



AGROVISION
FOUNDATION



21 Days International Summer School



agribionext
Gene to genome

**Integrative Biotechnology and Bioinformatics for
Sustainable Crop and Livestock Improvement**

16th May to 5th June, 2026

ORGANISED BY



KRUSHISHASTRA IS EMPOWERING FARMERS, STUDENTS AND RURAL ENTREPRENEURS ACROSS MAHARASHTRA THROUGH TECHNOLOGY-DRIVEN SOLUTIONS. RECOGNIZED WITH THE FICCI BEST DIGITAL AGRI STARTUP AWARD (2022), KRUSHISHASTRA BRIDGES TRADITIONAL FARMING WITH MODERN INNOVATION IMPACTING 10,000+ FARMERS AND 5,000+ STUDENTS WHILE DRIVING SUSTAINABLE, KNOWLEDGE-LED RURAL TRANSFORMATION.

A PDKV-RIF INCUBATED STARTUP

KNOWLEDGE PARTNERS

- ◆ South Asia Biotechnology Centre (SABC), Jodhpur (RJ)
- ◆ ICAR-Indian Institute of Oilseed Research (IIOR), Hyderabad (TS)
- ◆ Dr Panjabrao Deshmukh Krishi Vidyapeeth (Dr. PDKV), Akola (MS)
- ◆ Mahatma Phule Krishi Vidyapeeth (MPKV), Rahuri (MS)
- ◆ Agrovision Foundation, Nagpur (MS)
- ◆ PDKV- Research and Incubation Foundation, Akola (MS)
- ◆ Global Alliance for Sustainable Development (GASD) (MS)
- ◆ Association of Plant Pathologists, Dr. PDKV, Akola

21 DAYS INTERNATIONAL SUMMER SCHOOL

INTEGRATIVE
BIOTECHNOLOGY
&
BIOINFORMATICS
FOR SUSTAINABLE
CROP AND
LIVESTOCK
IMPROVEMENT



BRIDGING YIELD GAPS: THE ROLE OF MODERN BIOTECHNOLOGY IN INDIAN AGRICULTURE

Big Picture

India has nearly tripled agricultural production since the Green Revolution. Despite large cultivated land, productivity gaps still exist

Key challenges



Climate change impacting yield stability
Rising biotic (pests, diseases) and abiotic stresses (drought, salinity)
Limitations of conventional breeding in speed and precision

Role of Biotechnology



Proven success with Bt cotton (~97% adoption)
Enables faster, precise, and targeted crop improvement
Supports sustainable and resilient agriculture

Biotechnology has proven impactful, with Bt cotton covering ~97% of the area, and is now advancing through tools like CRISPR, NGS, and genomic selection. Innovations such as gene-edited sheep Tarmeem and rice variety DRR Dhan 100 (Kamala) highlight the growing role of precision biotechnology in shaping the future of Indian agriculture.

"Stay inspired. Never stop creating."

Traditional breeding alone is no longer sufficient to address evolving challenges. Modern biotechnology, powered by genomics and data-driven tools, is enabling faster, more precise crop and livestock improvement, paving the way for a more sustainable and climate-resilient agricultural future.



COURSE VISION

In view of the emerging biotechnology revolution in agriculture, the present course is envisioned as a capacity-building platform to create awareness and strengthen practical understanding among agricultural students, scientists, and young researchers regarding the tools, technologies and applications of biotechnology in agriculture.

COURSE OBJECTIVES

- ◆ To provide advanced training to teachers, researchers, extension personnel, professionals and eligible students in the application of biotechnology, bioinformatics and computational tools in agriculture and allied sciences.
- ◆ To update the participants with recent developments in genomics, molecular biology, data analysis, digital agriculture and allied biotechnological approaches relevant to sustainable crop, livestock and production systems.
- ◆ To provide hands-on exposure to important databases, software tools, analytical platforms and digital resources used in biological data interpretation, molecular research, breeding support and sustainable agricultural decision-making.

COURSE DELIVERY AND DAILY SCHEDULE

The Summer School will be conducted in online mode through platforms such as **Zoom**.

Each day will include a theory lecture, practical/hands-on session and interactive discussion for effective learning.

Daily Schedule

- 05:30 PM – 05:45 PM — Login / Recap
- 05:45 PM – 06:45 PM — Theory Session
- 06:45 PM – 07:00 PM — Interaction / Break
- 07:00 PM – 08:15 PM — Practical / Hands-on
- 08:15 PM – 08:30 PM - Discussion / Feedback

Be a part of an interactive journey into modern agricultural biotechnology.

COURSE STRUCTURE

The rapid growth of biotechnology, bioinformatics, digital agriculture and computational tools has created a strong need for structured capacity building among faculty, scientists, students and allied professionals. This 21-day Summer School has been designed to provide interdisciplinary theoretical and practical exposure to emerging tools and applications relevant to agriculture and allied sectors.

MODULE 1: FOUNDATIONAL BIOTECHNOLOGY & CORE DATA SKILLS

Day	Topics / Session Area	Resource Person
May 16, 2026	<ul style="list-style-type: none"> Inaugural Keynote Presentation-CRISPR-based Plant Genome Editing: Fundamentals and Applications for Crop Improvement 	Prof. K. C. Bansal , Former Director, NBPGR (ICAR), Pusa, New Delhi
May 17, 2026	<ul style="list-style-type: none"> Molecular Biology and Genomics: Core Concepts Hands-on Virtual Laboratory Session on DNA/RNA Extraction and PCR 	Dr. D.R. Rathod , Professor, Dr PDKV, Akola (MS) Dr. Charanjeet Kaur , Assistant Professor, MJPRU, Bareilly, (UP)
May 18, 2026	<ul style="list-style-type: none"> Advances in Genomics and Sustainable Future 	Dr. Amolkumar Solanke , Scientist, ICAR-NIPB, New Delhi
May 19, 2026	<ul style="list-style-type: none"> Transcriptome Profiling of Genes Governing Complex Traits 	Dr. N. Raghuram , Head CSNNM, School of Biotechnology, GGSIU, New Delhi
May 20, 2026	<ul style="list-style-type: none"> In Vitro Fertilization in cattle Myths and Scientific Facts 	Dr. Sonal A. Ingle , Assistant Professor, Veterinary College, Nagpur, (MS)

MODULE 2: APPLIED BIOINFORMATICS & CROP / LIVESTOCK GENOMICS

Day	Topics / Session Area	Resource Person
May 21, 2026	<ul style="list-style-type: none"> Applied Genomics Workflow: Sequence Mining, Primer Designing and PCR Optimization 	Dr. M. Muthukumar , Principal Scientist, ICAR-CISH, Lucknow (UP)
May 22, 2026	<ul style="list-style-type: none"> Tools for Data Visualization and Analysis for Genomics, Proteomics, and Other Biological Datasets 	Ms. Subhashree Sahu , Bioinformatician, PdxNucleus, Kolkata (WB)
May 23, 2026	<ul style="list-style-type: none"> Advances in Quantitative Genetics : Theory and Practice 	Dr. Pawan Kulwal , Professor, MPKV, Rahuri, (MS)

Day	Topics / Session Area	Resource Person
May 24, 2026	<ul style="list-style-type: none"> Role of advanced genomics and bioinformatics in Animal Husbandry 	Dr. Yogesh S. Akshay , Assistant commissioner, AHDS, Buldhana (MS)
May 25, 2026	<ul style="list-style-type: none"> Transcriptome and RNA-Seq Analysis in Dairy Animals 	Dr. Arif Pandit , Assistant Professor, SHUAST-K, Gr Shrinagar, (Kashmir)

MODULE 3: ADVANCED BREEDING ANALYTICS & BIOTECH INTEGRATION

Day	Topics / Session Area	Resource Person
May 26, 2026	<ul style="list-style-type: none"> GWAS and WGS for Genomic Selection and Breeding Analytics 	Dr. Anju Bajpai , Head, Principal Scientist, ICAR-CISH, Lucknow (UP)
May 27, 2026	<ul style="list-style-type: none"> Genome Editing in Rice 	Dr. Santosh V. Sawardekar , Registrar, Professor, Dr. BSKKV, Dapoli (MS)
May 28, 2026	<ul style="list-style-type: none"> Omics Integration, CRISPR and qPCR CRISPR and Real-Time PCR Applications 	Dr. Prashant Shingote , Assistant Professor, Dr PDKV, Akola (MS)
May 29, 2026	<ul style="list-style-type: none"> Advanced Statistical Methods / Random Regression Principal Component Analysis Applications 	Dr. Lokesh Gautam , Assistant Professor Co. Veterinary and Animal Science, Bikaner (RJ)
May 30, 2026	<ul style="list-style-type: none"> CRISPR and Real-Time PCR Applications 	Dr. Sudarshan Kumar , Principal Scientist, NDRI, Karnal, (Haryana)

MODULE 4 : COORDINATION, LEADERSHIP & TRANSLATIONAL ENGAGEMENT

Day	Topics / Session Area	Resource Person
May 31, 2026	<ul style="list-style-type: none"> Transcriptomics, RNA-Seq Analysis, and Molecular Approaches for Crop Improvement and Disease Biology 	Dr. P. Gopal , Assistant Professor, MKU, Madurai (TN)
Jun 1, 2026	<ul style="list-style-type: none"> MAGIC Populations, NAM Populations and Advanced Breeding Design 	Dr. Mangesh Y. Dudhe , Principal Scientist, ICAR -IIOR, Hyderabad (TS)
Jun 2, 2026	<ul style="list-style-type: none"> Third-Generation Breeding: Genomics, Phenomics & AI Integration in Livestock 	Dr. Lokesh Gautam , Assistant Professor, CoV &AH, Bikaner, (RJ)
Jun 3, 2026	<ul style="list-style-type: none"> The "Holy Grail" of Plant Breeding: Integrating Doubled Haploid Technology and Genomics for Synthetic Apomixis Aiming for Heterosis Fixation 	Mr. Rushikesh Tahakik , Dr PDKV, Akola (MS)
Jun 4, 2026	<ul style="list-style-type: none"> Industry Perspective and Entrepreneurship 	Dr. Divya Vashisht , Officer on Special Duty (OSD) to Principal Scientific Advisor to Govt. of India
Jun 5, 2026	<ul style="list-style-type: none"> Beyond GMOs: The Evolving Landscape of Genetic Engineering and Advanced Biotechnology Valedictory, Participant Presentations and Future 	Dr. Kathleen Hefferon , Cornell University, US Krushishastra Team

Experts



Dr. N. Raghuram
Head CSNNM, School of
Biotechnology,
GGSIU, New Delhi



Prof. K. C. Bansal,
Former Director, NBPGR
(ICAR), Pusa, New Delhi



**Dr. Amolkumar
Solanke**
Senior Scientist, ICAR-
NIPB, New Delhi



Dr. Pawan Kulwal,
Professor, MPKV, Rahuri,
(MS)



Dr. Divya Vashishta
Officer on Special Duty
(OSD) to Principal
Scientific Advisor to
Govt of India



**Dr. Santosh V.
Sawardekar,**
Registrar, Professor, Dr
BSKKV, Dapoli (MS)



Dr. Gaofeng Zhou,
Professor, Dept of
Biotechnology,
MU, Australia



Dr. Arif Pandit,
Assistant Professor,
SHUAST-K, Gr. Shrinagar,
(Jammu)



Dr. D.R. Rathod,
Professor, Dr PDKV,
AKola (MS)



Dr. Charanjeet Kaur,
Assistant Professor,
MJPRU, Bareilly (UP)



Mr. Rushikesh Tahakik,
Biotechnology Centre,
Dr PDKV, Akola (MS)



Dr. P. Gopal,
Assistant Professor,
Madurai kamraj
University, Madurai (TN)

Experts



Dr. Sonal A. Ingle,
Asst Professor, Veterinary
College, Nagpur (MS)



Dr. Mangesh Y. Dudhe,
Principal Scientist,
ICAR -IIOR, Hyderabad (TS)



Dr. Lokesh Gautam,
Professor Co. Veterinary
and Animal Science,
Bikaner



Dr. M. Muthukumar,
Principal Scientist, ICAR-
CISH, Lucknow (UP)



Dr. Sudarshan Kumar
Senior Scientist,
NDRI, Karnal (Haryana)



Ms. Subhashree Sahu,
Bioinformatician,
PdxNucleus, WB



Dr. Kathleen L Hefferon
Cornell University
Ithaca, United States



Dr. Yogesh S. Akshay,
Asst commissioner,
AHDS, Buldhana (MS)



Dr. Anju Bajpai,
Head & Principal Scientist,
ICAR-CISH, Lucknow (UP)



Prof. Gajanan B. Zore,
Professor and Head
Dept. of Biotechnology,
Central University of Raj,
Ajmer



Dr. Prashant Shingote
Asst Professor, Dr PDKV,
Akola (MS)

Patrons



Dr. S. R. Gadakh
Vice-Chancellor,
Dr. Panjabrao Deshmukh
Krishi Vidyapeeth, Akola



Dr. C. D. Mayee
President SABC,
Vice President, NAAS,
New Delhi India



Mr. Nikhil Yadav
Founder and CEO
Krushishastra,
Maharashtra

Course Advisor Committee

- Dr. S.S. Mane, Director of Research, Dr. PDKV, Akola
- Dr. D. M. Panchbhai, Dean Faculty of Agriculture, Dr. PDKV, Akola
- Dr. R. M. Gade, Elect President, Indian Phytopathological society, New Delhi & Secretary, Association of Plant pathologists, Dr. PDKV, Akola
- Dr. R.K Mathur, Director IIOR, Hyderabad
- Dr. K.C. Bansal, Former Director, National Bureau of Plant Genetic Resources (ICAR), India
- Prof. Chengdao Li , Director Western Crop Genetics Alliance (WCGA) Murdoch University, Australia
- Dr. Bhagirath Choudhary, Founder & Director, SABC, Jodhpur, Rajasthan
- Dr. N Raghuram, Head, School of Biotechnology, GGSIU, New Delhi
- Dr. A. M. Deshmukh, President, Microbiologist Society of India
- Prof. Gajanan B. Zore, Professor and Head Dept. of Biotechnology, Central University of Raj, Ajmer
- Dr. Archana W. Thorat, Head, Department of Agricultural Botany, Dr. PDKV, Akola
- Dr. S.R. Kalbande, Dean, Faculty of Agril. Engineering, Dr. PDKV, Akola.
- Dr. Samir Lande, Principal Shri Shivaji Krishi Mahavidalaya, Amravati
- Dr. Mangesh P Moharil, Incharge, Biotechnology Centre, Dr PDKV, Akola
- Dr. Pawan Kulwal , Professor of Plant Breeding & Senior Cotton Breeder, MPKV Rahuri
- Dr. Santosh V. Sawardekar, Registrar & Prof of Biotechnology, Dr BSKKV, Dapoli
- Dr. Yogesh S. Akshey, Asst. Commissioner Animal Husbandary & Dairy D Raja, Buldhana.
- Dr. Mangesh Y Dudhe, Principal Scientist, ICAR -IIOR, Hyderabad (TS)
- Dr. Nitin B. Mehetre, Principal, Samarth Agriculture College, D Raja, Buldhana, MH
- Dr. Sae Thakur, Associate Professor Dept of Biotechnology Engineering, KITCOE, Kolhapur
- Dr. Nowsheen Nazir, Professor Division of Fruit Science, Faculty of Horticulture, SKUAST KASHMIR
- Mr. Ashok Pingle, Executive Secretary GASD, MH

Course Co-director

- Mr. Rushikesh R. Tahakik, PhD Scholar
Biotechnology Centre, Dr PDKV, Akola
- Ms. Komal Kute, Co-Founder, Krushishastra
- Mr. Vijay Shinde, PhD Scholar and COO,
Krushishastra
- Dr. N. M. Konde, Associate Professor (CAS),
Dept of Soil Science, Dr. PDKV, Akola
- Dr. N.S. Wazire SMS (Entomology), KVK,
Selsura, Wardha Dr.PDKV, Akola

Course Co-ordinator

- Dr. D. R. Rathod, Biotechnology Center, Dr
PDKV, Akola
- Dr. Y. V. Ingle, Associate professor, Dr. PDKV,
Akola
- Dr. J. N. Parmar, Asst Professor Dr. PDKV,
Akola
- Dr. Swati Verma, Dr. Y S Parmar University of
Horticulture & Forestry Nauni Solan, HP
- Dr. Sandhyarani Nishani, University of
Horticultural Sciences, Bagalkot, KN
- Dr. Saiyyeda Firdous, VAIAL, VIT Vellore, TN
- Dr. Savitha S Desai, KLE'S P.C. Jabin Science
College
- Dr. Golmei Langangmeilu, School of
Agriculture, GIET University, Odisha
- Dr. Shraddha Karcho, COA, Balaghat, JNKVV,
Jabalpur
- Mr. Vijay Dhanorkar, ICAR-IARI, New Delhi
- Ms. Meghana R Sagar, NIPB, New Delhi
- Mr. Kiran Budhwat, SSAC, Amravati, MH
- Ms. Jaya Singh, Murdoch University, Australia
- Mr. Abhishek, University of Horticultural
Sciences, Bagalkot, KN
- Gajanan S. Mhasal, RCA, MPUAT, Rajasthan
- Mr. Kesamreddy Lokeshwar, Tamil Nadu
Agricultural University, TN
- Dr. Sachin Mule, KVK, Selsura, Wardha
- Mr. Supriyesh Kadlag, Murdoch University,
Australia
- Ms. Samiksha Misal, DST Inspire Fellow,
Biotechnology
- Mr. Swagat Kakade KIT, Kolhapur, MH &
Krushishastra
- Ms. Amruta Rathod, RJSPM'S ACS Collage
- Dr. Ramdas Agale, MGM NK COA, Gandheli,
CS, MH
- Dr. Rachana R Pachori, Rajasthan Aryans
Mahavidyalaya, Washim
- Dr. Shilpa Tarte, MGM-COA Biotechnology,
Gandheli, CS, MH
- Dr. Roshan Jadhav Y.P. ICAR, NBPGR AKOLA
- Dr. Amrutlal Khaire, Chhatrapati Shivaji
Maharaj, K.V.S Kashti, Malegoan
- Ms. Chetna M. Mishra, PGI, Dr. PDKV, Akola
- Mr. Roshan Chandurkar, PGI, Dr. PDKV, Akola
- Mr. Ankit Tetar, Sumit Agri Clinic & Agri
Business Centre, Yavatmal
- Mr. Sumit Kale, Amity Institute of
Biotechnology, AUM, Mumbai ,MH
- Ms. Megha Hange, MPKV, Rahuri
- Shri. Pramod Patiramji Parwate, SMS,KVK,
Sakoli, Bhandara, MH
- Mr. Nishant Zatale, PGI, Dr. PDKV, Akola

Local Organising Team

- Mr. Jivan Jadhav
- Mr. Pritam Halder
- Ms. Gunjan Vaidya
- Ms. Bhagyashree Thakare
- Mr. Abhishek Shinde
- Ms. Dnyaneshwari P. Yadav
- Mr. Rohan Chavan
- Mr. Mohit Gordey

WHO SHOULD APPLY?

Students, faculty, scientists, agricultural officers, KVK staff, RAs, SRFs, JRFs, young professionals, industry personnel, and others interested in agricultural biotechnology and bioinformatics.

COURSE DURATION

21 days
From May 16th to June 5th

COURSE TIME

Daily
6:00 pm IST - 8:00 pm IST

COURSE FEES STRUCTURE

PARTICIPANTS	EARLY BIRD REGISTRATION (BEFORE 05 May)	REGULAR REGISTRATION (AFTER 05 May)	INTERNATIONAL PARTICIPANTS (Only E-Certificate)
UG Students	499 INR	599 INR	25 \$
PG Students	599 INR	699 INR	30 \$
PhD Scholars	799 INR	999 INR	40 \$
All Faculty Members, Entrepreneurs and working Employees	1499* INR	2000* INR	50 \$

***Marked will get offline certificate**

PAYMENT DETAILS

Krushishastra and GASD, MH NGO encourages only Cashless Transactions to support the Government of India's guidelines on transaction.

The Course fee may be paid in the form of online transfers. The bank details are as follows,

Name of the Beneficiary: Global Alliance for Sustainable Development (GASD)

Account Number: 31035017695

Name of the Bank: State Bank of India

Branch: NAUPADA (Thane)

IFSC Code No : SBIN0005354



EVALUATION

- ◆ Weekly assessments
- ◆ Final evaluation through MCQs

ATTENDANCE CRITERIA

- ◆ Participants are kindly informed that a minimum of 75% attendance is mandatory to qualify for the certificate.
- ◆ Attendance will be tracked daily through the **Zoom Attendance Tracking System**.

NUMBER OF SEATS

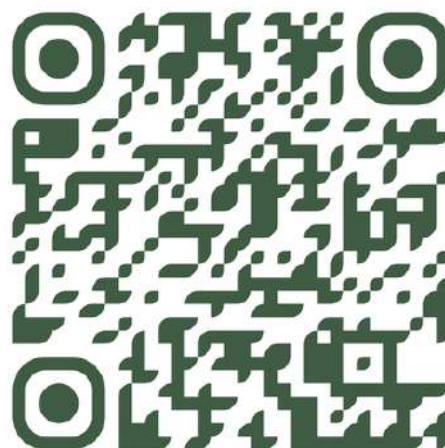
- ◆ 350 seats – General Participants
- ◆ 50 seats – Reserved for Progressive Farmers, SHGs, and FPOs

HOW TO APPLY

All are advised to fill nomination form in the enclosed Google Form Link and submit.

Google Form Link or Scan QR Code:

[Click here to open registration form](#)



South Asia Biotechnology Centre

South Asia Biotechnology Centre, Jodhpur is a scientific, not-for-profit organization working to advance the responsible use of biotechnology for sustainable agricultural development. It serves as a platform for knowledge exchange, technology outreach, and science-based dialogue, with emphasis on translating innovations from research laboratories to farmers' fields.

Through programs in bio-innovation, outreach, and agricultural networking, the centre contributes to strengthening food and fibre security while supporting the growth of India's bioeconomy



Indian Institute of Oilseeds Research

The ICAR–Indian Institute of Oilseeds Research (IIOR), Hyderabad is premier research institute that works on genetic improvement, biotechnology applications, crop production, protection technologies, and sustainable management practices for major oilseed crops such as castor, sesame, niger, safflower, sunflower, and linseed. Through interdisciplinary research, capacity building, and technology dissemination, IIOR aims to enhance productivity, improve oil quality, and strengthen India's edible oil security while promoting climate-resilient and sustainable oilseed production systems.



Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola

Dr. Panjabrao Deshmukh Krishi Vidyapeeth (Dr. PDKV), Akola. is one of the premier institutions dedicated to imparting agricultural education to rural youth through its constituent and affiliated colleges across eleven districts of the Vidarbha region. The University conducts site- specific and need-based research through its 19 research stations spread across its jurisdiction. An innovative and inclusive outreach program is also one of the major mandates of the University.



Mahatma Phule Krishi Vidyapeeth

Mahatma Phule Krishi Vidyapeeth (MPKV), Rahuri, established in 1969, serves the Western Maharashtra region with its jurisdiction spread across ten districts Satara, Sangli, Kolhapur, Ahmednagar, Solapur, Pune, Nashik, Dhule, Jalgaon, and Nandurbar.

MPKV, Rahuri is committed to advancing agricultural education, conducting region-specific research and promoting the transfer of innovative technologies to farmers. MPKV continues to enhance agricultural productivity and rural development across Western Maharashtra.



PDKV- RIF

PDKV Research and Incubation Foundation (PDKV - RIF) is registered as a Section -8 company on 24 June 2019. It is a sector-specific incubation centre working in the Agri-sector. The Maharashtra State Innovation Society (MSInS), Government of Maharashtra, has supported Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola, for the establishment of this incubation centre. The role of PDKV-RIF is to support Agri-startups for entrepreneurship development in the agri-sector. The incubation centres are designed to nurture and grow new and small businesses by supporting them through the early stages of development and change.

Association of Plant Pathologists, Dr. PDKV, Akola

Association of Plant Pathologists, Dr. PDKV, Akola is a reputed scientific society has been established in the year 2005, committed to promoting plant sciences and sustainable crop protection. The association supports eco-friendly and climate resilient agriculture, organizes collaborative scientific programmes, and contributes to farmer welfare through plant protection advisory services. It also serves as the academic body associated with the Journal of Plant Disease Sciences, a peer-reviewed half-yearly journal publishing quality research in Plant Pathology, Molecular Biology, Biotechnology, and integrated disease management.



AGROVISION FOUNDATION

Agrovision Foundation

The Agrovision Foundation is a non-governmental organization based in Nagpur, Maharashtra, working to promote sustainable agriculture and improve farmers' livelihoods, particularly in the Vidarbha region. The foundation focuses on educating, empowering, and encouraging farmers to adopt modern agricultural technologies, improved farming practices, and innovative agribusiness opportunities that can increase productivity and income. It conducts training programs, to help farmers address challenges such as climate change, pest management, and market access.

Global Alliance for Sustainable Development

Established in 2010, the Global Alliance for Sustainable Development (GASD) is a nonprofit, non-political, and non-religious organization dedicated to building inclusive, climate-resilient communities across India.

We promote sustainable development through grassroots action in the environment, agriculture, education, and clean energy sectors.



“Our knowledge partners are the backbone of our innovation bringing expertise, credibility, and real value to every initiative we undertake”

SKILLS YOU WILL GAIN

COURSE OUTCOME

1**1 Proficiency in Molecular Techniques**

Gain practical, hands-on understanding of fundamental molecular biology workflows, including DNA/RNA extraction, PCR optimization, and transcriptome profiling.

2**2 Expertise in Precision Gene Editing**

Master the design, simulation, and real-world applications of CRISPR-Cas systems and Real-Time PCR (qPCR) for targeted crop and livestock improvement.

3**3 Digital Dexterity in Bioinformatics**

Develop the capacity to handle, analyze, and visualize complex genomic, transcriptomic, and proteomic datasets using advanced computational tools and software.

4**4 Advanced Genomic Breeding Analytics**

Understand and apply cutting-edge breeding strategies, including GWAS, Whole Genome Sequencing (WGS), and advanced population designs like MAGIC and NAM.

5**5 AI & Statistical Integration Skills**

Learn to implement advanced statistical methods (PCA, Random Regression) and integrate Artificial Intelligence (AI) for data-driven agricultural research.

6**6 Translational & Entrepreneurial Acumen**

Bridge the gap between laboratory research and field application by understanding industry perspectives, agri-startups, and the commercialization of bio-innovations.

CONTACT DETAILS

Mr. Nikhil Yadav

Email: nikhil.yadav@krushishastraagri.in | krushishastra@gmail.com

Mobile: +91 8408912706 / +91 7972068969

Ms. Komal Kute Mobile: +91 9527323888 **Mr. Vijay Shinde** 8855941733

Course Delivery Mode:

The online course will be conducted via Zoom. Registered participants will receive the meeting link through their registered email address prior to each session.

Technical Requirements:

Participants are required to have access to a laptop or desktop computer, a stable internet connection, and headphones with a microphone for effective participation.

Attendance & Certification:

Attendance in all sessions (approximately 1–2 hours daily) is mandatory.

Certificates will be awarded based on attendance and active participation throughout the course.

कृषिशस्त्र : Journey so far



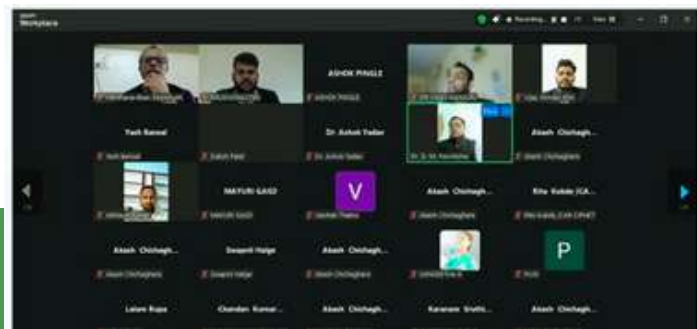
Krushishastra Portal Launch

KRUSHISHASTRA Portal Launched by the Hands of Hon'ble Union Agriculture Minister, Shri Narendra Singh Tomar in year 2023 at ICAR, New Delhi.



Winner- Agri Hackathon

Awarded First Prize in the AGRI Hackathon conducted by PDKV-RIF, Akola, recognizing Innovation and Excellence in agri-tech solutions.



Community Initiatives

ASRB-NET Guidance Series- national-level panel discussions featuring domain experts dedicated to guiding future agricultural professionals.

Global Summit on AI4Agri, Mumbai, MH

We participated in the Global Summit on AI4Agri, contributing to round table discussions. Our startup was invited for policy development and strengthening PPP frameworks in agriculture.



The Krushishastra team participated as a panelist in the International summit held in New Delhi, organized by FOLU 2025.



Krushishastra successfully conducted a 21-day Agri Drones skill enhancement course, training over 450 participants from across India.



In 2023, in collaboration with IIMR, Krushishastra conducted a millet-based Course program with around 400 participants