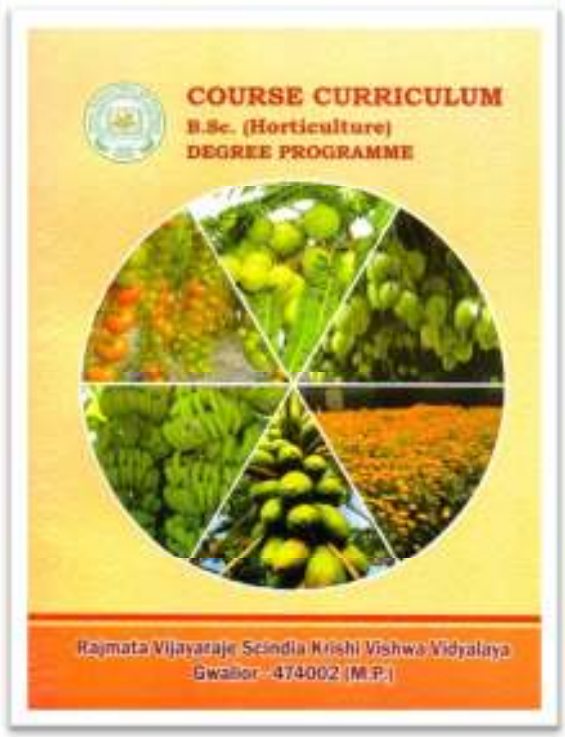
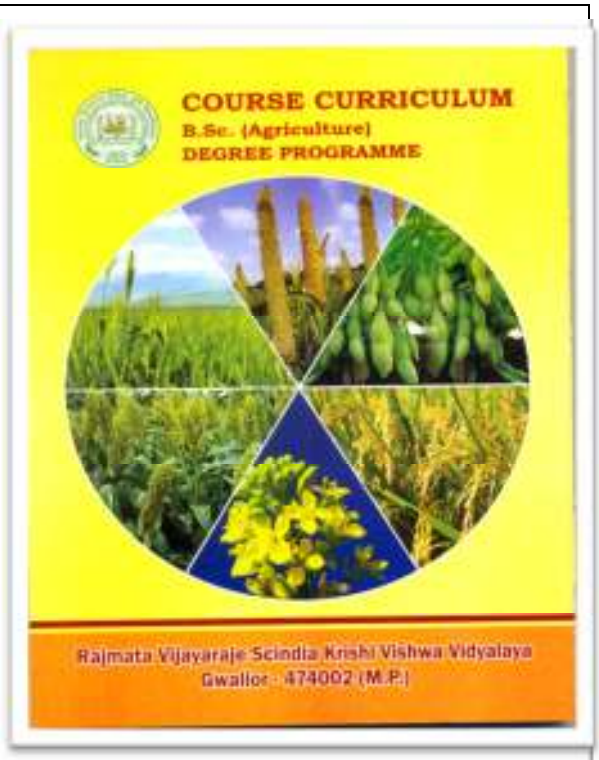
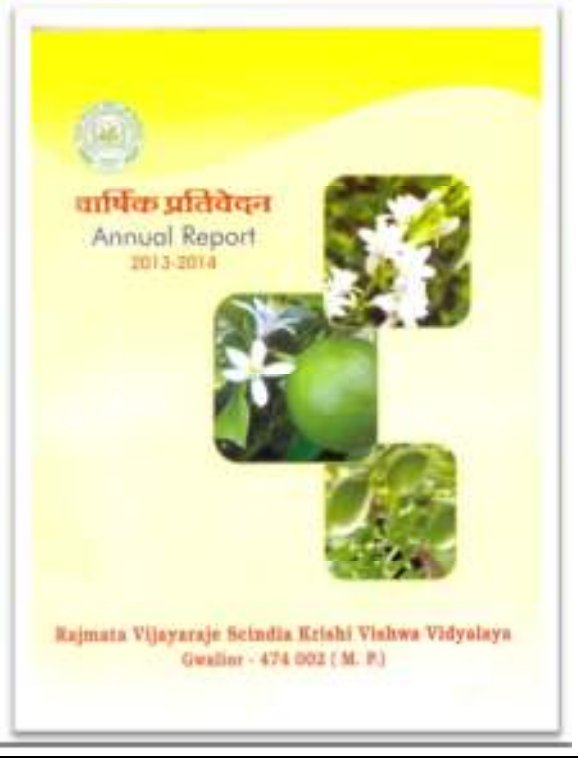
15. RVSKVV Publications:

GLIMPSES OF RVSKVV PUBLICATIONS





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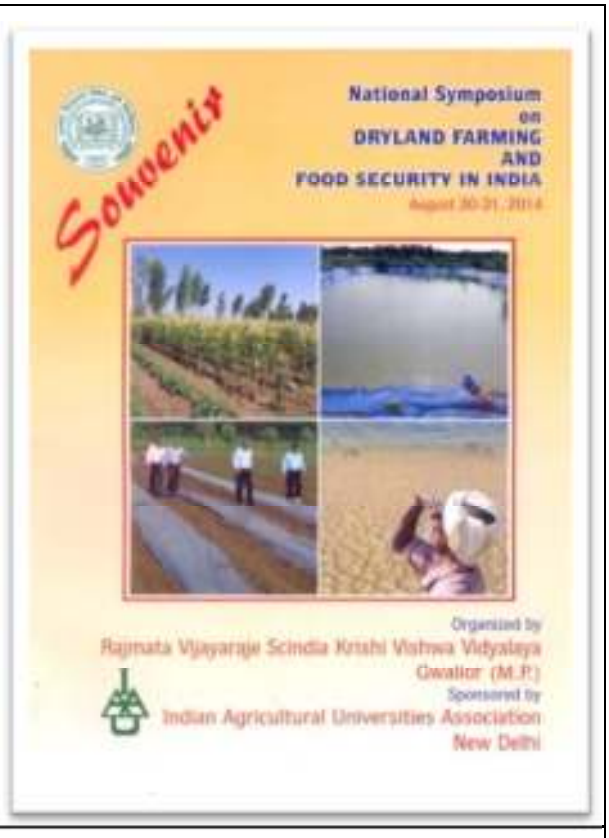
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February 26-28, 2015
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FINAL REPORT
National Agricultural Innovation Project
(Indian Council of Agricultural Research)
INTEGRATED FARMING SYSTEM FOR SUSTAINABLE
RURAL LIVELIHOOD IN UNDULATING AND RAINFED
AREAS OF JHABUA AND DHAR DISTRICTS OF
MADHYA PRADESH
2014
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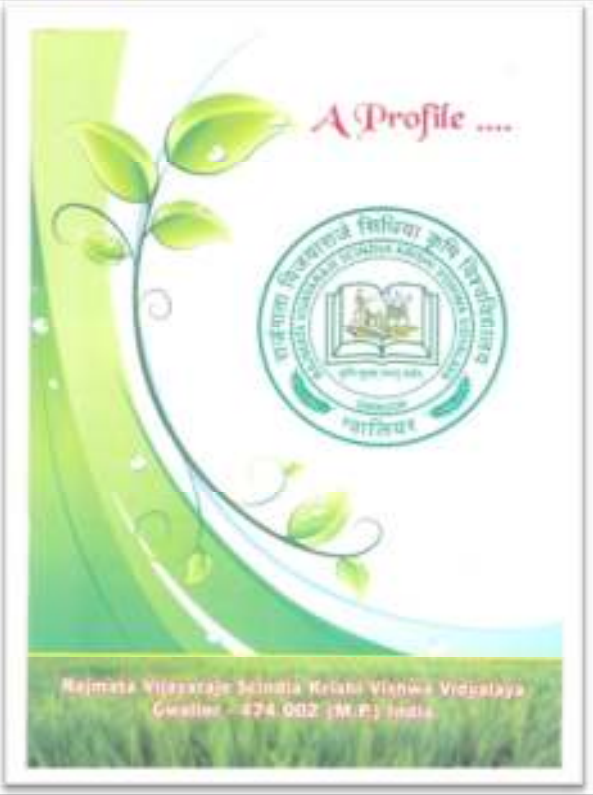
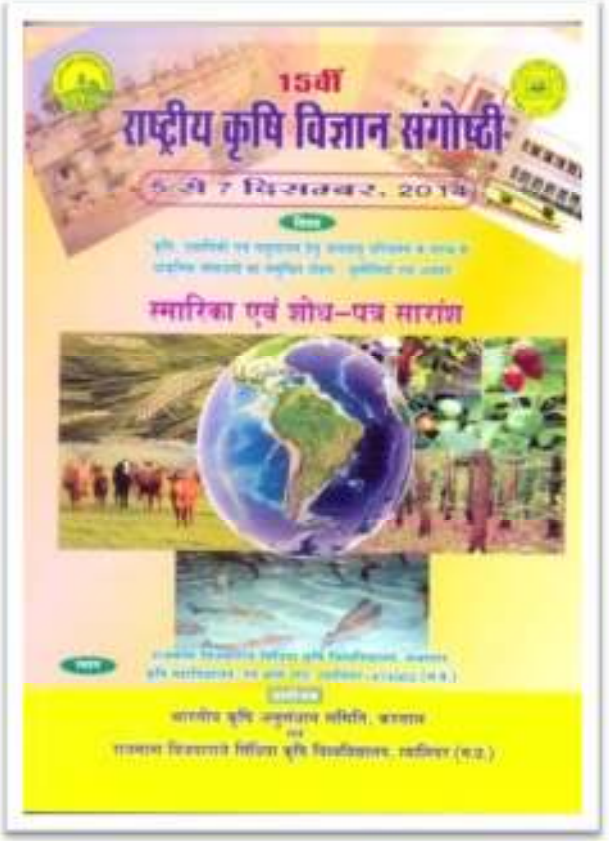
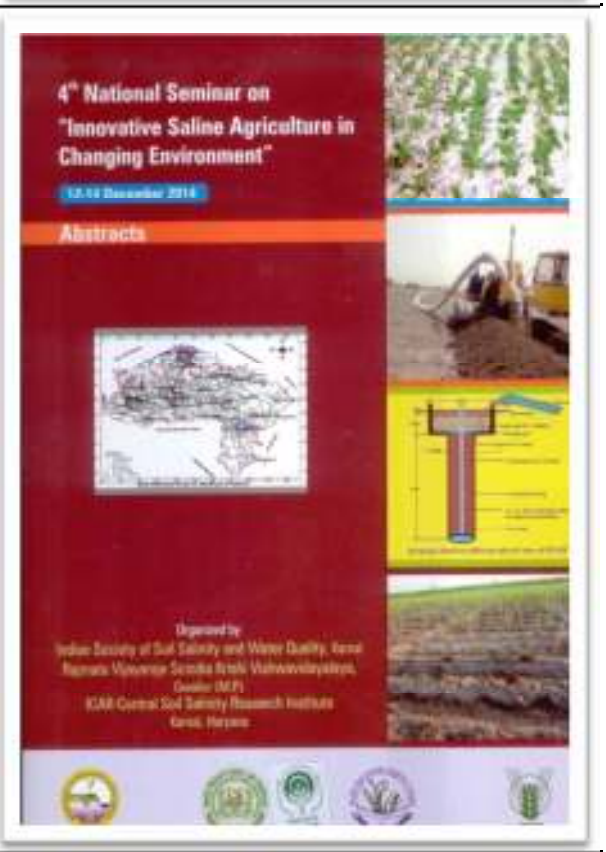
Gwalior - 474 002 (M.P.)


कृषि विजय - 2014
उन्नत कृषि उत्पादन तकनीकें
(27-29 सितम्बर, 2014)
निदेशालय विस्तार सेवायें
राजमाता विजयराजे सिंधिया कृषि विश्व विद्यालय
ग्वालियर (म.प्र.)


A Profile ....


15वीं
राष्ट्रीय कृषि विज्ञान संगोष्ठी
स्मारिका एवं शोध-पत्र सारांश


4th National Seminar on
"Innovative Saline Agriculture in Changing Environment"
Abstracts