**BIO-DATA**



**Dr. Devendra Kumar Patel**

**Professor and Former Head,**

Department of Botany

Guru Ghasidas Vishwavidyalaya, (A Central University),

Bilaspur (Chhattisgarh) – 495009, India.

 [S/o - Shri Shobharam Patel,

 At – Po -: Salhe, Via -: Chandrapur,

 Distt. -: Sakti (Chhattisgarh.),

 Pin - 495692**.** Mobile No.: - 09993660173.,

*e- mail* -: *dplantscience@yahoo.co.in*

## ---------------------------------------------------------------------------------------------------------------

## PERSONAL INFORMATION:

* **Name : Dr. DEVENDRA KUMAR PATEL**
* **Father’s Name :** Shri Shobharam Patel
* **Date of Birth** **:** 10th Oct. 1978
* **Sex** **:** Male
* **Marital Status** **:** Married
* **Domicile** **:** Chhattisgarh
* **Category**  **:** **OBC**
* **Nationality**  **:** Indian

**2. EDUCATIONAL QUALIFICATION:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S.No. | Examination | Year | Board/University | Subject  | Division | Result% |
| 1. | H.S.C.(10th) | 1994 | M. P. Board, Bhopal | Science, Mathematics, Hindi, English, Sanskrit, Social- Science. | I | 70.46  |
| 2. | H.S.S.C.(12th)  | 1996 | M. P. Board, Bhopal | Biology, Chem., Physics, Hindi, English. | I | 65.33  |
| 3. | B.Sc. (Bio. -CBZ) | 1999 | G. G. University, Bilaspur (C.G.) | Botany, Zoology, Chemistry, F. Course. | I | 65.55  |
| 4. | M.Sc. (Pre.)Botany | 2000 | G. G. University, Bilaspur (C.G.) | Algae + Bryophyta,Fungi + Plant Pathology, Pteridophyta + Gymno., Angiosperm | I | 71.00  |
| 5. | M.Sc.-Botany(Aggregate) | 2001 | G. G. University, Bilaspur (C.G.) | Cytology + Genetics, Plant - Physiology + Biochemistry, Environmental Biology & Forest Ecology  | I | 69.58  |
| 6. | NET | 2004*. National Eligibility Test* (NET) *Qualified,*  |
| 7. | Ph. D. – Botany |  “Study on Nutrient Removal Potential of Some Aquatic plants from Domestic wastewater.” Pt. Ravishankar Shukla University, Raipur - 2007.  |

**3. DISTINCTION*:***

 *(In K.G. Arts and Science College Raigarh (C. G.).*

* Academic position held: Secretary, Botanical Society - 2000 and

: President, Botanical Society - 2001.

* **Gold Medal Awarded for securing first position** in merit list of **M. Sc. Botany – 2001.**
* N. S. S. **“B”** Certificate.

**4. HONOUR:**

* Honoured by MarwadiYuva Manch Raigarh (C.G.) for distinction in PG.

***(Placed 1st in order of Merit in M. Sc. - Botany).***

* Honored by K. G. Arts and Science College, Raigarh for first position in Merit.

**5. FELLOWSHIP:**

* Selected as JRF ***(Project Fellow)*** in C. COST sponsored project for 2003 - 05.
* Selected for Pt. Ravishankar Shukla University Research Fellowship in 2003.

**6. SELECTION:**

* Selected as an Assistant Professor on Contract basis in the Department of BOTANY by Higher Education Department of C. G. Govt. in different Govt. Colleges continuously for four times, (Session 2005-06, 2006-07, 2007-08, 2008-09) and -
* Selected as an Assistant Professor in BOTANY by Chhattisgarh PSC (Public Service Commission) – Raipur (C. G.) in year 2012.
* Assistant Professor (Adhoc) in Rural Technology Department at Guru Ghasidas Vishwavidyalaya, (A Central University), Bilaspur (Chhattisgarh) in Academic session 2009-10, 2010 -11 and 2011- 12 and from 31-03-2012 Posted in Regular basis Assistant Professor.
* Currently working as **Associate Professor in Department of Botany**at Guru Ghasidas Vishwavidyalaya, (A Central University), Bilaspur (Chhattisgarh), India.
* NET Qualified- 2004.

##  7. PRESENT POSITION:

**­­­­­**Associate Professor, Department of Botany,

Guru GhasidasVishwavidyalaya (A Central University), Bilaspur (Chhattisgarh) – India.

##  8. A. FIELD OF INTEREST: -Plant Ecology,

 - Diversity/Conservation of the Plants, Ethnobotany

* Current Research Activity –
1. Conservation of Medicinal and Aromatic Plants (MAPs).
2. Multiplication / *Plant Propagation* /Conservation of RET/Important Medicinal Plants,
3. Seed Collection of various Medicinal plants.
4. Diversity Study of the Plants,

**B – Research Supervised/Ph. D. Awarded – 02**

**C. Registered Research Scholars - 06**

**9. TAUGHT SUBJECTS/PAPERS –**

1. Lower Plants
2. Economic Botany
3. Morphology and Anatomy of Phanerogames
4. Fundamentals of Medicinal Plants
5. Plant Taxonomy
6. Plant Anatomy
7. Reproductive Biology of Angiosperm
8. Diversity and Biology of Gymnosperm and Anatomy of Angiosperm
9. Archegoniates
10. Floral Morphology and Embryology of Angiosperms
11. Archegoniates : Bryophyta, Pteridophyta and Gymnosperm
12. Advances in Bryophyta, Pteridophyta and Gymnosperm
* *02 years as a Research Project fellow* (September 2003- October 2005) in Chhattisgarh *Council of Science and Technology* Research project.

**10.TEACHING EXPERIENCE**–

Total - **16 YEAR 05 Month and 00 DAYS**- AS ON 04 December 2023

**Teaching Details**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Position / Post** | **Department/ Institution** | **Employer** | **Duration** | **Salary/****Month –** **Full Scale** |
| 1. | Assistant Prof. – Botany ( Contract Basis) | Govt. Rajeevlochan College, Rajim, (C. G.) | C. G. Govt. Higher Education Deptt. | 17 - 11 – 05 **To** 30 – 04 - 06 | 8000/ |
| 2. | Assistant Prof. – Botany ( Contract Basis) | Govt. College of Science, Raipur (C. G.) | C. G. Govt. Higher Education Deptt. | 12 – 01 – 07 **To** 30 – 04 – 07 | 8000/ |
| 3. | Assistant Prof. –  Botany ( Contract Basis) | Govt. College, Shankarnagar, Raipur  | Principal, as per UGC rule against Teacher Fell. | 01 – 08 – 07 **To** 18 – 09 - 07 | 8000/ |
| 4. | Assistant Prof. –  Botany ( Contract Basis) | Govt. Rajeevlochan College, Rajim, (C. G.) | C. G. Govt. Higher Education Deptt. | 19 – 09 - 07 **To** 30 – 04 - 08 | 8000/ |
| 5. | Assistant Prof. –  Botany ( Contract Basis) | Govt. Rajeevlochan College, Rahim,(C. G. ) | C. G. Govt. Higher Education Deptt. | 01 – 07 – 08 **To** 30 – 04 - 09 | 12800/ |
| 6. | Assistant Prof. –  Botany ( Contract Basis) | Govt. Rajeevlochan College, Rajim, (C. G.) | C. G. Govt. Higher Education Deptt. | 08 – 07 -09 **To** 18 -08 -09 | 12800/ |
|  | * 02 Year, 03 Month and 69 Days/ **02 Year, 05 Month and 09 Days,**
 |
| 7. | Assistant Prof. –  (Adhoc basis) | Rural Technology | G.G.V.-Bilaspur (C. G.) | 19 – 08 – 09 **To**30 – 06 -2010 | 28512/ |
| **8.** | Assistant Prof. –  (Adhoc basis) | Rural Technology | G.G.V.- Bilaspur (C. G.) | 09 – 07– 10 To16 - 06 – 2011**Continue from** **09 July 2010** | 31320/ |
| 9. | Assistant Prof. –  (Adhoc basis) | Rural Technology | G.G.V.- Bilaspur (C. G.) | 27 – 07– 11 ToMarch end 2012 | 34776/ |
| 10. | Assistant Prof. – (Permanent Position)  | Rural Technology | G.G.V.- Bilaspur (C. G.) | 31 – 03– 2012 |  |
| 11. | Associate Prof. – (Permanent Position)  | Botany | G.G.V.- Bilaspur (C. G.) | 26 – 12 – 2019 to cont. | 1,31,300 Basic |
| 12. | Professor – (Permanent Position)  | Botany | G.G.V.- Bilaspur (C. G.) | 26 – 12 – 2022 | 1,48,500 Basic |
|  | Current basic 153000=00 |
| **TOTAL TEACHING EXPERIENCE –16 YEAR 03 Month and 26 DAYS**- AS ON 31 July 2023 |

* Before joining at GGV- 02 Year, 05 Month and 09 Days
* AT GGV- 15 Year, 02 Month and 21 Days

Total - **17 YEAR 05 Month and 00 DAYS**- AS ON 04 December 2024

1. **BOOKS PUBLISHED: INTERNATIONAL**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S. No. | Book Name | PUBLISHER | PLACE OF PUBLICATION | ISBN NO- |
|  | Medicinal and Aromatic Plants : Diversity and Vegetation Propagation | OMICS Group | USA | 978-1-63278-039-3-040 |
|  | A Digital Herbarium Book – I on Medicinal and Aromatic Plants | OMICS Group | USA | 978-1-63278-039-3 |
|  | Glimpse of Floral Diversity | Lap Lambert, Academic Publishing, Germany | Germany | 978-3-659-85233-6 |
|  | A Digital Seed Bank - I | Lap Lambert, Academic Publishing, Germany | Germany | 978-3-659-75194-3 |
|  | Herbal Garden: For Ex-situ conservation of Medicinal and Aromatic Plants | Lap Lambert, Academic Publishing, Germany | Germany | 978-3-659-76467-7 |
|  | Digital Herbarium Book - II on Medicinal and Aromatic Plants | Lap Lambert, Academic Publishing, Germany | Germany | 978-3-659-81019-0 |
|  | Repository of Medicinal and Aromatic Plants | Lap Lambert, Academic Publishing, Germany | Germany | 978-3-659-86673-9 |
|  | Digital Book on Flowering Plants | Lap Lambert, Academic Publishing, Germany | Germany | 978-3-659-67561-4 |
|  | Compendium of Medicinal and Aromatic Plants | Scholars Press, Omni Scriptum Gmbh& Co. KG | GERMANY | 978-3-659-84395-2 |

**NATIONAL - 2**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S. No. | Book Name | PUBLISHER | PLACE OF PUBLICATION | ISBN NO- |
|  | Medicinal and Aromatic Plants: Diversity and Uses in Chhattisgarh | Akinic Publication,  | New Delhi | 978-93-5335-645-3 |
|  | Plant and Plantation in Central India | Akinic Publication,  | New Delhi | 978-93-5335-633-0 |

**12. DISSERTATIONIN PG GUIDED/COMPLETED– 20**

|  |  |  |  |
| --- | --- | --- | --- |
| S. No. | Student Name | Year | Title |
|  | Durgesh Prasad | 2015 | Biopesticides: Role in vegetable crops protection |
|  | Ankita Shriwas | 2017 | Exotic weeds and their Management in Guru Ghasidas Vishwavidyalaya (A Central University) campus, Bilaspur (C.G) |
|  | Neetu Diwan | 2017 | Eucklyptus : Cultivation and Management |
|  | Aakansha Jaiswal | 2017 | Biodiversity and needs for conservation |
|  | Sandhya Sahu | 2018 | Phenology, propagation and Medicinal values of a Medicinal plant *Operculariaturpethum* |
|  | Harshita Singh | 2018 | Phenology, propagation and Medicinal values of a Medicinal plant *Andrographis paniculata* |
|  | Ishwar Prasad | 2020 | Study of Ethnomedicinal plants used by Trible people of Bar gram area of Barnawapara Wildlife Sanctuary, Blodabazar (C. G.) |
|  | Bhawana Rajesh | 2020 | Phytoremediation of Thermal wastewater using hydrophytes (Water hyacinth and *Salvinia*) |
|  | PushpanjaliRathia | 2020 | Phytoremediation of heavy metals with aquatic plants *Pistia* and *Hydrilla* |
|  | Nitesh Chouhan | 2020 | A review on *Plumbago zeylanica* |
|  | RinkiPadhan | 2021 | A review on Medicinal plants *Ocimum sanctum* and *Emblica officinalis* |
|  | Tripti Chatterjee | 2021 | A review on *Rauwolfia serpentina* and *Dioscoriaalata* |
|  | Pragati Verma | 2021 | A review on *Aloe vera* and Fenugreek |
|  | Vedshruti Nayak | 2021 | A review on *Tinospora cordifolia* and *Terminalia arjuna* |
|  | Poonam Walive | 2021 | A review on Medicinal plant *Asparagus racemosus* and *Acorus calamus* |
|  | Chandan Kumar Saha | 2022 | Studies of Invasive Plants in India: A Review |
|  | Bhumi Bharti Paikra | 2022 | A Survey on use of Ethnomedicinal plants by Tribes of Kansabel for Treatment of Diseases in Kansabel, Jashpur, Chhattisgarh |
|  | Neha Sheikh | 2022 | Use of Medicinal Plants for COVID – 19 Prevention and Treatment during the Pandemic: A cross-sectional Survey |
|  | TruptimayeeJhagara | 2022 | A Review on *Tridax procumbens* Linn and *Euphorbia hirta* Linn. |
|  | Himanshu Tandia | 2022 | Medicinal Plants used by tribes of Chhattisgarh, District Pendra - Road |
|  | Abhijeet Das | 2023 | Antibacterial and antibiotic resistance modifying activity of the oil extracts against opportunistic microorganisms including multidrug resistant phenotypes |
|  | Jyotsana Rani Sahoo | 2023 | Effect of water stress on seed germination and early seedling growth of Spinach (*Spinacia oleracea* L.) |
|  | 1. P. Lipsa
 | 2023 | Plants as a Source of Natural Herbal Dye (Diversity of Plants Utilized for Production of Natural Dyes) |
|  | Sampada Satpathy | 2024 | Ethnoreligious Plants used by oram community of Rasrajpur village, Sundargarh district, Odisha. |
|  | Prachismita Sahu | 2024 | Assessment of Medicinal Plants Diversity and their Therapeutic potentials in the Bheden River Basin Jharsuguda District, Odisha |
|  | Omkar Behera | 2024 | Medicinal plants distribution in Patnagarh block Odisha |
|  | Ragini Dewangan | 2025 | Ethnobotanical Survey on Medicinal plants in Dipka-Korba, Chhatisgarh |
|  | Anchal Samantray | 2025 | Ethnomedicinal uses of Medicinal Plants by tribal communities near Gandhamardhan Hill range, Khaprakhol block, Bolangir, Odisha  |
|  | Sandhya Rani Jena | 2025 | Traditional uses of Medicinal Plants by local Communities in Badamba Tehsil of State of Odisha, India |
|  | Nirupama Sa | 2025 | Diversity of Plants resourses from villages of Debrijgarh Wildlife Sancturies Bargarh, Odisha, India |

1. **(i) Ph. D. AWARDED – 02**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S. No. | Ph. D. Awardee | Title  | Registration No | Roll No./Enrolment Number | Award Date/Year |
| 1. | Durgesh Dixena | Ph. D.- Ethnobotany- (Ethnobotanical Studies of Medicinal Plants in The Region of Tribes, Kota, Chhattisgarh) | 1551435001 | 15921001 | 16-03-2021 |
| 2. | Satruhan | Ph. D.- “Studies on Ethnomedicinal Plants among the Tribes of Bodla block, Kabirdham district, Chhattisgarh, India” | 215103511 | GGV/21/13107 | 29-07-2025 |

**(ii) Ph. D. Students Registered– 06**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S. No.** | **Scholar Name** | **Fellowship** | **Ph. D. Topic** | **Registration No.** | **Date** |
|  | Ram Kumar Rajwade | VRET, GGV Bilaspur (C.G.) | Studies on Orchid Flora of Surguja district, Chhattisgarh, India | 215103510 | 29-10-2022 |
|  | Gayatri Devi Biswal | VRET, GGV Bilaspur (C.G.)LS - Botany/Life Science | “Role of Glycine Betaine on *Vigna Radiata* L. and *Vigna Mungo* L. under Cadmium stress” | 215103609 | 29-10-2022 |
|  | Vivek Patel  | JRF - Botany/Life Science | Phytochemical Screening and Antimicrobial evaluation of some Medicinal Plants of Chhattisgarh, India | 225103508 | 08-04-2024 |
|  | Aashish Patel | VRET, GGV Bilaspur (C.G.) | Ethnobotanical Studies of Dharamjaigarh block of Raigarh district in Chhattisgarh, India | 225103502 | 08-04-2024 |
|  | Ranjeet Kumar  | JRF - Botany/Life Science | Phytochemical and Antimicobacterial studies of some selected Medicinal plants from dongilohara block, Balod District, C.G., India | 235102507 | 14-02-2025 |
|  | Poonam Walive | JRF - Botany/Life Science | Coursework is going on  | Coursework is going on  | 2025 |

**(iii) Ph. D. Thesis Examined/Evaluated– 03**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S. No.** | **Scholar Name** | **Ph. D. Topic** | **Research Center** | **Award Date/Year** |
| 1. | Sarvesh Kumar  | Phytosociological and Ethnobotanical Studies in Gomarda Wildlif Sanctuary Raigarh, Chhattisgarh with special reference to herbs | Pt. RSU Raipur (C.G.) | 08-10-2024 |
| 2. | Dhaneshwar Prasad  | Ethnobotanical survey and Phytochemical analysis of Medicinal Plants used in the treatment of Sickle cell anaemia in Dhamtari and Balod district of Chhattisgarh | Govt. VYT PG Aitonomous College, Durg (C.G.)/ Hemchand Yadav Vishwavidyalaya, Durg (C.G.) | 28-03-2024 |
| 3. | Reshma Rani Dash | Phycodiversity Assessment of Bhitarkanika : A Comparative Study of Pre and Post monsoon Algal Flora | Sambalpur University, Odisha | 22-07-2025 |

**14. ATTENDED ORIENTATION / REFRESHER COURSES –**

|  |  |  |  |
| --- | --- | --- | --- |
| S. No. | Title of Training | Organizer | Duration |
| 1. | **4thOrientation**Programme, 2012. | Academic Staff College (ASC), G. G. V. Bilaspur (C. G.) | 26 - 11 – 2012 To22 – 12 - 2012 |
| 2. | **Refresher Course -** Methodology in Social Sciences and Pure and Applied Sciences (Interdisciplinary).  | UGC-HRDC, GGV- Bilaspur (C. G.) | 18 November to 09 December 2015 |
| 3. | **Refresher Course -** Synthetic and Natural products: Chemical and Medicinal Aspects | UGC-HRDC, GGV- Bilaspur (C. G.) | 11 June 2018 to 02 July 2018 |
| 4. | **Refresher Course** – Environmental practices for sustainable Development. | UGC-HRDC, GGV- Bilaspur (C. G.) | 24 June 2019 to 06 July 2019 |

**15. INVITED TALK/RESOURCE PERSON**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Title of the Invited Lecture delivered/Paper presented** | **Details of Conference / Seminar/ FDP****and Organizing Institution** | **Category** | **Date** |
|  | Science for Nation Building | Govt. Rajmata VijayarajeSindhya Girls College, Kawardha (C. G.) | University Level | 03 March, 2015 |
|  | Vermicompost Production Technique | Skill Development Cell and Rural Technology Department, GGV Bilaspur (C.G.) | University Level | 7-9 March, 2016 |
|  | Importance of Medicinal Plants | National Service Scheme, GGV Bilaspur (C.G.) | University Level | 10 March, 2016 |
|  | Medicinal plants Uses and need for Conservation | Govt. J.M. P. College Takhatpur (C. G.) | University Level | 13- September, 2020 |
|  | Needs of Medicinal Plants in Current Scenario | Bhanupratap Deo Govt. PG College, Kanker (C.G.) | University Level | 1-9 February 2023 (06-02-2023) |
|  | Medicinal Plants: Traditional Uses and need for Conservation | Govt. Mahtma Gandhi PG College, Kharsia, Distt. Raigarh (C.G.) | University Level | 11, 12 August 2023  |

**16. EDITORIAL NOTES –**

|  |  |  |  |
| --- | --- | --- | --- |
| S. No. |  Journals | Editorial notes Title | ISSN: |
|  | Agrotechnology | Cultivation Technique of the plants | ISSN: 2168-9881 |
|  | Journal of Biodiversity and Endangered species  | Biodiversity and its loss | ISSN: 2332-2543 |
|  | Journal of Biodiversity and Endangered species | Biodiversity and its importance | ISSN: 2332-2543 |
|  | Journal of Medicinal and Aromatic Plants | Plants as a Source of Medicine | ISSN: 2167-0412 |

**17.****MEMBERSHIPS**

**I. INTERNATIONAL MEMBER - 01**

|  |  |
| --- | --- |
| S. No. | Society |
|  | Commission member of IUCN (International Union for Conservation of Nature and Natural Resources) – SSC (Species Survival Commission) - Medicinal Plants Specialist Group (MPSG). |

**II. LIFE MEMBER – NATIONAL - 05**

|  |  |
| --- | --- |
| S. No. | Society |
| 1. | (MAPAI) Medicinal and Aromatic Plants Association of India, Anand – (Gujarat) |
| 2. | (IAAT) Indian Association for Angiosperm Taxonomy, Calicut – (Calicut), |
| 3. | (ISCA) Indian Science Congress Association, - Kolkata – (West Benghal) |
| 4. | (SPTB) Society for Promotion of Tropical Biodiversity – Jabalpur (M. P.) |
| 5. | (IBS) Indian Botanical Society-2014 |

1. **ANNUAL MEMBER.**

|  |  |
| --- | --- |
| 1. | Subject Expert - BOS- Alumnae of P. G. Level, - For Preparation and Approval of Syllabus of Botany UG and PG level. (K. G. Arts and Science College, Raigarh (C.G.), |
| 2. | Subject Expert - BOS- School of Botany, Gagadhar Mehar University, Amruta Vihar, Sambalpur (Odisa)- 02-09-2021 |

**18. RESPONSIBILITIES/MEMBERS OF DIFFERENT COMMITTEE IN GGV – BILASPUR (C. G.)**

|  |  |
| --- | --- |
| S. No. | Name of Committee/s in GGV Bilaspur (C.G.) |
|  | Unnat Bharat Abhiyan (UBA)  |
|  | Roster committee for Teaching and Non-Teaching Posts |
|  | First School Board of Studies (BOS)-Natural Resources |
|  | NSS Programme officer Natural Resource unit- G.G.V.-Bilaspur, (C. G.). |
|  | Garden Development Committee - G.G.V. - Bilaspur, (C. G.). |
|  | Facilitation centre Committee - G.G.V. - Bilaspur, (C. G.). |
|  | Anti-ragging committee - G.G.V. - Bilaspur, (C. G.). |
|  | Horticulture Development Committee- G.G.V. - Bilaspur, (C. G.). |
|  | Wood Management committee- G.G.V. - Bilaspur, (C. G.). |
|  | Member of ACADEMIC COUNCIL, GGV, Bilaspur (C. G.)- (Ex.) |
|  | Academic council Standing committee (Ex.)- |
|  | Member of “One Student One Tree” Programme at G.G.V. - Bilaspur, (C. G.). as per instruction of UGC-New Delhi |
|  | Member of Editorial Board for Preparation of Annual Report of G. G. V. – Bilaspur (C. G.) in 2008 -2009 and 2009 – 2010  |
|  | Scrutiny committee member of different Departments  |

**19.** **TEACHER IN CHARGE**

* Scholarship
* Attendance
* Mentor
* **SPORTS IN CHARGE**
* 2014 and 2018
* **NAAC RELATED RESPONSIBILITY**
* Assisted in Criterion – VII
* **INTERNATIONAL CONFERENCE** - Transport committee- - Bharat Rejuvenation, GGV Bilaspur (C. G.)

**20****. EXAMINATION - GGV BILASPUR (C. G.)**

University Examination-

1. **ASSISTANT CENTRE SUPERINTENDENT IN GGV BILASPUR (C. G.)**

|  |
| --- |
| * Assistant Centre Superintendent –VRET- GGV- 07-05-2015
* Assistant Centre Superintendent – Semester Exam. GGV- 27-04-2016
* Assistant Centre Superintendent – Semester Exam. GGV- 25-04-2017
* Assistant Centre Superintendent – Semester Exam. GGV- 19- 05 - 2018
 |

1. **EXTERNAL EXAMINER/OBSERVER – OUTSIDE OF GGV BILASPUR (C. G.)**
* VET (Vishwavidyalaya Entrance Exam) – Observer – Ambikapur – 2017
* VET (Vishwavidyalaya Entrance Exam) – Observer – Kolkata – 2019
* Practical examination – PG- Raigarh (C. G.)
* Practical examination – PG- Baster University Jagdalpur (C. G.)
* Evaluation of VET /VRET exam-2014
1. **CENTER SUPERINTENDENT IN GGV BILASPUR (C.G.)**
* Centre Superintendent (Forestry and Rural Technology Building) – Semester Exam. GGV- 2022

**21****. DUTIES IN CONVOCATION: GGV BILASPUR (C. G.)**

|  |  |  |
| --- | --- | --- |
| S. No. | Year | Duty |
|  | 2010 | Documentation of matters related to Convocation |
|  | 2011 | Invitation and matter Publication Related Duty |
|  | 2012 | Invitation and matter Publication Related Duty |
|  | 2013 | Invitation and matter Publication Related Duty |
|  | 2017 | Decoration in Campus GGV |
|  | 2018 | Decoration in Campus GGV |

**22****. DUTIES IN STUDENT COUNCIL ELECTION GGV BILASPUR (C. G.)**

|  |  |  |
| --- | --- | --- |
| S. No. | Year | Duty |
|  | 2012 | Polling Officer - 1 |
|  | 2014 | Polling Officer - 2 |
|  | 2015 | Counting Officer -2 |
|  | 2018 | Polling Officer/Presiding Officer - 1 |

**23. RESEARCH PAPERS: PUBLISHED –**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S. No. | Paper | Year | ISSN No. | UGC- Approved/Peer reviewed | UGC –Journal list No. |
|  | **DK Patel,** Kanungo, V. K., and Verma, J. N.[Domestic wastewater Treatment by using a water chestnut (Trapa bispinosa).](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=keanBl4AAAAJ&cstart=20&pagesize=80&citation_for_view=keanBl4AAAAJ:eMMeJKvmdy0C)Journal of Aquatic Biology, 20 (2), 211 – 215 | 2005 | ISSN – 0971-4235 | Yes | 18379 |
|  | Kanungo, V. K., Verma, J. N. **and DK Patel** Cyanobacteria of a Temple tank at Raipur (C.G.). Indian Journal of Environment and Ecoplanning, 10 (3): 743-745 | 2005 | ISSN - 0972-1215 | - | - |
|  | Kamlesh Shriwas, Kavita Agarwal, and DK **Patel** 2005.A Spectrophotometric determination of Ascorbic Acid.52: 503-506 | 2005 | 0009 - 4536 | Yes | - |
|  | **DK Patel.** VK Kanungo. [Phytoremediation of domestic wastewater by using a free-floating aquatic plant *Pistiastratiotes*L.](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=keanBl4AAAAJ&cstart=20&pagesize=80&citation_for_view=keanBl4AAAAJ:bFI3QPDXJZMC)Nature, Environment and Pollution Technology 5 (1), 101-106 | 2006 | ISSN- 0972 - 6268 | Yes | 25576 |
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|  | **DK Patel.** [*Tinospora cordifolia* (Willd.) Miers ex Hook. F and Thoms: An important medicinal, climber plant and its multiplication in Herbal Garden for ex-situ conservation](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=keanBl4AAAAJ&citation_for_view=keanBl4AAAAJ:uDGL6kOW6j0C), International Journal of Botany Studies 1 (2), 24-31 | 2016 | ISSN: 2455-541X | Yes | 7847 |
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|  | Durgesh Dixena and **DK Patel** Herbaceous climber medicinal plants recorded from Kota, Bilaspur, Chhattisgarh in India, The Pharma Innovation, 9(8): 298-301 | 2020 | ISSN -2277- 7695 | Yes | 7693 |
|  | Durgesh Dixena and **DK Patel** Some efficient medicinal plants used for joint pain purpose by the tribes in Kota block, Bilaspur, International Journal of Botany Studies, 6(3): 977-980 | 2021 | ISSN -2455-541X | Yes | 7847 |
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|  | Satruhan and DK Patel. Traditional practices of ethnomedicinal plants used for wound healing in Bodla block, Kabir Dham district, (C.G.) India, Journal of Medicinal Plants Studies 11(6): 133-140 | 2023 | ISSN: 2320-3862 | Yes | - |
|  | Satruhan, Ashish Patel and DK Patel. A review on a medicinal tree Acacia nilotica Linn., Journal of Pharmacognosy and Phytochemistry 12(6): 345-348 | 2023 | ISSN: 2278-4136 | Yes | - |
|  | Ram Kumar Rajwade and D.K. Patel, Epiphytic Orchid species diversity of Mainpat, Surguja, Chhattisgarh, India, 13 (2): 31-47 | 2023 |  | Yes |  |
|  | Ram Kumar Rajwade, Satruhan, Devendra Kumar Patel, *Zeuxine strateumatica* (L.) Schlechter. (Orchidaceae): A new addition of the Orchid Flora of Bilaspur District of Chhattisgarh state in Central India, International Journal of Botany Studies9 (2): 39-42 | 2024 | ISSN: 2455-541X | Yes |  |
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|  | Ram Kumar Rajwade, Devendra Kumar Patel, Comparative studies on orchid species diversity of three blocks of Surguja district, Chhattisgarh, Central India. International Journal of Botany Studies, 10 (4): 1-7  | 2025 | ISSN: 2455-541X | Yes |  |
|  | Satruhan and DK Patel, The Diversity of ethnomedicinal plants and their uses among the tribal community in the Bodla block, Kabirdham, Chhattisgarh, India. Journal of Ayurveda and Naturopathy, 2(1): 18-25.  | 2025 | 3078-6282 | Yes  |  |
|  | Satruhan and DK Patel. Quantitative Phytochemical analysis of selected traditional medicinal plants in Bodla block, Kabirdham district, Chhattisgarh, India, International Journal of Pharmaceutical Sciences and Drug Analysis, 5(1):60-65  | 2025 | 2788-9246 | Yes  |  |
|  | Gayatri Devi Biswal, Madhulika Singh, D.K. Patel and Sheo Mohan Prasad, Glycine betaine mitigates cadmium toxicity in plants via redox homeostasis and osmotic adjustment, Journal of Plant Biochemistry and Biotechnology, 1-17 | 2025 |  | Yes  |  |

**24. RESEARCH PAPER PRESENTATION IN SEMINARS/ CONFERENCES etc.**

1. **International Level**

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| --- | --- | --- | --- | --- | --- |
| S. No. | Title of the Paper presented | Details of Conference / Seminar | Organizing Institution | Category | PaperPresentation date |
|  | Study on utilization of duckweed (*Lemna minor*) for the removal of nutrients from domestic wastewater. | International Symposium on Microbial diversity: Challenges, Opportunities and Relevance in new millennium, | Deptt. of Biological Sciences, RaniDurgavati University,Jabalpur, (M.P.) | International (Within Country) | 19 - 21, Nov. 2004 |
|  | Treatment of domestic wastewater by an aquatic plant *Trapa bispinosa*Roxb. | International Conference on Modern trends in Plant Sciences with special reference to the role of biodiversity in conservation | Deptt. of Botany, Amravati University, Amravati (M.H.) | International (Within Country) | 17 – 20 Feb. 2005 |
|  | Management of domestic wastewater by using Phyto-remediation Technique. | International conference on Land use change, Biodiversity and Sustainable resource management, | Deptt. Of Geography, C.M.D. College,Bilaspur (C.G.) | International (Within Country) | 07 - 09 Oct. 2009 |
|  | Importance of Medicinal plants | International conference on Bharat Rejuvenation | GGV-Bilaspur (C. G.) | International (Within Country) | 15 – 17 October.2017 |
|  | Herbal Garden for Ex-situ conservation of Medicinal and Aromatic plants in GGV campus | International conference on Emerging researches on Biosciences | Zoology Department. GGV-Bilaspur (C. G.) | International (Within Country) |  2018 |

**ii. State Level**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S. No. | Title of the Paper presented | Details of Conference / Seminar/  | Organizing Institution | Category:  | PaperPresented date |
|  | Domestic wastewater treatability potential of a free-floating aquatic weed Eichhornia crassipes | 2nd Young Scientist Congress (Chhattisgarh) | Guru GhasidasUniversity,Bilaspur (C.G.) | Chhattisgarh/State Level | 28 - 29 Feb., 2004 |
|  | Study on domestic wastewater treatment by using a submerged and a free-floating aquatic plant  | 3rd Young Scientist Congress, (Chhattisgarh), | Pt. R. S. U. Raipur (C. G.) | Chhattisgarh/State Level | 28 Feb.- 01 March, 2005 |
|  | Quality of well water near the major drainage of Raipur  | 3rd Young Scientist Congress, (C. G.) | Pt. R. S. U. Raipur (C. G.) | Chhattisgarh/State Level | 28 Feb.- 01 March, 2005 |
|  | Phytoremediation of Domestic wastewater by using *Ceratophyllumdemersum,* a submerged rootless aquatic plant. | 4 rd Young Scientist Congress, (Chhattisgarh), | Indira Gandhi Agricultural University, Raipur, (C.G.) | Chhattisgarh/State Level | 28 Feb.- 01 March, 2006 |
|  | Bioremediation of municipal wastewater by a submerged aquatic plant *Hydrilla verticillata.* | 5 rd Young Scientist Congress, (Chhattisgarh), | Swami Vivekanand Technical University,Bhilai (C.G.) | Chhattisgarh/State Level | 28 Feb.- 01 March, 2007 |

1. **National Level**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S. No. | Title of the Paper presented | Details/Title of Conference / Seminar | Organizing Institution | Category  | PaperPresented date |
|  | Study on Nutrient removal potential of an aquatic plant *Pistia stratiotes* from domestic wastewater. | Innovation and prospects in Life Sciences, | School of Life Sciences, Pt. R. S. U. Raipur (C.G.) | National Level | 14-16 Dec. 2002 |
|  | Study on Nutrient absorption potential of an aquatic plant *Hydrilla verticillata* from domestic wastewater. | National Conference on changing Environ. and Biodiversity with Physico-chemical parameters, | Deptt. Of Botany, Zoology and Chemistry, K. G. Arts and Science College, Raigarh (C. G.). | National Level | 10 -11 March, 2003 |
|  | Some Cyanobacteria of Doodhari pond of Raipur Chhattisgarh. | National symposium on Biology and Biodiversity of fresh water algae | Center for advance study in Botany, University of Madras (T.N.). | National Level | 8 and 9 Sep. 2004 |
|  | Treatment of domestic wastewater by some common aquatic plants. | National Seminar on Environmental Pollution, | Center for Environmental Science and Engineering, BIT, Durg (C.G.) | National Level | 07 Oct. 2004 |
|  | Study on use of an aquatic plant *Ceratophyllumdemersum* L for domestic wastewater treatment.  | 92th Indian Science Congress | Nirma University of Science and Technology, Ahmadabad G.J.) | National Level | 03 - 07 Jan. 2005 |
|  | In vitro study on Salvinia rotundifolia L for nutrient removal potential from domestic wastewater | National Symposium on Biodiversity: Current status and prospects,  | School of Life Sciences, Pt. R. S. U. Raipur (C. G.) | National Level | 17 – 18 Oct.2005 |
|  | Diversity of aquatic plants in some ponds of Raipur City. | National Conference on Plant Diversity and its Conserv. | ST. Thomas College, Bhilai, (C. G.). | National Level | 11 - 12 Nov. 2005 |
|  | Prospects of aquatic plants in Phytoremediation of domestic wastewater. | National Symposium on Bio-resources: Technology and Prospects, | Deptt. of Botany, Govt. College of Science, Bilaspur, (C. G). | National Level | 18 - 19 March, 2007 |
|  | Comparative phytoremediation potential of two aquatic plants in Domestic wastewater culture. | National Seminar on Botanical researches: Present scenario and future prospects.  | Deptt. of Botany,Govt. Collegeof ScienceRaipur, (C. G.). | National Level | 29 and 30 Jan. 2008 |
|  | Eco-environmental study on some aquatic plants in phytoremediation of domestic wastewater. | Central region Science Conference by Indian Science Congress,  | Govt. Home andScience CollegeJabalpur, (M. P.) | National Level | 21 – 22 Feb. 2009 |
|  | Phyto-remediation of Domestic *Wastewater by Hydrilla verticillata* L, | National Seminar on Bio resources: Its implication, Alteration and Management for the Welfare of Living kingdom,  | Deptt. of Bio technology and Govt. V. Y. T. P. G. Autonomous College, Durg, (C. G.). | National Level | 11 – 12 Oct. 2011 |
|  | Medicinal Plants: Collection and Conservation in Nursery of Rural Technology Department, G. G. V.  | National Seminar on Standardization of Herbal Formulations: A Holistic Goal,  | Deptt. of Pharmacy, G.G.V. - Bilaspur, (C. G.). | National Level | 25 – 26Feb. 2012 |
|  | Importment Medicinal Plants from Chhattisgarh. | National Symposium on “Plant Biology and its role in Sustainable Food and Energy Production, | Deptt. of Botany, G.G.V. - Bilaspur, (C. G.). | National Level | 17- 18March, 2012 |
|  |  Herbal Garden Development for Ex-Situ Conservation of Medicinal and Aromatic Plants | National Seminar On Innovations and Entrepreneurship in Biotechnology  | BIOTECHNOLOGY- GGV- Bilaspur, C.G. | National Level | 26, 27 Dec. 2016 |
|  |  Ex-situ Conservation of *Commiphorawightii*(Arnott) Bhandari in Herbal Garden. | National Conference on Plant Science Technologies: Current status and future prospects | BOTANY - GGV- Bilaspur, C.G. | National Level | 21- 23 March 2017 |
|  | Ex-situ conservation of Medicinal and Aromatic Plants in Herbal Garden. | National Conference on Plant and Microbial Products: Progress, Potentials and IPR issues. | Deptt. of BotanyG.G.V. - Bilaspur, (C. G.). | National Level | 07 – 09February 2018 |
|  | Ex-situ conservation of Medicinal and Aromatic Plants --- in Herbal Garden | National Conference on Plant and Microbial Products: Progress, Potentials and IPR issues. | Deptt. of BotanyG.G.V. - Bilaspur, (C. G.). **Best paper presentation award** | National Level | 07 – 09February 2018 |
|  | Xerophytic Plants: Role in conservation of water and soil | National Seminar on Water Conservation: Demand of Time | Pt. Sundarlal Sharma Sharma Open University Bilaspur, (C. G.). | National Level | 29 – 30 – March2018 |
|  | Act As a judge for Model exhibition | National Seminar on Water Conservation: Demand of Time | Pt. Sundarlal Sharma Sharma Open University Bilaspur, (C. G.). | National Level | 29 – 30 – March2018 |
|  | Ex-Situ Conservation of Medicinal and Aromatic Plants in Herbal Garden | Biodiversity and its Utilization and Conservation in Central India | G.G.V. - Bilaspur, (C. G.). | National Level | 21 - 22nd February 2022 |
|  | Herbal Garden: A Center for Conserving Valuable Medicinal Plants | Strengthening environmental health: Role of Society, Science and Technology | G.G.V. - Bilaspur, (C. G.). | National Level | 26-27 September 2022 |

1. **University Level**

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| --- | --- | --- | --- | --- | --- | --- |
| **S. No.** | **Title of the Paper Presented** | **Level of Conference, Seminar** | **Invited/Organized by** | **Date of Events** | **API Score**  | **Annexure No. of Proof Enclosed** |
|  | Workshop on Curriculum development in Rural Community Engagement in Higher Education at Post Graduate level | Local /University Level | G.G.V. - Bilaspur, (C. G.). | 29-30 November, 2017 | 2 |  |
|  | Regional workshop of Unnat Bharat Abhiyan | Local /University Level | Shri G. S. Institute of Technology and Science, Indore | 03 August, 2018 | 2 |  |
|  | A virtual learning initiative and health awareness program on COVID19- 5 Days webinar | Local /University Level | Regional Coordinating Institute (RCI), NIT- Raipur (C.G.) | 25 July to 29 July 2021. | 2 |  |
|  | Workshop n oNEP 2020: Academic Bank of Credit (ABC)  | Local /University Level | HRDC-GGV, Bilaspur (C.G.) | 27/06/2022 to 27/06/2022. | 2 |  |
|  | Workshop On NEP 2020: Multidisciplinary  | Local /University Level | HRDC-GGV, Bilaspur (C.G.) | 28/06/2022 to 28/06/2022. | 2 |  |
|  | Workshop on NEP 2020: Good Academic Research Practices/Academic Research Integrity. | Local /University Level | HRDC-GGV, Bilaspur (C.G.) |  30/06/2022 to 30/06/2022 | 2 |  |
|  | Workshop On NEP 2020: Internationalization of Higher Education  | Local /University Level | HRDC-GGV, Bilaspur (C.G.) | 30/06/2022 to 30/06/2022 | 2 |  |
|  |  |  |  |  |  |  |
|  | **TOTAL SCORE** | **06** |  |

**25. Invited lectures / Resource Person/ paper presentation in Seminars/ Conferences/full paper in Conference Proceedings (Paper presented in Seminars/Conferences and also published as full paper in Conference Proceedings will be counted only once)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S. No. | Title of the Invited Lecture delivered/Paper presented | Details of Conference / Seminar/ FDPand Organizing Institution | Category: International (Abroad)/ International (within country)/ National/ State/University | Please select Invited Talk/PaperPresented date |
|  | Science for Nation Building | Govt. Rajmata VijayarajeSindhya Girls College, Kawardha (C. G.) | University Level | 03 March, 2015 |
|  | Vermicompost Production Technique | SKill Development Cell and Rural Technology Department, GGV Bilaspur (C.G.) | University Level | 7-9 March, 2016 |
|  | Importance of Medicinal Plants | National Service Scheme, GGV Bilaspur (C.G.) | University Level | 10 March, 2016 |
|  | Medicinal plants and Society | Uttam Memorial College, Raigarh (C.G.) | National Level | 10 January -2020 |
|  | Medicinal plants Uses and need for Conservation | Govt. J.M. P. College Takhatpur (C. G.) | National Level | 13 September, 2020 |
|  | Biodiversity/Flora and Fauna: Role and Need for Conservation | Govt. College Baloda(C. G.) | University Level | 11 March 2022 |
|  | Medicinal plants: uses and need for conservation | Mizoram University | University Level | 02 August 2022 |

**Research Papers Presented: Summary**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S. No. | Conference, Seminar Types | Number of Presented Papers | Marks Per Presentation- API | Total Marks- API |
|  | International Conferences | 05 | 05 | 25 |
|  | State Level Conferences | 05 | 02 | 10 |
|  | National Level Conferences | 21 | 03 | 57 |
|  | University Level | 03 | 02 | 04 |
| TOTAL SCORE | **87** |

**6. RESEARCH PAPERS REVIEWED –**

|  |  |  |  |
| --- | --- | --- | --- |
| S. No. |  Journals | Research Paper Title | Manuscript no. |
|  | International Journal of Water Resources and Environmental Engineering, | Process Design for Decentralized Sewage treatment System with Total natural Resources Management | IJWREE-11-016 |
|  | International Journal of Biodiversity and Conservation, | Spatio-temporal dynamics of macrophytes in relation to Ecology of a Kashmir Himayalian Wetlands | IJBC – 11- 052 |
|  | International Journal of Plant Physiology and Biochemistry, | Heavy Metal Phyto-remediation by Plants Growing in Urban Stream sediments. | IJPPB-11-025 |
|  | International Research Journal of Microbiology | Production of biogas from water hyacinth *(Eichhornia crassipes)* seeded with ruminant microorganisms | IRJM-11-106 |
|  | Global Advanced Research Journal of Biotechnology | Physico-chemical and Microbial Analysis of Well water in noculum metropolis, ogun –state, Nigeria. | GARJB- 12 – 035 |
|  | Herald Journal of agriculture and Food Science Research | Phytoremediation Potentials of *Lepidum sativum* L., *Lactuca sativa* L., *Spinacia oleraceae* L. And *Raphanus sativus* L. | HJAFSR-12-008 |
|  | International Research Journal of Agricultural Science and Soil Science  | Assessment of water quality and major Threats of morna Reservoir in western ghats (M. S.) India | IRJAS-12-165 |
|  | Basic Research Journal of Agricultural Science and Review | Comparison of nitrogen, phosphorus and potassium contents in cow dung and slurry generated in biogas plant | BRJASR-29-012 |
|  | Global Advanced Research Journal of Physical and Applied Sciences(GARJPAS) | Effect of Different Types of Plants (*Lemna Sp., Azolla filiculoides and Alfalfa*) and Artificial Diet (With Two Protein Levels) on Growth Performance, Survival Rate, Biochemical Parameters and Body Composition of Grass Carp | GARJPAS-12-026 |
|  | Journal of Forest Research | Pollution Studies of Monomictic Lake, Srinagar, J&K , India  | JFOR-13-8278 |
|  | Journal of Biodiversity & Endangered Species | Landscape structure indicators as a key feature in habitat selection: An operational approach to conservation planning | 774 –JBES-7 |
|  | American Journal of Environmental Science Research – Impact Factor-1.22 | Trace Metal Profile of *Moringa oleifera* (Linn.) Seedlings Sown in Spent Lubricating Oil 9881Contaminated Soils.  | ASRJ-13-002 |
|  | Journal of Agrotechnology | Effect of conservation trenches on plantation crop in degraded watershed in Kandhamal district of Odisha | AGT-13-9766 |
|  | Journal of Agrotechnology | Modeling soybean (glycine max l.) root growth under different tillage system | AGT-13-9764 |
|  | international journal of biodiversity and conservation | Impact of an invasive shrub, *Lantana camara* on soil properties in Nairobi National Park, Kenya | IJBC09.08.130623 |
|  | Horizon Research Publishing, USA (HRPUB) | Rejuvenation and adventitious Rooting in shoot cuttings of *Tectona grandis* under protected conditions in new locality of Western Himalayas | 10302181 |
|  | [International Journal of Plant & Soil Science](http://www.sciencedomain.org/journal-home.php?id=24) | Biodiversity management and plant dynamic in a cocoa agroforest (Cameroon) | 2014\_IJPSS\_10347 |
|  | Journal of Biodiversity & Endangered Species | Status and distribution of Coleus barbatus Benth. in Tehri Garhwal district, Uttarakhand | Ms. No. ENVIRONSCI-14-333 |

1. **REVIEW PAPER/S REVIEWED – 03**

|  |  |  |  |
| --- | --- | --- | --- |
| S. No. |  Journals | Research Paper Title | Manuscript no. |
|  | Sky Journal of Medicinal Plants Research | A comprehensive Ethno-pharmaceutical Review on *Euphorbia hirta*L.  | SJMPR-12-032 |
|  | Journal of Medicinal Plant Research | Comprehensive Review of *Hemigraphiscolorata*(Blume) H.G.Hallier | JMPR.14.01.13.2576 |
|  | International Journal of Biodiv. and Conservation, | A Review on agronomy and breeding studies on *Stevia rebaudiana* (bertoni) in Malaysia. | IJBC – 11- 052 |

**28. RESEARCH PROJECT COMPLETED - 01.**

* **Project Title –** “Ex – situ Conservation of important Medicinal and Aromatic Plants (MAPs) Resources from Chhattisgarh in Guru Ghasidas Vishwavidyalaya (A Central University) Campus, Bilaspur (C.G.)”.Financial Assistance (Approved amount Rs.6.00Lakhs) –:

Released amount - 5, 40, 000=00

* PI – Dr. Devendra Kumar Patel
* Funding Agency – UGC, New Delhi
* Worth in lakhs- Six lakh
* Grant received- 5,40000
* Under the above research project an Herbal Garden has been developed for Ex-situ conservation of the Medicinal and Aromatic plants from Chhattisgarh.

**ABOUT HERBAL GARDEN:**

Developed in GGV campus, Bilaspur, Chhattisgarh aimed for -

***Ex-situ Conservation of RET (Rare, Endangered, Threatened) Medicinal and Aromatic Plants of Chhattisgarh State in central India.***

 An Herbal Garden has been developed under a startup grant of Rs. Six lacks sanctioned to Dr. Devendra Kumar Patel from UGC-New Delhi.

Under this project near by 30 X 60 Meter of the area in Guru Ghasidas Vishwavidyalaya campus Bilaspur (A Central University) - Chhattisgarh, India A specified area has been marked (with proper permission of the Administration) and as per need of the Herbal Garden Fencing (Chain linked fencing with Iron pole for long durability) around the area made for protection of MAPs. There are Four Water Tanks were also made for proper supply of water to the Medicinal and Aromatic Plants (MAPs).

Additional to the above construction one shade with net developed for protection of the sensitive MAPs. The area is also utilized as a small-scale propagation of the MAPs for their regeneration as well as for Ex-situ conservation in Herbal Garden. Plant propagules were collected from different parts of the Chhattisgarh state and bring in Herbal Garden for their introduction aimed for Ex-situ conservation.

* Whole area is protected/covered by **chain linked fencing** supported by Iron pole for long durability (Height five feet from ground surface). Whole area of Herbal Garden is divided in four parts. In middle part and near of fencing area temporary pathway has been developed for proper monitoring of the introduced Medicinal and Aromatic plants collected from different parts of the Chhattisgarh state aimed for their Ex-situ conservation purpose in Herbal Garden.
* Entry/**Gate of the Herbal Garden** is 10 ft so small vehicles/tractors can easily enter to supply required goods, manures etc.
* There are four **water tanks** (1.5 x 1.5 x 1.5 Meter) developed in Herbal Garden. Each one water tank is connected with water source and further used to supply water in different prepared beds for growing varied Medicinal and Aromatic plants.
* **Additional to the above construction one shade with net cover and store room** jointly has been also developed. The area is utilizing for propagation of different Medicinal and Aromatic Plants and to protect the important Medicinal and Aromatic plants/plant propagules in summer season. Suitable plant parts were collected from varied parts of the state and are brought in Herbal Garden for their Introduction. Continuously the seeds of different Medicinal and Aromatic plants were also collected to regenerate them in coming season. For the same purpose a Seed Bank also made to support the Ex-situ conservation of varied Medicinal and Aromatic Plants in Herbal Garden.

Valuable Medicinal and Aromatic plants has been introduced and multiplying using their different parts like by seeds as well as by potential application of their vegetative plant parts. The above process as introduction of Medicinal and Aromatic plants is continuously going on.

Seasonal Medicinal and Aromatic plants are grown in their favourable season using suitable methods.

**Outcome –** Due to various human activities and by environmental variations, Overexploitation etc. plant populations are facing problems. Such degree is increasing day by day and is leading for loss of different plant species in including Medicinal and Aromatic Plants. So, the current effort to develop HRBAL GARDEN aimed for Ex-situ conservation of Medicinal and Aromatic Plants is significantly remarkable for multifold directions such as –

1. Herbal Garden is a suitable Step towards protecting endangered Medicinal and Aromatic plants which are under the threat of extinction.
2. Herbal Garden is a Repository of different Medicinal and Aromatic Plants.
3. It is a center of Different valuable/Endangered Medicinal and Aromatic Plants.
4. Exploring the diversity of Medicinal and aromatic plants in Herbal Garden.
5. Developing Botanical knowledge on varied Medicinal and aromatic plants.
6. Supporting the process of Ex-Situ conservation of varied Medicinal and Aromatic Plants.
7. Rich diversity of Medicinal and Aromatic Plants can be observed in a same place.
8. Maintaining species diversity of Medicinal and Aromatic Plants
9. Finally, For Ex- situ conservation of Medicinal and Aromatic plant species many efforts in our country is going on, in same connection many Herbal Gardens also developed for the same targets. Similarly, the protection of Medicinal and Aromatic Plants in Herbal Garden is better performing to conserve the important/Endangered Medicinal and Aromatic plant species in Chhattisgarh State in Central India.

**29. SUBMITTED PROJECT/PROPOSALS**

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| --- | --- | --- | --- | --- |
| **S. No.** | **Title of the project** | **Funding Agency** | **Period** | **Grant** |
|  | STI Hub in GGV for Socio-economic development of ST communities of Chhattisgarh through Science and Technology intervention. Dr. SK Shahi, Dr. KK Chandra, **Dr. DK Patel** and Dr. Subal Das | DST- New Delhi | 03 Year | 4,33,92,000 /- |
|  | Diversity of Tree species in District Bilaspur, Chhattisgarh | Chhattisgarh Biodiversity Board, Raipur (C.G.) | 01 Year | 4,50,000 /- |
|  | Assisted in preparation of Biodiversity Mapping and Conservation in GGV, Bilaspur (C. G.)- Ministry of Environment, Forest and Climate change, GOI, New Delhi |
|  | Assisted in the Preparation of proposal of Center for food processing services and food park in central India in GGV Bilaspur (C.G.)- Ministry of food processing industries, GOI, New Delhi |

**30. CONFERENCES ORGANIZED -**

* Organizing committee – National Symposium cum workshop on Biodiversity, its utilization and conservation in central India, 21-22 February 2022.
* Co - Convenor - National Conference on Fungal Diversity for Sustainable Future: Potential, Progress, Conservation and IPR Issues & 49th Annual Meeting of Mycological Society of India. 28 – 30 November 2022. Department of Botany, GGV Bilaspur (C.G.)
1. **OTHER RELAVENT INFORMATIONS**
* Coordinator - Refresher Course (Botany)-HRDC- GGV Bilaspur (C.G.) - Plant Diversity and Conservation, 09-10-2023 to 21-10-2023.
* Duties along with Teaching and Research
1. **IN THE BOTANY DEPARTMENT, GGV, BILASPUR (C. G.).**

|  |  |
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| ***S. No.*** | ***RELAVENT INFORMATION/S*** |
|  | ***Head, Department of Botany, GGV Bilaspur (C.G.) – 21-12-2021 to 20-12-2024*** |
|  | Document verification committee member for the recruitment of Adhoc Assistant Professor in the Botany Department |
|  | Walk-in interview for Adhoc Assistant Professor in the Botany Department, Document verification duty |
|  | Pre. Ph. D. Course work invigilation duty |
|  | Dissertation UG and PG- 2019-20 |
|  | Co-ordinator Departmental Committee for NAAC Report (Botany). |
|  | Co-ordinator Departmental Educational Tour 2019-20 (Botany). |
|  | Recognized as a Research Supervisor in Botany/Life Sciences. |
|  | Member Departmental Admission Committee (UG/PG Botany) for Session 2020-21. |
|  | Member of the Physical Verification Committee in the Botany Department. |
|  | Co-ordinator Departmental NAAC Committee. |
|  | Dissertation UG and PG- 2020-21 |
|  | Co-ordinator preparation of the list of unserviceable/obsolete materials in the Botany Department. |
|  | Co-ordinator Departmental Plantation and Decoration Committee |
|  | Member Departmental (Botany) level Parent Teacher Association (DPTA) |
|  | Acted as Judge in various cultural and Co-cultural activities at Department and University level. |
|  | Counselling as mentor of UG and PG classes. |
|  | Developed Herbal Garden in GGV Campus sponsored by UGC-Start Up Grant, New Delhi. |
|  | Performed various exam related duties (Departmental and University level) including external examiner for various Practical exams of UG and PG Botany in different Govt. Colleges and Universities. |
|  | Research Supervised in Ethnobotanical study in Tribal villages in Unnat Bharat Abhiyan (UBA) adopted villages. |
|  | Store In-charge in Botany Department. |
|  | Supervised UG and PG – Botany Dissertation. |
|  | Member Ph. D. Botany Admission Committee. |
|  | Plant Diversity Study in GGV Campus. |
|  | Chairman, DRC, Botany GGV, Bilaspur (C.G.) |
|  | Chairman, UG/PG Botany – Admission Committee, GGV, Bilaspur (C.G.) |
|  | GGV Result Committee for Life Sciences.  |
|  | Scrutiny committee member of different Departments  |
|  | **Organizing committee –** National Symposium cum workshop on Biodiversity, its utilization and conservation in central India, 21-22 February 2022. |
|  | **Co - Co-Convenor -**National Conference on Fungal Diversity for Sustainable Future: Potential, Progress, Conservation and IPR Issues & 49th Annual Meeting of Mycological Society of India. 28 – 30 November 2022. Department of Botany, GGV Bilaspur (C.G.) |

1. **IN GGV, BILASPUR (C. G.).**

|  |  |
| --- | --- |
|  | Member Unnat Bharat Abhiyan, GGV Bilaspur (C. G.). |
|  | Roster Committee Member for Teaching and Non-Teaching Posts. |
|  | Member Garden Development Committee. |
|  | Member Anti-ragging Committee. |
|  | Member of Academic council, GGV Bilaspur (C.G.) (Former) |
|  | Member of Academic council, - Standing committee GGV Bilaspur (C.G.) |
|  | Member of One Student One Tree programme at GGV Bilaspur (C.G). as per the instruction of the UGC-New Delhi. |
|  | Member of the Editorial Board for the preparation of the Annual Report of GGV Bilaspur (C.G). |
|  | Presiding officer, Student council election 2019 |
|  | Member Campus decoration committee during 8th Convocation of GGV, Bilaspur (C. G.). |
|  | Member Proctorial Board – Life Sciences, GGV Bilaspur (C. G.). |
|  | Decoration-related duty during Bharat ka Amrit Mahotsav |
|  | Attended Unnat Bharat Abhiyan (UBA) Orientation Workshop in NIT Raipur (C. G.). |
|  | Collection/Conservation of various Medicinal plants from Chhattisgarh. |
|  | Scrutiny Committee (Teaching and Non-Teaching Posts). |
|  | Member Pay Fixation Committee |
|  | Member Admission Committee (UG, PG, and Ph. D.) - Zoology. |
|  | Pre-Ph. D. Admission committee, Botany 2020-21 |
|  | Chairman, Admission Committee – UG and PG Botany, 2021- 2024 |

**C. OTHER ACTIVITIES**

|  |  |
| --- | --- |
| 1. | Cactus Collection |
| 2. | Collecting different varieties of Asclepids (*Caralluma, Hurenia, Oberia*), Haworthia etc. |
| 3. | Collecting various Xerophytic plants |
| 4. | Invited as a Resource person during the National Webinar on Life Sciences and Human Health held on 19-09-2020 at the Government. J. P. M. College, Takhatpur (C. G.). |
| 5. | Invited as a Subject expert in the National Seminar on Changing Environment and its impact on Flora and Fauna held on 10-01-2020 at Uttam Memorial College, Raigarh (C.G.). |
| 6. | Member IUCN – Medicinal Plants Specialist Group. |
| 7. | Participated in Nature Photography on World Nature Conservation Day- 28-07-2020. |
| 8. | NSS Programme Officer (former) |
| 9. | FIELD OF INTEREST: -Plant Ecology, - Diversity/Conservation of the Plants, Ethnobotany1. Conservation of Medicinal and Aromatic Plants (MAPs).
2. Multiplication / Plant Propagation /Conservation of RET/Important Medicinal Plants,
3. Diversity Study of the Plants.
 |
| 10. | TAUGHT SUBJECTS/PAPERS –* Lower Plants
* Economic Botany
* Morphology and Anatomy of Phanerogames
* Fundamentals of Medicinal Plants
* Production and Management of Medicinal Plants
* Biodiversity and Biotechnology
* Plant Taxonomy
* Plant Anatomy
* Reproductive Biology of Angiosperm
* Diversity and Biology of Gymnosperm and Anatomy of Angiosperm
* Archegoniates : Bryophytes, Pteridophytes and Gymnosperms
* Floral Morphology and Embryology of Angiosperms
 |

* In addition to the above activities, performed all the duties assigned by the Department of Botany and GGV Bilaspur (C. G.).

**Dr. Devendra Kumar Patel,**

Professor ,

Department of Botany,

 Guru Ghasidas Vishwavidyalaya,

(A Central University), Bilaspur (Chhattisgarh).

Date – 04-12-2023