College of Agriculture
Rewa (M.P.)

Jawaharlal Nehru Krishi Vishwavidyalaya
Jabalpur (M.P.)
PREAMBLE
Rewa, the capital of old Vindhya Pradesh before inception of Madhya Pradesh is known globally as homeland of world famous 'White Tiger'. College of Agriculture, Rewa is one of the oldest colleges started in 1952 administratively linked with Darbar College, Rewa. It became a constituent campus since inception of Jawaharlal Nehru Krishi Vishwavidyalaya, Jabalpur. It is situated at the latitude of 24°30'N, the longitude of 80°15'E and the altitude of 365 m above MSL. The college is located in the Kymore Plateau of Kymore Plateau and Satpura Hills Zone of M.P.

Kymore Plateau of Kymore Plateau and Satpura Hills Zone

<table>
<thead>
<tr>
<th>Soil</th>
<th>Rainfall (mm)</th>
<th>Max. &amp; Min. Temperature</th>
<th>Districts under the college</th>
<th>Main crop of the Zone</th>
<th>Mandate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alluvial derived Black and Red</td>
<td>900-1200</td>
<td>40°C and 4°C</td>
<td>Rewa, Satna, Sidhi, Panna, Shahdol, Umariya and Anooppur</td>
<td>Kharif: Rice, Soybean, Moong, Urd, Arhar, Kodo Kutki, Sesamum Rabi: Wheat, Gram Linseed, Lentil, Barley</td>
<td>To serve as a centre for agriculture education for teaching in different subjects of agriculture To conduct research for agricultural improvement To disseminate viable technology generated to the farmers through extension programmes</td>
</tr>
</tbody>
</table>

TEACHING PROGRAMME

<table>
<thead>
<tr>
<th>Students admitted</th>
<th>B.Sc.(Ag.) (4 years)</th>
<th>M.Sc. (Ag.)</th>
<th>Ph.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agronomy</td>
<td>Horticulture</td>
<td>Economics</td>
</tr>
<tr>
<td>Girls 90</td>
<td>8</td>
<td>8</td>
<td>6</td>
</tr>
</tbody>
</table>

FACILITIES AVAILABLE
Well equipped laboratories, Library (more than 25,400 Books and Periodicals), Agricultural Research Information System (ARIS) Cell, Computer Lab, Placement Cell, Plant Clinic Cell, Spawn Production and Mushroom Cultivation Unit, Suchana Ka Adhikar-2005 Cell, NSS, NCC, Boys (UG, PG) and Girls Hostels, Sports Ground, Auditorium and Conference Hall, Dairy, Bio-fertilizer and Seed Production and Processing Unit.
STAFF POSITION

<table>
<thead>
<tr>
<th>Designation</th>
<th>Agri. College, Rewa</th>
<th>KVK Sidhi</th>
<th>KVK Shahdol</th>
<th>KVK Panna</th>
<th>KVK Rewa</th>
<th>KVK Umaria</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Professor/Principal Scientist</td>
<td>14</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>14</td>
</tr>
<tr>
<td>Assoc. Professor/Sr. Scientist/PC</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>Assistant Professor/Scientist</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>3</td>
<td>22</td>
</tr>
<tr>
<td>Training Associate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tech. Assistant/Training Assistant</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>-</td>
<td>9</td>
</tr>
<tr>
<td>Supporting Staff</td>
<td>55</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>62</td>
</tr>
</tbody>
</table>

SALIENT ACHIEVEMENTS

TEACHING

A total number of 295 B.Sc.(Ag.) and 51 M.Sc.(Ag.) students have completed their degree courses during last three years from College of Agriculture, Rewa. NCC, NSS, sports, games and cultural programmes are also being conducted for boys and girls students. Several students of the college have been awarded University gold medal and also received ICAR scholarship for higher education. This college has also opted Accidental Insurance Scheme for all the students. Teaching is being imparted through audio visual aids. Students of the college have got selection through campus interview in various organization viz. Banking sector, Seeds, Fertilizer and Chemical companies and other Government agencies. Sixteen UG students of the college awarded University Merit Scholarship and five students honored in 2008-09. Two hundred forty seven students from different categories SC, ST and OBC have got benefitted from State Govt. through PM Scholarship award in 2008-09.

Carrier and Personality Development Programme

College has conducted first time a unique programme on soft skills, carrier and personality development and spoken English tutorial for the B.Sc. (Ag.) final year and M.Sc. (Ag.) students. This programme was designed and executed in 3 modules during 12-27 March 2012. Prof. Gautam Kalloo, Hon’ble Vice Chancellor was present on the occasion.

I. Module: Soft skills, carrier and personality development programme

Dr. B. Shivaprasad, Corporate Trainer and Motivational Speaker of SS Technology, Hyderabad trained the students through lectures, power point presentation, workshops, group discussions, practical and sport events for team spirit etc. He covered various aspects of soft skills developments, goal setting, resume writing, selling skills, carrier in agribusiness and personality development aspects.
II. Module: JRF/SRF/NET and ARS Coaching
Dr. Phundan Singh, Ex. Director, CICR, Nagpur was delivered subject lectures series related to competitive examinations. Dr. Singh covered different patterns of competitive examination, solved question papers of various discipline of agriculture, He also conducted mock interview with students for gaining experience and confidence. A powerpoint presentation by Dr. B. Shivprasad on soft skills, carrier and personality development benefitted the students.

III. Module: Spoken English tutorial (crash course)
A professional spoken english coaching course was arranged for the purpose. A week long crash course was completed covering verbs, part of speech, tenses, vocabulary, construction of sentences, voice, spoken practices presentations etc.

Scholarships:
- 11 students have got NTS scholarship
- 253 students from different categories SC, ST and OBC got Post Metric Scholarship
- 13 students got merit scholarship
  - One student received Gaon ki beti and one in Vikramaditya Scholarship in 2011-12.

Smart Classes:
- Developed two smart classrooms in the College of Agriculture Rewa
- Strengthening of Audio-visual aids and Video Conferencing facilities developed
- Study /educational tours
Several students of this college have been awarded ICAR scholarship' for higher education. This college has also opted Accidental Insurance Scheme for all the students. Teaching is being imparted through Audio visual aids., Students of this college got selected through campus interviews in various organization viz. Banking sector, Seed, Fertilizer and Chemical companies, Government agencies and NGOs.

RESEARCH

PROJECTS OPERATIVE IN THE COLLEGE
A. All India Coordinated Research Projects (ICAR)
- All India Coordinated Rice Improvement Project
- All India Coordinated Small Millets Improvement Project
- All India Coordinated Research Project for Dryland Agriculture
- All India Coordinated Wheat and Barley Improvement Project
- All India Coordinated Research Project on Cropping System
- All India Coordinated Research Project on Sub-Tropical Fruits
- National Initiative on Climate Resilient Agriculture (NICRA)

B. State Plan
  I. National Agriculture Research Project
  II. Intensive Extension Research Project
III. MP Agriculture Research Institute
IV. Regional Research Scheme
V. Regional Rice Research Scheme
VI. Agricultural Meteorology
VII. MPWSRP

C. Ad hoc Research Project

I. Collection, maintenance, characterization and evaluation of land races of small millet especially for biotic stresses in the tribal areas of Rewa Division of M.P. - Funded by MP State Biodiversity Board, Bhopal

II. Exploration, collection and conservation of wild species and land races of rice of MP. - Funded by Madhya Pradesh State Biodiversity Board, Bhopal

III. Characterization of the effects of a QTL for drought resistance in rice - Funded by DBT

IV. Stress Tolerance Rice for Africa and South Asia (STRASA) Phase II - Funded by Bill & Melinda Gates Foundation.

V. Conservation and evaluation of Mango in Rewa district of MP. Funded by Madhya Pradesh State Biodiversity Board, Bhopal

VI. Testing of Linseed cultivars against bud flies - Funded by CSAU & T, Kanpur

VII. Revalorizing small millets in rainfed regions of South Asia - Identification of technologies to reduce Kodo seed poisoning. Funded by DHAN Foundation, Madurai (TN)

VIII. Japan International Cooperation Agency (JICA) on Soybean - Funded by Japan Govt,

IX. Bio-control potential of local isolates of Trichoderma in M.P. - Funded by MPCST, Bhopal.

D. Demonstrations

1. Four hundred Front Line Demonstrations in Rewa and Satna (each) districts conducted on early maturing rice hybrids under NFSM Programme in 2011 in Kharif and 90 Demonstrations in each district conducted in chickpea to popularize the improved variety for increasing the productivity.

2. Twenty hectare demonstrations on JNKVV, recently released rice hybrids JRH 4, JRH 5 and KRH 2 conducted in Rewa division for popularization of rice hybrids.

3. Ninety seven demonstrations on soybean, paddy, wheat, gram and vegetables conducted in Rewa under Madhya Pradesh Water Sector Restructuring Project.

4. Front Line Demonstrations on barley, oilseeds, pulses and small millets

5. Demonstrations were laid for soybean, blackgram, pigeonpea, sesame and rice during Kharif (30 ha) and wheat, chickpea, linseed, lentil and mustard during Rabi (30 ha) in Patanua and Raura village of Rewa under NICRA Dryland Project.

Varieties released

<table>
<thead>
<tr>
<th>Kodo</th>
<th>Kutki</th>
<th>Barley</th>
<th>Mango</th>
<th>Guava</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>JB 1 - Irrigated</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
II. Seed Production Programme

Nucleus, Breeder and Jawahar Seed Production programmes are being carried out on soybean, rice, kodo, kutki, gram, wheat, pea, barley, pigeonpea, berseem and turmeric to meet out the demand of growers and Indian seed industry both public and private in the state.

Quality seed production was successfully achieved at Kuthulia Farm and College Farm on Nucleus Breeder and Jawahar Seed and resource of Rs. 120 Lakh was generated through this programme in Kharif and Rabi seasons in 2010-2011.

Seed storage building developed at College Farm for safe storage of quality seeds.

Nursery raising of fruit plants: Twenty thousand aonla and one lakh mango root stock developed at College and Kuthulia Farm. More than 3 lakhs of mango, guava, lime and papaya seedlings/budded plant developed in FRS and College Nursery in 2011-2012.

III. Technology Generated

Varietal release, development of potential cropping systems, natural resource management, nucleus, breeder and Jawahar Seed production of all major crops, conservation of plant diversity, integrated management of plant nutrients, weeds, insect pest and diseases etc. have been generated. Important technologies of this college are:

- Technology for soybean, pigeonpea, kodo, kutki intercropping developed to maximize the returns.
- Chemical herbicides (Persuit and Terga Super) identified for weed management in standing crop of soybean.
- Soybean-chickpea sequence has been found more remunerative.
- Lentil crop was found to be most remunerative after rice in light soil.
- Technology for water management (watershed) for rain fed crops and Dryland farming.
- Nitrogenous fertilizer reduces the incidence of Striga sp. in Kodo millet. Seed treatment with Carbendazim and carboxin are effective to control head smut in kodo and grain smut in little millet.
- Double hedge row system of planting technology developed for more production in mango cv. Amrapali.

Sowing of soybean cv. JS93-05, Rice cv PS 3, MR219, WGL 32100, Dhansweri, Wheat cv. HD 2864, Shimla Mirch cv. California Wonder, Garlic cv. G 323 are more remunerative under irrigated condition.

Rice hybrids JRH 4, JRH 5, Pro-Agro 6444, KRH 2, and PRH 10 were found most promising rice for obtaining higher grain yield (80-90 q/ha) under irrigated ecosystem.

- Newly evolved fungicides Sivic 75WP, Tilt, Tricyclazole, Contaf, Result 25 EC @ 1 ml/lit. were found highly effective for controlling the leaf blast of rice.
- Bio-pesticides, Neem gold, Biotics @ 5 ml/lit were highly effective for the management of leaf blast of rice.
- Chlorothalonil (Kavach) 75 WP, Kocide 77 WP were found highly effective fungicide for the control of false smut of rice.
- Granular insecticide Carbofurom @ 1000g ai/ha, Monocrotophos 2ml/lit. were found highly effective insecticide for the management of rice pest effectively.

49 land races of Barnyard millet and 68 land races of Foxtail millets collected from Rewa division were registered at NBPGR, New Delhi.
EXTENSION

Kisan Mela was organized at Kuthulia Farm, College of Agriculture, Rewa Under AICRP on Dryland Project. Hon’ble Vice Chancellor, Prof. Gautam Kalloo was inaugurated the Kisan Mela on 23 March 2012.

Exhibits of small millets were displayed in the State level Krishi Vigyan Mela organized at Pawarkheda on 23-25 Feb., 2012.

Exhibits of small millets were displayed in the Kisan Mela organized by MPCST, Bhopal at TRS College ground, Rewa on 17-19 Feb., 2012.

On campus and off campus trainings were conducted.

A crop clinic was established at the college.

Regular conduction front line demonstrations and on farm trials.

Conduction of farmer’s fair / field days.

Crop diagnostic activities and publication of extension literatures.

Mass communication through news papers, radio and T.V.

KVK activities

Old orchard rejuvenation of mango and guava, Seed Village Programme for quality seed production

FARM HOLDING AND LAND UTILIZATION (ha)

<table>
<thead>
<tr>
<th>Farm</th>
<th>Total area (ha)</th>
<th>Road &amp; building</th>
<th>Pasture land (ha)</th>
<th>Fruits orchard/ tree plantation/ nursery (ha)</th>
<th>Cultivated area (ha)</th>
<th>Area under Jatropha plantation (ha)</th>
<th>Forest area (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuthulia Farm</td>
<td>85.27</td>
<td>08.00</td>
<td>01.67</td>
<td>02.00</td>
<td>73.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Farm</td>
<td>55.03</td>
<td>23.33</td>
<td></td>
<td>01.40</td>
<td>30.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruit Research Station</td>
<td>62.00</td>
<td>02.00</td>
<td>--</td>
<td>27.00 Orchard 3.00 Nursery</td>
<td>30.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KVK, Rewa</td>
<td>20.00</td>
<td>01.00</td>
<td></td>
<td></td>
<td>19.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KVK, Sidhi</td>
<td>33.25</td>
<td>02.30</td>
<td>10.25</td>
<td>03.00</td>
<td>11.70</td>
<td>01.00</td>
<td>05.00</td>
</tr>
<tr>
<td>KVK, Shahdol</td>
<td>19.00</td>
<td>01.20</td>
<td>03.50</td>
<td></td>
<td>8.20</td>
<td>02.00</td>
<td></td>
</tr>
<tr>
<td>KVK, Panna</td>
<td>18.52</td>
<td>02.00</td>
<td>01.52</td>
<td>--</td>
<td>13.20</td>
<td>01.80</td>
<td></td>
</tr>
</tbody>
</table>
**Development of infrastructure**

- College new and old building floor was renovated with well furnished
- A new guest house in college premises
- Renovation of Regional Research lab for AICRP on Rice and Barley
- Construction of thrashing floor at college and Kuthulia Farm
- Three greenhouse/nethouse at college and two poly houses at Kuthulia farm Rewa were constructed for climate change studies and generating fruits & vegetables planting materials production
- Construction of boys & girls hostel, one each

**Awards**

- Dr. I.M. Khan, Principal Scientist, Plant Physiology awarded with certificate of excellence and shield for drought and heat stress studies in rice and execution of DRR Rice Physiology Programme as best AICRIP-Plant Physiology Centre discipline wise for 2011-12 in 47th Annual Rice Group Meeting organized at Directorate of Rice Research (ICAR) Hyderabad on 7th April 2012.
- Dr. T. K. Singh, Scientist (Horticulture) was awarded Young Scientist Award-2012 by Bioved Res. Institute Allahabad 19th Feb 2012 for outstanding contribution in horticulture.

**FUTURE THRUST**

- Gaining excellence in teaching of UG and PG level
- Development of crop genotypes coupled with high yield and resistance to biotic and a biotic stresses
- Increasing and stabilizing yield through exploitation of genetic material. Sustainable utilization of natural resources with environmental protection.
- Safeguarding the plant biodiversity, characterization, documentation proper utilization of wasteland
- Intensification of KVK’s activities
- Efficient method of water harvesting and recycling of run off water
- Fruit improvement programme especially on mango, guava, aonla and ber. Agro-forestry system approach and fodder improvement programme.
- Intensive survey and collection of medicinal plants of the region and to explore their possibility in sole and alley cropping
- Emphasis on IPNM & bio fertilizers
- Selection of drought tolerance varieties suitable for rainfed farming system