



K.R. MANGALAM UNIVERSITY
THE COMPLETE WORLD OF EDUCATION



SCHOOL OF AGRICULTURAL SCIENCES

NEWSLETTER

APRIL TO JUNE 2026





TABLE OF CONTENTS

FROM THE EDITORS' DESK	4
WORDS FROM LEADERSHIP	5
MESSAGE FROM THE DEAN	6
FROM THE DESK OF IQAC COORDINATOR	7
ABOUT SCHOOL: VISION AND MISSION	8
FACULTY ACHIEVEMENTS	9
STUDENTS' ACHIEVEMENTS	14
INITIATIVES BY SCHOOL	16
KRISHI VIKAS	18
EVENTS	20
AGRICULTURE AND COMMUNITY CONNECT	23
FACULTY RESEARCH UPDATES	25
STUDENTS' CORNER	28
THOUGHTS FROM FACULTY	32
INTERNSHIP & PLACEMENT	32
ALUMNI	34

FROM THE EDITOR'S DESK

Dear Readers,

I am delighted to present the April-June 2026 edition of the School of Agricultural Sciences Newsletter. This issue reflects another productive quarter marked by academic excellence, innovation, and meaningful engagement across our institution.

Over the past three months, our faculty and students have actively contributed to advancing knowledge, research, and community outreach in the field of agriculture. This edition showcases a diverse collection of articles highlighting emerging trends, sustainable agricultural practices, technological advancements, and innovative solutions addressing contemporary agricultural challenges.

We are proud to feature significant achievements, including research publications in reputed journals, patents, faculty and student accomplishments, expert lectures, training programmes, workshops, and various academic and co-curricular activities. Practical learning experiences through field visits, industry interactions, and hands-on training initiatives have further enriched the educational journey of our students.

This newsletter serves as a platform to celebrate our collective achievements, share knowledge, and strengthen connections within our academic community. We hope you find this edition informative, inspiring, and reflective of the dynamic activities taking place at the School of Agricultural Sciences.

We sincerely thank all contributors, readers, and well-wishers for their continued support and encouragement.

Warm Regards

**DR. ANJALI
TOMAR**

Editor-in-chief & Assistant
Professor School of Agricultural Sciences
K.R. Mangalam University



WORDS FROM LEADERSHIP

Dear Readers,

It is a pleasure to share my message for the April-June 2026 edition of the School of Agricultural Sciences Newsletter. This publication reflects the vibrant academic culture, innovative spirit, and collective achievements that continue to define the school's journey towards excellence.

The field of agriculture is undergoing rapid transformation, driven by technological advancements, sustainability imperatives, and evolving global challenges. In this context, the School of Agricultural Sciences has demonstrated remarkable dedication in nurturing knowledge, promoting research, and creating meaningful learning opportunities for students. The accomplishments featured in this edition are a testament to the hard work and commitment of our faculty, researchers, and students.

I am delighted to see the growing emphasis on experiential learning, interdisciplinary collaboration, entrepreneurship, and innovation within the School. Through research publications, training programmes, field-based learning experiences, outreach initiatives, and academic engagements, our students are being equipped with the skills and perspectives necessary to become future leaders in agriculture and allied sectors.

I congratulate the School of Agricultural Sciences on its achievements during this quarter and appreciate the efforts of everyone who has contributed to its continued success. I am confident that with the same enthusiasm and dedication, the school will continue to reach new milestones and make valuable contributions to society.

I extend my best wishes to the faculty, students, and staff for their future endeavors and encourage them to continue pursuing excellence with passion, integrity, and a spirit of innovation.

Warm Regards

**PROF. (DR.) ANIL
KUMAR SAINI**

Vice Chancellor
K.R. Mangalam University



MESSAGE FROM THE DEAN

Dear Readers,

It gives me immense pleasure to present the April-June 2026 edition of the School of Agricultural Sciences Newsletter. This issue showcases the remarkable accomplishments, academic endeavors, and vibrant activities undertaken by our faculty and students during the quarter.

The School of Agricultural Sciences continues to strengthen its commitment to excellence in education, research, innovation, and community engagement. Throughout this period, our academic community actively participated in a wide range of initiatives, including research publications, patent achievements, expert lectures, training programmes, field visits, workshops, student development activities, and outreach programmes. These accomplishments reflect our dedication to fostering a dynamic learning environment that bridges knowledge with practical application.

I am particularly encouraged by the enthusiasm, creativity, and determination demonstrated by our students and faculty members. Their contributions to academic excellence, scientific inquiry, and skill development are helping shape a culture of innovation and lifelong learning within the school.

I extend my heartfelt appreciation to all faculty members, and students, whose hard work and commitment have contributed to the achievements highlighted in this newsletter. Their collective efforts continue to enhance the academic standing and reputation of the School of Agricultural Sciences.

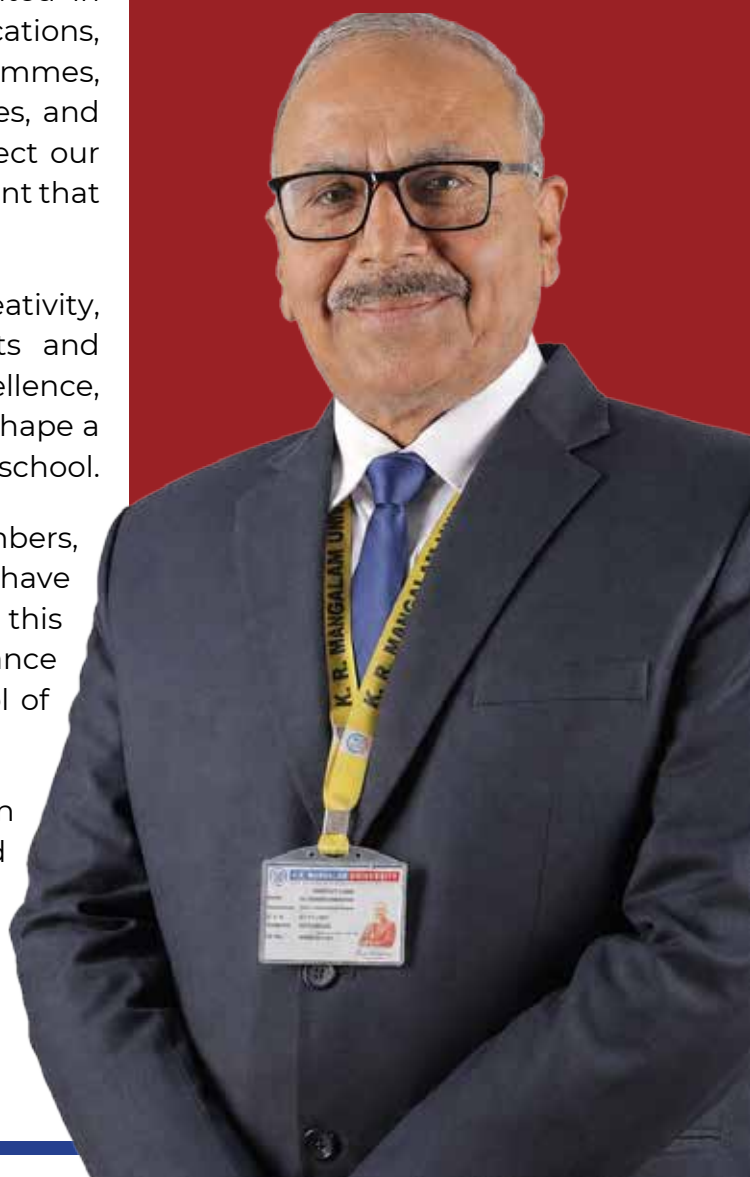
I hope this newsletter serves as a source of inspiration and reflects the spirit of progress, collaboration, and innovation that defines our institution.

With best wishes for continued success and growth.

Warm Regards

**PROF. (DR.)
JOGINDER SINGH
YADAV**

Editor & Dean
School of Agricultural Sciences
K.R. Mangalam University



FROM THE DESK OF IQAC COORDINATOR

Dear Readers,

It gives me great pleasure to present my message for the April-June 2026 edition of the School of Agricultural Sciences Newsletter. This publication serves as a testament to the vibrant academic environment, innovative initiatives, and collective accomplishments that continue to shape the growth of the school. I congratulate the editorial team for their commendable efforts in bringing together the noteworthy events and achievements of the quarter.

The Internal Quality Assurance Cell (IQAC) remains dedicated to promoting excellence through quality enhancement, innovation, and best practices across all academic and administrative processes. It is gratifying to observe the School of Agricultural Sciences making significant strides in these areas through its diverse academic activities, research contributions, outreach programmes, and industry-oriented learning opportunities.

The enthusiasm and dedication demonstrated by faculty members and students in research, publications, intellectual property creation, training programmes, workshops, and experiential learning activities are truly praiseworthy. Such engagements foster critical thinking, professional competence, and a spirit of innovation, preparing students to become effective contributors to the agricultural sector and society at large.

I extend my best wishes to the School of Agricultural Sciences for its future endeavours and encourage all stakeholders to continue striving for innovation, quality, and impactful contributions in the field of agriculture.

Warm regards

**DR. SHIKHA
DUTT SHARMA**

Editor & IQAC Coordinator
K.R. Mangalam University



ABOUT SCHOOL: VISION & MISSION

ABOUT THE SCHOOL OF AGRICULTURAL SCIENCES

School of Agricultural Sciences at K. R. Mangalam University is fully equipped with the facilities of laboratories agriculture farms to carry out the Teaching, Practical and Research work. All the faculty members are well qualified (Ph.D. in their respective fields) and well experienced. The faculty remains in constant touch with various experts in the relevant fields and is willing to experiment with latest ideas in teaching and research.

School of Agricultural Sciences imparts students technical knowledge, enhances their practical skill and ability, motivating them to think creatively, helping them to act independently and take decisions accordingly in all their technical pursuits and other endeavours. It strives to empower its students and faculty members to contribute to the development of society and Nation.

School Vision

To be an internationally recognized Agri-institute for agriculture education, research and innovation, and Agri-entrepreneurship.

School Mission

- Interdisciplinary approach, innovative pedagogy, stimulating research to foster Agri-based employability and entrepreneurship.
- Integrate global needs and expectations through collaborative programs with premier universities, research centers, industries, and professional bodies within India and abroad for global exposure & real-life work experience.
- Practicing cutting-edge-technologies, tools, techniques, practices, and processes in the field of agriculture
- Developing leadership, ethical values, and sensitivity to the environment.



FACULTY ACHIEVEMENTS

DELIVERED EXPERT SESSION TO PARTICIPANTS OF DAESI PROGRAM AT CCS HAU, HISAR



Prof. (Dr.) J.S. Yadav, Dean, SOAS, addressing participants during a technical session at CCS HAU, Hisar

The School of Agricultural Sciences is proud to share that Prof. (Dr.) J.S. Yadav, Dean, School of Agricultural Sciences, was invited as an expert speaker to deliver technical lectures at CCS Haryana Agricultural University (CCS HAU), Hisar, on 17 May 2026.

The programme was organized by HAMETI (Haryana Agricultural Management & Extension Training Institute), Jind, under the coordination of MANAGE (National Institute of Agricultural Extension Management), Hyderabad.

Prof. Yadav conducted two technical sessions on Crop Production Technology of Kharif Pulses and Crop Production Technology of Kharif Oilseed Crops. During the sessions, he shared valuable insights on improved production practices, varietal selection, seed treatment, nutrient management, irrigation scheduling,

integrated pest and disease management, and scientific cultivation techniques aimed at enhancing the productivity and sustainability of Kharif pulse and oilseed crops.

The lectures were highly informative and interactive, providing participants with practical knowledge and updated technological interventions for effective crop management. The programme offered an excellent platform for knowledge sharing and capacity building, enabling participants to gain a deeper understanding of modern agricultural practices and their application in the field.

Prof. Yadav's contribution as an expert resource person reflects his academic expertise and highlights the School's continued contribution to agricultural education, extension, and professional capacity-building initiatives.

DELIVERED EXPERT SESSION TO PARTICIPANTS OF DAESI PROGRAM AT NUH, HARYANA



Dr. Agnibha Sinha, Assistant Professor, SOAS, delivering a technical session for DAESI participants at Nuh.

The School of Agricultural Sciences, K.R. Mangalam University, is pleased to share that Dr. Agnibha Sinha was invited as a distinguished guest speaker to deliver an expert lecture for participants of the Diploma in Agricultural Extension Services for Input Dealers (DAESI) programme at Nuh on 17 May 2026.

The programme was organized by MANAGE (National Institute of Agricultural Extension Management), Hyderabad, in collaboration with HAMETI (Haryana Agricultural Management & Extension Training Institute), Jind.

During the session, Dr. Sinha delivered a comprehensive lecture on Soil Health and Its Management, emphasizing the importance of maintaining soil fertility for sustainable agricultural production. He highlighted

the significance of the Soil Health Card as a scientific tool for nutrient management and discussed the role of essential plant nutrients in promoting healthy crop growth and improved productivity.

The lecture provided participants with valuable insights into sustainable soil management practices and enhanced their understanding of modern agricultural advisory services. The interactive session was well received and contributed significantly to strengthening the technical knowledge of the participants.

Dr. Sinha's invitation as an expert speaker reflects his academic expertise and the School's continued commitment to agricultural education, extension, and capacity-building initiatives.

DELIVERED EXPERT SESSION TO PARTICIPANTS OF DAESI PROGRAM AT NUH, HARYANA



Dr. Anjali Tomar, Assistant Professor, SOAS, addressing participants of DAESI Program at Nuh.

The School of Agricultural Sciences, K.R. Mangalam University, is pleased to share that Dr. Anjali Tomar, Assistant Professor, School of Agricultural Sciences, was invited as a distinguished guest speaker to deliver an expert lecture for participants of the Diploma in Agricultural Extension Services for Input Dealers (DAESI) programme at Nuh on 17 May 2026.

The programme was organized by MANAGE (National Institute of Agricultural Extension Management), Hyderabad, in collaboration with HAMETI (Haryana Agricultural Management & Extension Training Institute), Jind.

During the session, Dr. Tomar delivered an insightful lecture on Fundamentals of Extension Education. She highlighted the concept and significance of education in agricultural and rural development and emphasized the crucial

role of extension education in empowering farming communities through knowledge dissemination and capacity building. She also discussed various extension methods, communication tools, and techniques used for effective transfer of agricultural technologies and farmer-centric advisory services.

The interactive session provided participants with valuable insights into the principles and practical applications of extension education, enhancing their understanding of effective communication strategies and community-based agricultural development.

Dr. Tomar's participation as an expert speaker reflects her academic expertise and the School's continued commitment to agricultural education, extension, and capacity-building initiatives.

PARTICIPATION IN CAPACITY BUILDING AND TRAINING PROGRAMME



Dr. Anjali Tomar, Assistant Professor, K.R. Mangalam University, participated in a five-day online Capacity Building and Training Programme on Strengthening Knowledge Domains, Library Resources and academic Integrity for Quality Learning in Higher Education Institutions.”

The programme was organized by IQAC & AADC, K.R. Mangalam University, in collaboration with the

Association of Indian Universities (AIU) from 27th April to 01st May 2026. Dr. Tomar’s participation demonstrates a strong commitment to advancing academic excellence, strengthening institutional quality, and promoting effective learning outcomes.

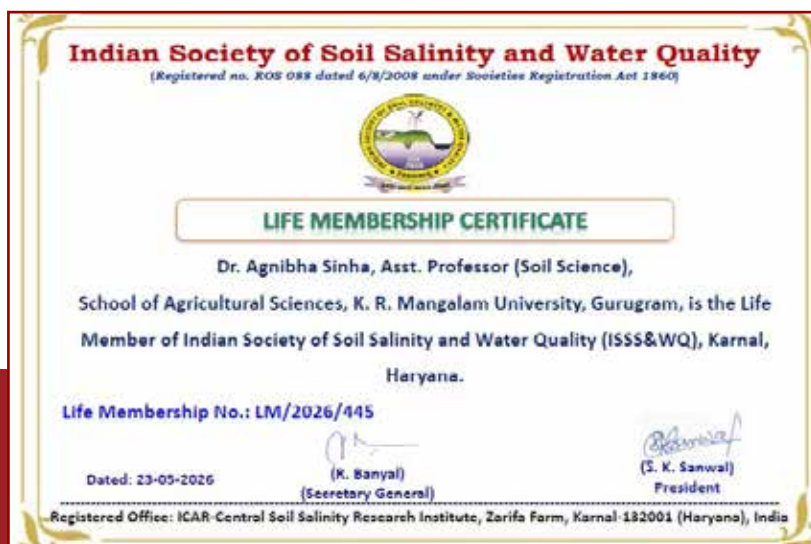
ANNUAL MEMBERSHIP IN THE SOCIETY FOR THE YEAR 2026

Dr. Agnibha Sinha, Assistant Professor (Soil Science), has been awarded Annual Membership of the Society for the year 2026 and has been assigned Membership No. M/S/2050.

This membership recognizes his professional engagement and commitment to advancing research, knowledge sharing, and academic excellence in his field of specialization. Through this association, Dr. Sinha will contribute to and benefit from scientific discussions, collaborative initiatives, and professional development opportunities. Congratulations to Dr. Sinha on this professional achievement.



LIFE MEMBERSHIP IN ISSS&WQ



Dr. Agnibha Sinha, Assistant Professor (Soil Science), became a Life Member of the Indian Society of Soil Salinity and Water Quality (ISSS&WQ), Karnal, Haryana, on 23 May 2026.

This professional recognition reflects his commitment to advancing knowledge and research in Soil Science and highlights his active engagement with leading scientific societies. The membership will provide opportunities for academic collaboration, knowledge exchange, and contributions to the fields of soil salinity management, water quality, and sustainable agriculture. School of Agricultural Sciences Congratulates to Dr. Sinha on this achievement and best wishes for his future endeavors.

LIFE MEMBERSHIP IN SOCIETY FOR COMMUNITY MOBILIZATION FOR SUSTAINABLE DEVELOPMENT

This recognition reflects Dr. Yadav's dedication to promoting sustainable development, community engagement, and capacity-building initiatives. Through this professional association, he will contribute to the exchange of knowledge, collaborative research, and the advancement of sustainable development practices that benefit both rural and urban communities.

Congratulations to Dr. Yadav on this achievement and best wishes for his continued contributions to academia, research, and sustainable development.



Prof. (Dr.) J. S. Yadav, Dean, School of Agricultural Sciences, has been conferred Life Membership of the Society for Community Mobilization for Sustainable Development, New Delhi.

STUDENTS' ACHIEVEMENTS

SOAS STUDENTS SHINE AT AGRI SPARK 2026

Students of the School of Agricultural Sciences showcased exceptional innovation and entrepreneurial spirit at Agri Spark 2026: Student Startup Innovation Challenge, held on 8 April 2026. The competition featured a range of innovative agricultural startup ideas and value-added products, evaluated on the basis of innovation, feasibility, sustainability, and market potential.

Winners:

- **1st Prize:** Neetu Sharma, B.Sc. (Hons.) Agriculture, 4th Semester.
- **2nd Prize:** Shivjeet, B.Sc. (Hons.) Agriculture, 4th Semester.
- **3rd Prize:** Surabhi Dubey, B.Sc. (Hons.) Agriculture, 6th Semester.

Congratulations to the winners for their outstanding creativity and entrepreneurial vision in developing innovative solutions for the agricultural sector.



Ms. Neetu Sharma
B.Sc. (Hons.) Agriculture II Year





Mr. Shivjeet Singh
B.Sc. (Hons.) Agriculture II Year



Ms. Surabhi Dubey
B.Sc. (Hons.) Agriculture III Year



STUDENT DEMONSTRATES SOCIAL RESPONSIBILITY THROUGH BLOOD DONATION

A student of the School of Agricultural Sciences demonstrated compassion and social responsibility by donating blood at S.S. Super Speciality Hospital, Bhiwadi, Alwar, on 24 May 2026.

This noble act reflects the student's commitment to serving society and contributing to the well-being of those in need. Blood donation is a lifesaving gesture that helps support patients requiring emergency medical care and encourages a culture of community service among young individuals.



Mr. Subham
B.Sc. (Hons.) Agriculture I Year



INITIATIVES BY SCHOOL

SOAS INITIATIVE: CONNECTING FARMERS AND URBAN COMMUNITIES FOR PROMOTING NATURAL FARMING



Dr. J. S. Yadav, Dean, SOAS interacting with farmers in the field and highlighting the benefits of natural farming practices.

The School of Agricultural Sciences (SOAS), K.R. Mangalam University, has been consistently working towards promoting natural farming through a series of awareness, training, and community engagement initiatives. Recognizing that the successful adoption of natural farming requires both informed producers and aware consumers, the School has taken proactive steps to connect farmers with urban residents and create a platform for knowledge exchange.



Dr. J. S. Yadav, Dean, SOAS interacting with farmers

Through farmer interaction programmes, awareness campaigns, expert talks, field visits, workshops, and community outreach activities, SOAS has facilitated meaningful dialogue between farming communities and urban consumers. These initiatives help urban residents understand the importance of chemical-free food production, soil health,

biodiversity conservation, and sustainable agricultural practices, while also providing farmers with opportunities to share their experiences and challenges.

The School regularly invites agricultural experts, natural farming practitioners, scientists, and progressive farmers to interact with students and community members. Such programmes promote awareness about natural farming techniques, preparation of bio-inputs, soil fertility management, and sustainable crop production methods. They also encourage consumers to make informed food choices and support environmentally responsible farming systems.

As part of its extension and outreach activities, SOAS continuously strives to bridge the gap between the farm and the consumer. By fostering direct interaction between farmers and urban communities, the School is contributing to increased awareness, greater acceptance, and wider adoption of natural farming practices.

These efforts reflect the commitment of SOAS towards sustainable agriculture, community engagement, and environmental

stewardship. Through education, capacity building, and stakeholder collaboration, the School continues to play a vital role in promoting a healthier food system and a more sustainable agricultural future.



Dr. J. S. Yadav, Dean, SOAS, connecting farmers with key stakeholders to foster collaboration, knowledge sharing, and sustainable farming practices

KRISHI VIKAS

SUSTAINABLE AGRICULTURE AND THE ROLE OF AGRICULTURAL EXTENSION



Dr. Anjali Tomar
Assistant Professor (Extension Education)

Sustainable agriculture has become essential for ensuring food security while protecting natural resources for future generations. With challenges such as climate change, declining soil fertility, water scarcity, and environmental degradation, the need for sustainable farming practices is greater than ever.

Sustainable agriculture focuses on maintaining productivity while conserving soil, water, and biodiversity. Practices such as integrated nutrient management, organic farming, crop

diversification, integrated pest management, and efficient water-use technologies help farmers produce more with fewer environmental impacts.

The successful adoption of these practices largely depends on Agricultural Extension Education. Extension serves as a bridge between agricultural research institutions and farmers, ensuring that scientific innovations reach the field and are effectively implemented. Through training programmes, field demonstrations, workshops, farmer meetings, and digital advisory services, extension professionals educate farmers about sustainable and climate-resilient farming practices.

Extension workers also play a vital role in helping farmers adapt to changing climatic conditions by promoting resource conservation, weather-based advisories, and risk management strategies. In addition, they encourage entrepreneurship, value addition, and market-oriented agriculture, contributing to improved rural livelihoods.

Modern information and communication technologies have further strengthened extension services. Mobile applications, online platforms, and social media enable farmers to access timely information and expert guidance, making agricultural knowledge more accessible than ever before.



School of Agricultural Sciences continuously strives to promote sustainable agriculture through awareness programmes, farmer trainings

As agriculture moves toward a more sustainable future, Agricultural Extension Education remains a key driver of change. By empowering farmers with knowledge, skills, and innovations, extension contributes significantly to building productive, resilient, and environmentally responsible agricultural systems.

FROM SEED TO SUPERFOOD: THE WORLD OF MICROGREENS



Dr. Ambika Bhandari
Assistant Professor (Horticulture)

In recent years, microgreens have emerged as one of the most exciting innovations in modern agriculture and nutrition. Often referred to as "superfoods," these tiny, tender greens are harvested at an early stage of growth, typically 7–21 days after germination, when the first true leaves appear. Despite their small size, microgreens are packed with flavor, color, and an impressive concentration of nutrients.

Microgreens can be grown from a wide range of vegetable, herb, and cereal crops, including radish, mustard, broccoli, cabbage, spinach, beetroot, coriander, basil, and sunflower. They require minimal space, water, and inputs, making them an ideal crop for urban farming, indoor cultivation, and sustainable agriculture practices.

One of the key reasons for the growing popularity of microgreens is their exceptional nutritional value. Studies have shown that many microgreens contain higher concentrations of vitamins, minerals, antioxidants, and bioactive compounds than their mature counterparts. Rich in vitamins A, C, E, and K, as well as essential minerals and phytochemicals, they contribute to improved immunity, better cardiovascular health, and overall well-being.



Beyond their nutritional benefits, microgreens offer significant economic opportunities. Their short production cycle allows multiple harvests within a month, making them a profitable enterprise for small-scale farmers, entrepreneurs, and start-ups. Restaurants, hotels, health-conscious consumers,

and gourmet food markets increasingly demand fresh microgreens due to their vibrant appearance and unique flavors.

The cultivation process is simple and eco-friendly. Seeds are sown in trays filled with a suitable growing medium, provided with adequate moisture and light, and harvested when they reach the desired stage. Because of their rapid growth and low resource requirements, microgreens align well with sustainable development goals by promoting efficient resource use and enhancing local food production.

As the world seeks innovative solutions for food security, nutrition, and sustainable agriculture, microgreens represent a promising avenue. From a tiny seed emerges a nutrient-rich superfood, proving that even the smallest crops can make a significant impact on human health and sustainable food systems.

Microgreens are more than just a trend—they are a glimpse into the future of smart, sustainable, and nutritious agriculture.

EVENTS

AGRI SPARK 2026: STUDENT STARTUP INNOVATION CHALLENGE



During Agri Spark 2026

The School of Agricultural Sciences (SOAS), K.R. Mangalam University, successfully organized “Agri Spark 2026: Student Startup Innovation Challenge” on 8 April 2026. The event provided a platform for students to transform innovative agricultural ideas into sustainable and market-oriented startup ventures.

A total of 44 participants from various schools of the university enthusiastically participated in the competition. Students showcased innovative concepts and

value-added products such as Neemora Herbal Soap, Rose Squash, Smart Hydroponics Systems, Fasal Sauda App, IMLI POP, Kalanamak Rice Butter Cookies, Rose Coco Delight Sweets, and Fresh Fusion Tomato Chutney.

The event was organized under the guidance of Dr. Joginder Singh Yadav (Dean, SOAS) and coordinated by Dr. Ambika Bhandari and Dr. Anjali Tomar. An expert panel comprising Dr. Rabiya Basri, Dr. Jay Nath, Dr. Agnibha Sinha, and Dr. Deepak Kumar evaluated the entries based on innovation, feasibility, sustainability, and market potential.

WINNERS OF AGRI SPARK 2026



- 1st Prize: Neetu Sharma (B.Sc. Agriculture, 4th Semester)
- 2nd Prize: Shivjeet (B.Sc. Agriculture, 4th Semester)
- 3rd Prize: Surabhi Dubey (B.Sc. Agriculture, 6th Semester)

The competition fostered entrepreneurial thinking, innovation, and sustainable agricultural solutions while contributing towards SDG 2: Zero Hunger. The event concluded with appreciation for all participants, organizers, judges, and student coordinators for making the competition a grand success.

ACADEMIC QUALITY ORIENTATION AND AWARENESS ACTIVITY CONDUCTED IN COLLABORATION WITH IQAC



Dr. J. S. Yadav, Dean. SOAS, addressing the participants

The School of Agricultural Sciences (SOAS), in collaboration with the Internal Quality Assurance Cell (IQAC), K.R. Mangalam University, organized an Academic Quality Orientation and Awareness Activity on 8 May 2026 for students and faculty members.

The programme aimed to promote awareness of quality assurance practices, academic excellence, and continuous improvement in higher education.

The event was convened under the guidance of Prof. (Dr.) Joginder Singh Yadav, Dean, SOAS, and coordinated by Dr. Jay Nath Patel, Assistant Professor, SOAS.



SOAS students and faculty members with organizers during the Activity

The keynote session highlighted the role of IQAC in fostering quality education, outcome-based learning, academic ethics, innovation, and skill development. The interactive discussions encouraged participants to actively contribute to institutional quality enhancement and lifelong learning.

The programme successfully reinforced the importance of quality education, professional development, and a culture of excellence within the university.

FAREWELL PARTY FOR BATCH 2022-26

The School of Agricultural Sciences (SOAS), K.R. Mangalam University, organized a heartfelt Farewell Party for the outgoing Batch of 2022-26 on April 28, 2026. The event was held with great enthusiasm and served as a memorable occasion to celebrate the achievements, friendships, and journey of the graduating students.

The programme commenced with a warm welcome by the faculty members, followed by inspiring words from the Dr. J. S. Yadav, Dean SOAS and faculty, who congratulated the students on their accomplishments and encouraged them to pursue their future endeavours with confidence and determination.



Dean SOAS felicitating Ms. Riddhi, winner of the "Ms. Farewell" title at the Farewell Party 2026.



Dean SOAS felicitating Mr. Nitish, winner of the "Mr. Farewell" title at the Farewell Party 2026.

The event featured a variety of cultural performances, fun-filled activities, games, and interactive sessions, creating an atmosphere of joy and nostalgia. Students enthusiastically participated in the celebrations, sharing their experiences and cherished memories of their academic journey at SOAS.

AGRICULTURE AND COMMUNITY CONNECT

COMMUNITY CONNECT INITIATIVE: BHUMI SUPOSHAN FOR ONE HEALTH

The School of Agricultural Sciences (SOAS), K.R. Mangalam University, in collaboration with Delhi Pharmaceutical Sciences and Research University (DPSRU), Akshay Krishi Parivar, and the Youth Red Cross Committee, organized "Bhumi Suposhan for One Health" on 5 May 2026. The programme was conducted as a Community Connect initiative under the theme "Healthy Soil • Healthy Food • Healthy People."



A glimpse of the traditional Bhumi Pujan ceremony celebrating the connection between soil, food, and life.



Resource persons lighting the ceremonial lamp at the inauguration of the programme.

The event aimed to bridge the gap between scientific knowledge and agricultural practice by connecting students, farmers, agricultural experts, academicians, and community members on a common platform. Through expert lectures and interactive discussions, participants gained valuable insights into soil health management, sustainable agricultural practices, bio-inputs, and their impact on food quality and human health.

The programme was initiated by Dr. Anjali Tomar, Assistant Professor, School of Agricultural Sciences (SOAS), who introduced the objectives of the event and highlighted the importance of promoting soil health for sustainable agriculture and overall well-being.

The programme was conducted under the visionary guidance and encouragement of Prof. Mehraj Uddin Mir, Hon'ble Vice Chancellor, K.R. Mangalam University, whose continued support for community outreach and sustainable agricultural initiatives has been instrumental in promoting meaningful academic engagement.

The formal welcome of the distinguished guests was delivered by Dr. J. S. Yadav, Dean, School of Agricultural Sciences (SOAS), who emphasized the significance of collaborative initiatives that connect academia, industry, and the farming community. As a token of appreciation, the resource persons were felicitated by Dr. Monika Yadav, Coordinator, Youth Red Cross, K.R. Mangalam University.

Renowned experts including Dr. Alok Kumar Gupta, Dr. Parul Sharma, Mr. Vijay Gaur, Dr. Agnibha Sinha, and Dr. Rabiya Basri shared their expertise and interacted with participants, addressing practical concerns related to soil fertility, sustainable farming, and environmental conservation. The symposium provided an opportunity for farmers and aspiring agricultural professionals to directly engage with experts, exchange ideas, and learn about innovative approaches for improving farm productivity while maintaining ecological balance.



Dr. Agnibha Sinha, Assistant Professor, SOAS, addressing Participants

The programme also emphasized the importance of the One Health approach, highlighting the strong connection between healthy soils, nutritious food, environmental sustainability, and human well-being. The active participation of stakeholders from different sectors fostered knowledge exchange and strengthened community awareness regarding responsible agricultural practices.

The event concluded with a collective pledge to promote soil conservation and sustainable farming practices.

The programme concluded with a vote of thanks proposed by Prof. Naveen, School of Agricultural Sciences (SOAS), who expressed sincere gratitude to the Hon'ble Vice Chancellor, the esteemed speakers, collaborating organizations, university administration, faculty members, students, and farmers for their enthusiastic participation and valuable contributions to the success of the event.

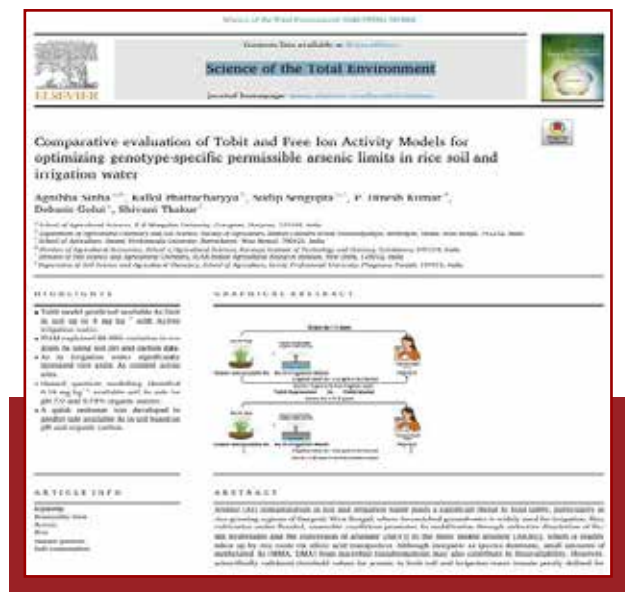
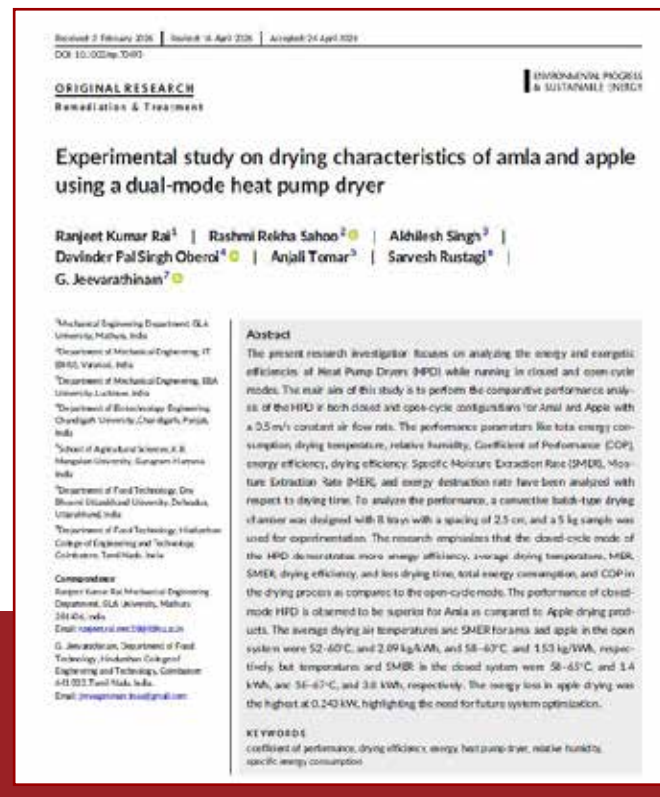
Through this initiative, SOAS successfully strengthened university-community engagement and facilitated meaningful interactions between farmers, researchers, and agricultural experts, contributing towards a more sustainable and resilient agricultural future.

FACULTY RESEARCH UPDATES

RESEARCH PAPER

The School of Agricultural Sciences, proudly congratulates Dr. Anjali Tomar, Assistant Professor, on the publication of her research paper titled “Experimental Study on Drying Characteristics of Amla and Apple Using a Dual-Mode Heat Pump Dryer” in Environmental Progress & Sustainable Energy, a reputed international journal in April 2026.

This achievement reflects Dr. Tomar’s active involvement in interdisciplinary research and adds to the academic and research contributions of the School of Agricultural Sciences. The School congratulates Dr. Anjali Tomar for her valuable scholarly contribution.



The School of Agricultural Sciences, is proud to announce that Dr. Agnibha Sinha, Assistant Professor, has successfully published a research paper titled “Comparative Evaluation of Tobit and Free Ion Activity Models for Optimizing Genotype-Specific Permissible Arsenic Limits in Rice Soil and Irrigation Water” in the prestigious international journal Science of the Total Environment in May 2026.

This noteworthy publication reflects Dr. Sinha’s dedication to high-quality research and his commitment to addressing critical environmental and agricultural challenges through innovative scientific approaches. The study contributes to the broader goal of ensuring sustainable crop production while safeguarding environmental and human health.

The School of Agricultural Sciences congratulates Dr. Agnibha Sinha on this significant academic achievement and wishes him continued success in his future research endeavors.

The School of Agricultural Sciences, K, is delighted to announce that Dr. J. S. Yadav, Dean, School of Agricultural Sciences, has successfully published a research paper titled “Enhancing Productivity and Profitability of Greengram (*Vigna radiata* L.) Through Cluster Frontline Demonstrations in Inner Kashmir Himalaya” in the reputed journal Legume Research – An International Journal, published on 4 May 2026.

This notable publication reflects Dr. Yadav's dedication to advancing agricultural research and extension education, with a focus on improving farmers' livelihoods through evidence-based and field-oriented solutions. His work continues to contribute meaningfully to the development of sustainable and profitable agricultural systems.

The School of Agricultural Sciences congratulates Dr. J. S. Yadav on this significant academic achievement and wishes him continued success in his future research and scholarly endeavors.

The School of Agricultural Sciences, K.R. Mangalam University, is pleased to announce that Dr. Jay Nath Patel, Assistant Professor, has successfully published a research paper titled “Weather-mediated Population Dynamics of Major Insect Pests Infesting Chickpea (*Cicer arietinum* L.)” in the esteemed journal Legume Research – An International Journal, published on 30 May 2026.

This notable publication reflects Dr. Patel's dedication to advancing agricultural research and addressing critical challenges in crop protection and sustainable agriculture. His work contributes to the development of scientific solutions that support improved productivity and food security.

The School of Agricultural Sciences congratulates Dr. Jay Nath Patel on this significant academic achievement and wishes him continued success in his future research and scholarly endeavors.

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RESEARCH ARTICLE

UK 2023
[11-5]



AgriGate Research, An International Journal

Weather-mediated Population Dynamics of Major Insect Pests Infesting Chickpea (*Cicer arietinum* L.)

Sushant Kumar¹, Anish Kaur¹, Daseek V.N.R.², Swetha³, Abhishek Anand⁴, Arun Kishor⁵, Jay Nath⁶, Ananya Patra⁷

10.36898/RJ-24-5654

ABSTRACT
Background: Chickpea (*Cicer arietinum* L.) is one of the most important pulse crops cultivated widely for its high nutrition value and its role to improve human nutrition. Nitrogen fixation in *Cicer*, however, is prominently significantly affected by various insect pests. **Methods:** A field experiment was conducted during the *rain season* of 2022-23 and 2023-24 for which "Wheat" variety of chick pea was sown during the last week of October and the observations on insect pest population were recorded weekly using standard sampling methods. The population of major pests was correlated with climatic factors such as temperature, relative humidity and rainfall to determine their influence on the pest incidence. **Result:** The major insect pests observed in the chickpea ecosystem were *Metopolophium directum*, *Aphis craccivora*, *Schizanthus lutea* and *Trialeurodes vaporariorum*, which significantly and gradually increased in their population during the growing season. During the 60°C SMDW with 2.80 mm rain¹ in *rain* of *C. arietinum*, 10.73 aphids/plant¹ of *A. craccivora*, 1.50 larvae/m² of *S. lutea* and 3.60 hoppers/plant¹ of *E. kandi*. Correlation analysis revealed that maximum temperature showed a positive relationship with *M. dir.* ($r = 0.52$), *A. craccivora* ($r = 0.24$), *S. lutea* ($r = 0.24$), while relative humidity exhibited a negative association with pest population. Rainfall showed a weak positive correlation with the incidence of major insect pests. **Key words:** *Anisoplia* *dir.*, *Trialeurodes*, *craccivora*, *lutea*, *hoppers*, *craccivora*, *incidence*.

INTRODUCTION
 India is one of the leading producers, consumer and exporter of pulses globally. The major pulse grown in the country are chick pea, mung bean, pigeon pea, black gram, lentil and soya (Kumar et al., 2019). Among them, Chickpea (*Cicer arietinum* L.) is one of the most important pulse crops cultivated in the semi-arid tropics and subtropics of the world. It serves as a rich source of dietary protein, carbohydrates, minerals, vitamins and therefore play a critical role in ensuring nutritional security particularly in developing countries where a larger proportion of population depend on plant-based protein. In its nutritional significance, chickpea contributes substantially to sustainable agriculture due to its ability to fix atmospheric nitrogen, suppress soil erosion, fix *rhizobium*, thereby improving soil fertility and reducing the requirement for synthetic fertilizers. Globally chickpea is cultivated on more than 16 million hectares with annual production exceeding 16 million ton and India accounts for nearly 65 to 70 per cent of total global production (FAOSTAT, 2020).

Despite its economic and nutritional importance, chickpea productivity is considerably affected by several biotic and abiotic stresses. Among the biotic constraints, insect pests have been reported to infest chickpea during different growth stages, damaging foliage, flowers and developing pods (Sharma et al., 2011 and Ahmad et al., 2021). Among them, the pod borer is considered as the most destructive pest and has been reported to cause

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value losses ranging from 20 to 80 per cent depending upon the level of infestation and environmental conditions. The larvae feed voraciously on flowers, leaves and pods, leading to direct reduction in grain yield and quality (Fitt

Medline Identifier

PATENT PUBLISHED

The School of Agricultural Sciences, K.R. Mangalam University, is pleased to announce that Dr. Anjali Tomar, Assistant Professor, has achieved a significant milestone with the publication of a patent titled "AI-powered Precision Irrigation System with Real-time Soil Moisture Analysis and Predictive Water Optimization". The patent application was published on 29 May 2026 by the Patent Office, Government of India.

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(21) Application No. 202611052656 A

(19) INDIA

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(43) Publication Date : 29/05/2026

(54) Title of the invention : AI-powered precision irrigation system with real-time soil moisture analysis and predictive water optimization

(51) International classification	A01G 25/16, G05D 7/06, G06N 3/04, A01G 25/02, A01G 27/00	(71) Name of Applicant :
		1) Dr. Anchal Singh Address of Applicant : Assistant Professor, School of Agricultural Sciences and Engineering, IFIM University, Moradabad, Uttar Pradesh, India 244102 Uttar Pradesh India 2) Dr. Vijay Kumar 3) Dr. Anjali Tomar 4) Dr. Ankit Gill 5) Dr. Vikas Tomar 6) Dr. Ragini Kumari 7) Amanpreet Singh Sran 8) Dr. Ritu
(31) Priority Document No	NA	(72) Name of Inventor :
(32) Priority Date	NA	1) Dr. Anchal Singh
(33) Name of priority country	NA	2) Dr. Vijay Kumar
(36) International Application No	:	3) Dr. Anjali Tomar
Filing Date	: 01/01/1900	4) Dr. Ankit Gill
(37) International Publication No	: NA	5) Dr. Vikas Tomar
(51) Patent of Addition to Application Number	NA	6) Dr. Ragini Kumari
Filing Date	NA	7) Amanpreet Singh Sran
(52) Divisional to Application Number	NA	8) Dr. Ritu
Filing Date	NA	

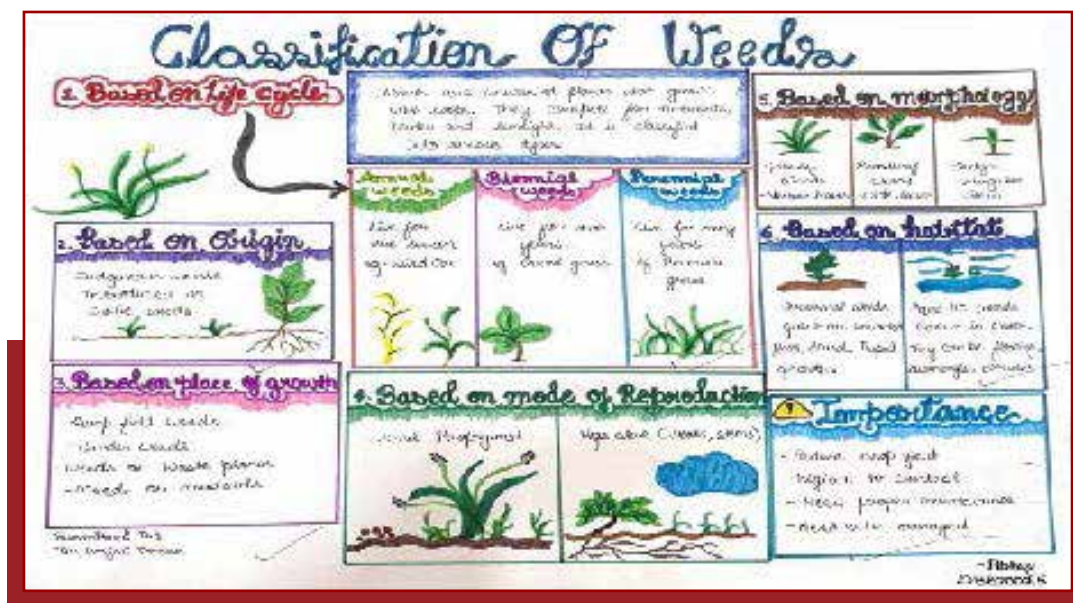
(57) Abstract :

The present invention relates to the technical field of agricultural automation and discloses a hardware-integrated precision irrigation system (100) comprising a distributed multi-depth soil moisture sensor array (101), an edge computing gateway (102) with a dedicated neural processing unit (103), a predictive water optimization module (104) executed on non-transitory memory (105), a solenoid-actuated flow control manifold (106) with piezoelectric flow sensors (107), and a low-power wireless communication interface (108). The technical problem of excessive water consumption and spatially non-uniform soil hydration in conventional irrigation is addressed by a hardware-accelerated temporal convolutional inference engine (109) that fuses real-time multi-depth dielectric readings with micro-climatic data (110) to compute zone-specific irrigation schedules. The system achieves water savings of approximately 42 percent, reduces actuation latency below 120 milliseconds and improves soil moisture homogeneity across root zones. Industrial application extends to precision agriculture, horticulture, landscape management and greenhouse farming (111).

No. of Pages : 18 No. of Claims : 10

STUDENTS' CORNER

POSTER ON "CLASSIFICATION OF WEEDS"



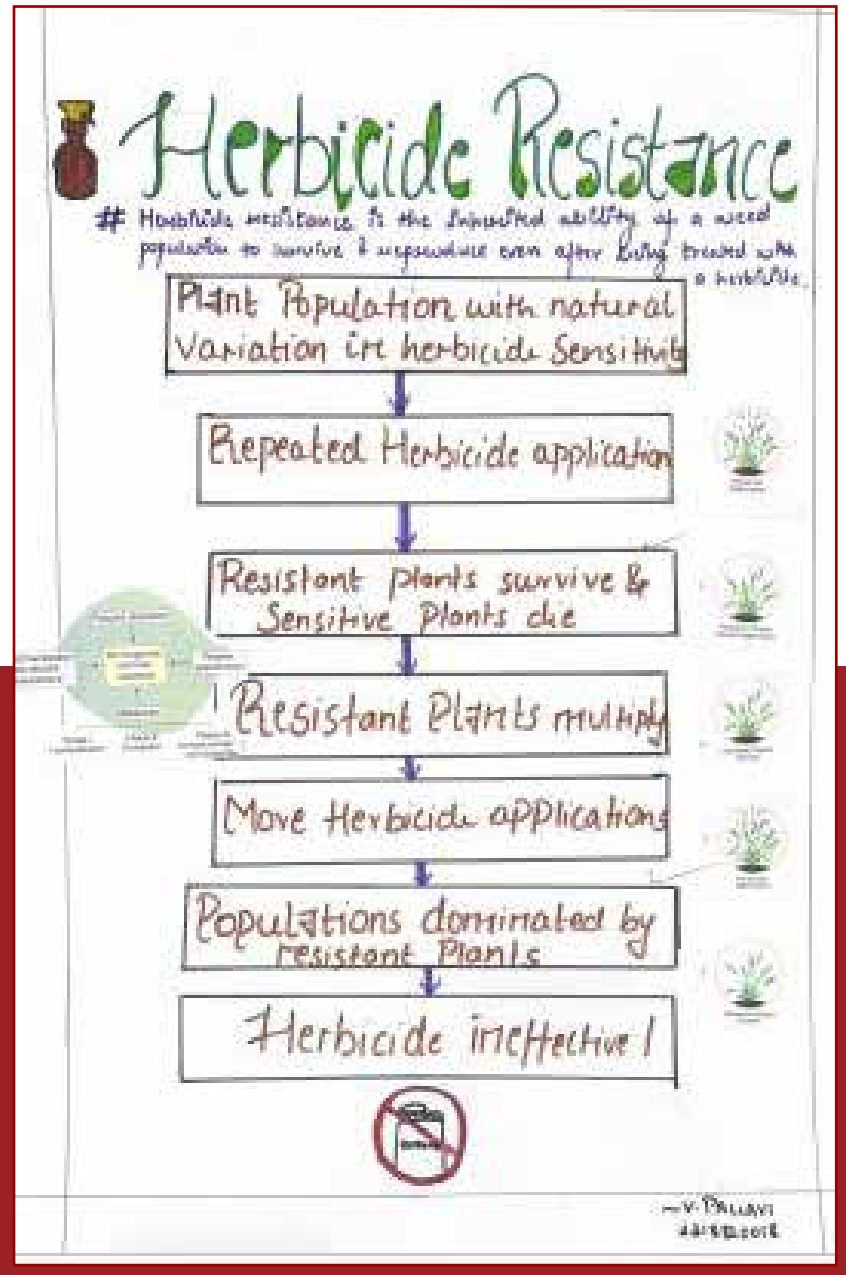
POSTER ON "INTELLECTUAL PROPERTY RIGHTS IN AGRICULTURE"



POSTER ON “HERBICIDE RESISTANCE”



Ms. V. Pallavi,
Student of B. Sc. (Hons.) Ag. III year



POSTER ON “IMPACT OF WTO & AOA ON INDIAN AGRICULTURE ”



Ms. Pragati Ratna,
Student of B.Sc. (Hons.) Agriculture
II year

POSTER ON “DIGITAL INNOVATION IN AGRICULTURAL MARKETING ”

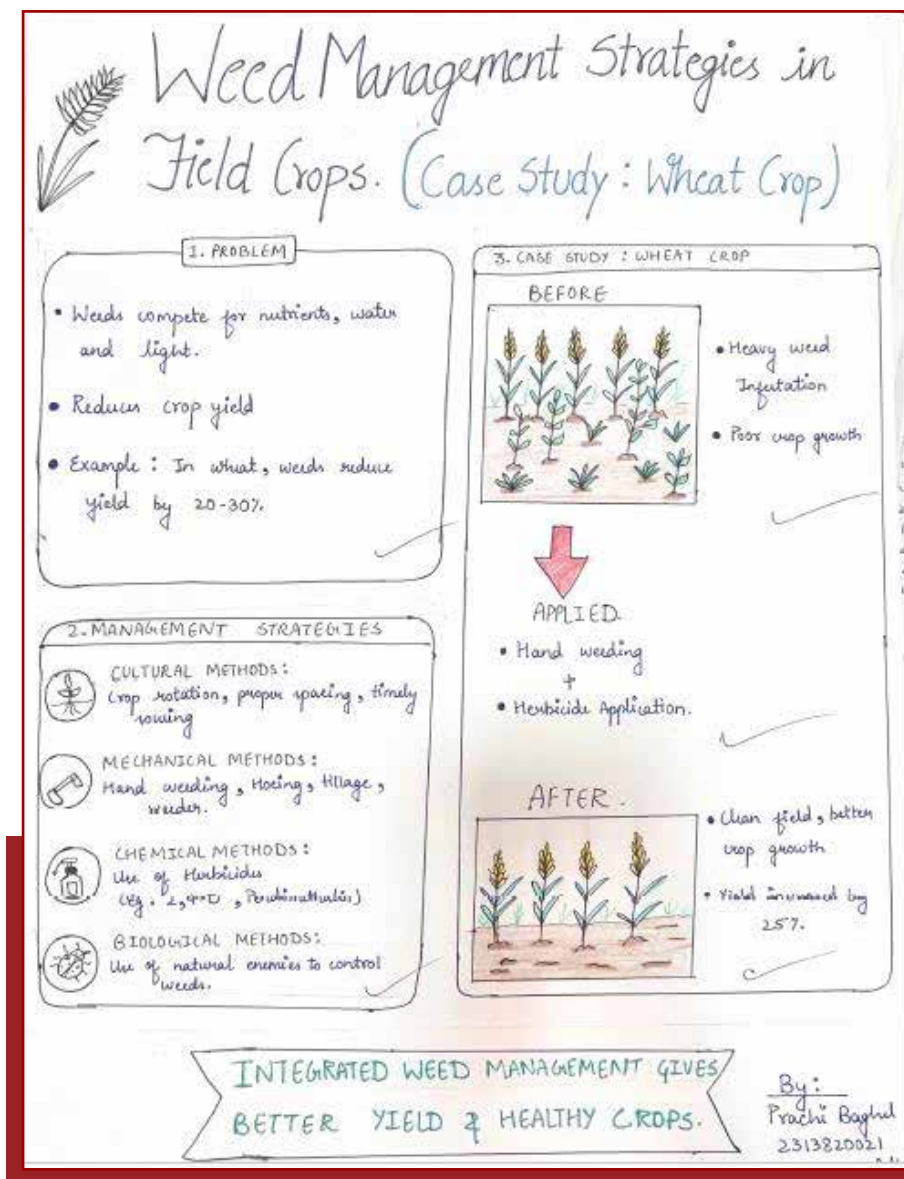


Mr. Dilshad,
Student of B.Sc. (Hons.) Agriculture
II year

POSTER ON “WEED MANAGEMENT STRATEGIES IN FIELD CROPS ”



Ms. Prachi Baghel,
Student of B. Sc. (Hons.) Ag. III year



THOUGHTS FROM FACULTY



Dr. Agnibha Sinha
Assistant Professor, SOAS

It gives me great pleasure to share my thoughts in this edition of our newsletter. Agriculture today is at the forefront of addressing global challenges related to food security, environmental sustainability, and natural resource management. As soil forms the foundation of agricultural productivity, its conservation and sustainable management are essential for ensuring long-term agricultural growth.

At the School of Agricultural Sciences, we strive to promote scientific learning, innovation, and research that contribute to sustainable agricultural development. Through academic activities, practical exposure, and research initiatives, we aim to equip students with the knowledge and skills required to address emerging challenges in agriculture and natural resource management.

This newsletter showcases the achievements, activities, and accomplishments of our faculty and students, reflecting their dedication to academic excellence and professional growth. I congratulate everyone featured in this edition and encourage our students to continue pursuing knowledge, innovation, and excellence in their chosen fields.

INTERNSHIP & PLACEMENT



PLACEMENT SUCCESS AT MD BIOCOALS PRIVATE LIMITED

The School of Agricultural Sciences proudly celebrates another milestone in student achievement as several students secured successful placements at MD Biocoals Private Limited. This accomplishment reflects the students' dedication, academic excellence, and practical skills developed through continuous learning, industry exposure, and professional guidance. The placement opportunity at MD

Biocoals Private Limited, a growing organization in the sustainable energy and biofuel sector, marks an important step in their professional journey. Their success not only highlights individual talent and perseverance but also demonstrates the commitment of the School of Agricultural Sciences toward career-oriented education and industry readiness.



Mr. Sagar
Student, SOAS



Mr. Harsh
Student, SOAS



Mr. Divesh
Student, SOAS



Mr. Ansar Khan
Student, SOAS



Mr. Nitis Kumar
Student, SOAS

ALUMNI



Ms. Riddhi
Alumni, Batch: 2022-26
SOAS, KRMU

My journey at K.R. Mangalam University has been both enriching and transformative. The School of Agricultural Sciences provided an excellent blend of academic learning and practical exposure, enabling me to develop a strong foundation in agricultural sciences. Through field visits, laboratory work, internships, and experiential learning activities, I gained valuable insights into real-world agricultural practices.

The faculty members were highly supportive and played a crucial role in shaping my academic and personal growth. Their constant guidance and mentorship helped me build confidence, strengthen my communication and problem-solving skills, and develop a professional outlook towards the agricultural sector.

The knowledge, experiences, and memories I gained at K.R. Mangalam University will always remain an integral part of my personal and professional journey.



Mr. Ansar
Alumni, Batch: 2022-26
SOAS, KRMU

My journey at K.R. Mangalam University has been an enriching and rewarding experience. Being a part of the School of Agricultural Sciences provided me with numerous opportunities to grow academically, professionally, and personally. The curriculum effectively combined theoretical knowledge with practical learning, helping me gain a deeper understanding of agriculture and its real-world applications.

Through field visits, laboratory practicals, workshops, training programmes, and internships, I acquired valuable hands-on experience and industry exposure. The faculty members were highly supportive, approachable, and always motivated me to explore new ideas, enhance my skills, and strive for excellence.

My time at the university helped me develop confidence, leadership qualities, teamwork, and critical thinking skills that will be invaluable in my future endeavors. The knowledge, experiences, and memories I have gained at K.R. Mangalam University will always remain a strong foundation for my personal and professional growth.





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