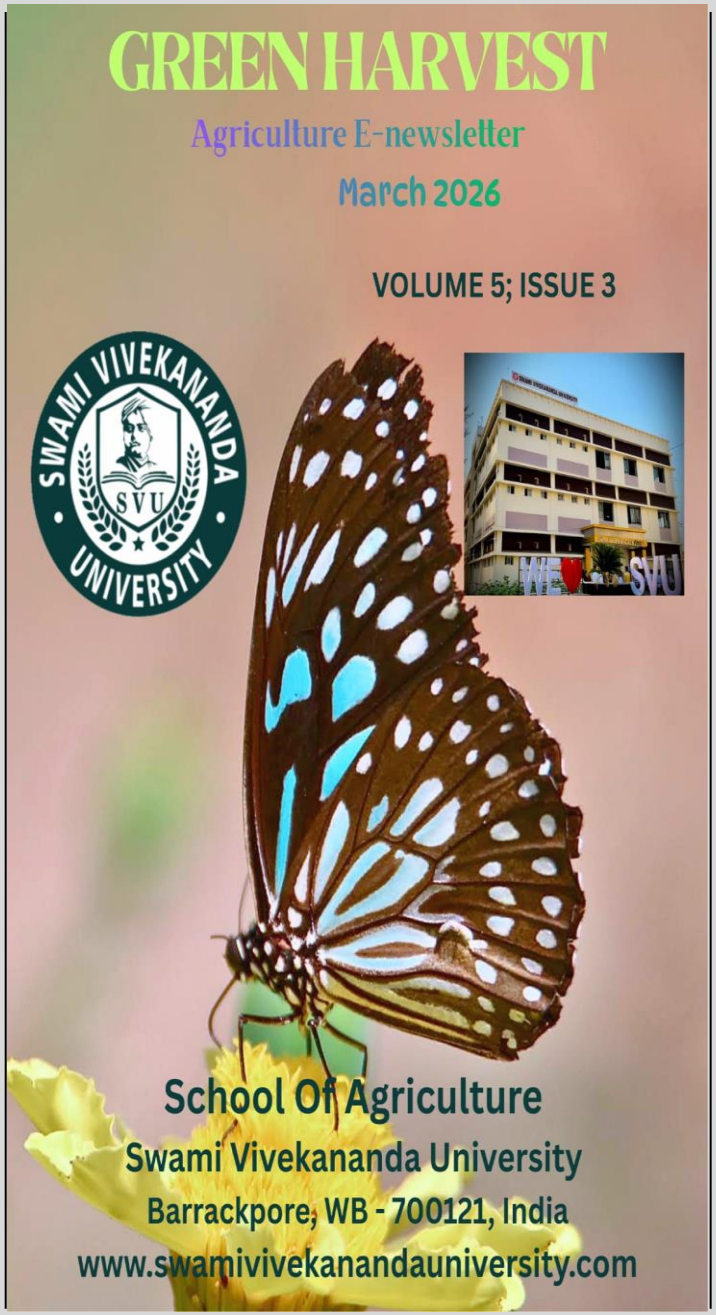
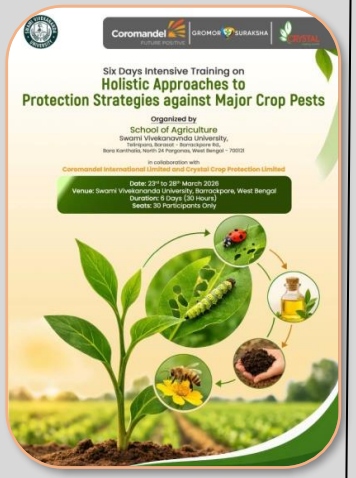


About School of Agriculture

The 2020-founded School of Agriculture strives for academic and scientific excellence. The school offers bachelor's degree programs in agriculture, agricultural engineering, and master's degree programs in agribusiness management. In accordance with the Indian Council of Agricultural Research's (ICAR) requirements, the school has created dynamic and targeted curricula to produce skilled workers for academics, agro-based industries, and extension-oriented applications.

Advancing Sustainable Pest Management through Hands-on Learning and Industry Collaboration

The School of Agriculture successfully conducted a **Six-Day Intensive Training Programme on "Holistic Approaches to Protection Strategies against Major Crop Pests"** from **23–28 March, 2026**, in collaboration with **Coromandel International Limited** and **Crystal Crop Protection Ltd.** The intensive hands-on programme focused on the **identification and management of major crop pests** in rice, vegetables, pulses, jute, mustard, and fruit crops, with special emphasis on **Integrated Pest Management (IPM)**. Bringing together students, researchers, and agricultural professionals, the training served as a vibrant platform for knowledge sharing and skill development in sustainable crop protection. Through expert lectures, field-oriented demonstrations, and practical sessions, participants strengthened their understanding of integrated and eco-friendly pest management strategies essential for resilient crop production. The university sincerely expresses gratitude to all resource persons, participants, collaborating partners, and organizers whose dedicated efforts made the programme a great success and contributed significantly to capacity building in modern agriculture.



From Classroom to Canopy: B.Sc. Agriculture Students Explore the Living Heritage of AJCB Indian Botanic Garden

An inspiring and knowledge-rich **educational tour** was organized for **B.Sc. Agriculture students** to the **Acharya Jagadish Chandra Bose Indian Botanic Garden** on **13 March, 2026**. The visit provided students with firsthand exposure to an

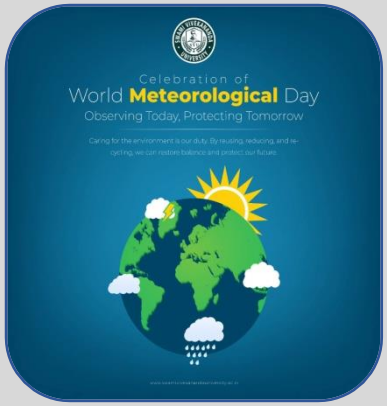
extraordinary diversity of plant species, including rare and exotic collections, along with the world-

famous **Great Banyan Tree**. Through active observation and guided learning, students enhanced their understanding of **plant taxonomy,**

biodiversity conservation, and sustainable landscape management, effectively transforming classroom concepts into practical insights. Such field-based learning experiences play a vital role in developing **scientifically oriented, skilled, and environmentally conscious agricultural professionals**, while strengthening their appreciation for plant diversity, conservation practices, and sustainable ecosystem management.

Celebrating World Meteorological Day: Inspiring Climate Awareness and Sustainable Agricultural Innovation

In celebration of **World Meteorological Day**, B.Sc. Agriculture students reflected on the theme, **"Observing Today, Protecting Tomorrow,"** emphasizing how understanding today's climate is essential for securing a sustainable future. Marking the occasion, students also visited the **Central Research Institute for Jute and Allied Fibres**, where they gained valuable insights into **sustainable agriculture, climate-resilient farming practices, and cutting-edge innovations in natural fibre research**. The visit offered an enriching blend of meteorological awareness and agricultural science, helping students connect climate observations with practical strategies for resilient crop production. Such meaningful academic experiences strengthen their commitment to **environmental stewardship, sustainable farming, and scientific advancement**, while nurturing a deeper understanding of the role of climate science in modern agriculture.



Bridging Agriculture and Financial Security: Seminar on Ethical Agricultural Insurance Intermediaries

The **School of Agriculture** organized an insightful seminar in collaboration with the **Insurance Institute of India** and the **Kolkata Insurance Institute** on the theme **"Role of Insurance as an Ethical Agricultural Insurance Intermediary."** The session highlighted the critical importance of insurance in safeguarding farmers against uncertainties, promoting ethical practices, and ensuring sustainability in agriculture. We were privileged to have **Mr. Angshuman Roy** and **Dr.**

Milan Chakraborty as distinguished speakers, who shared valuable perspectives on **agricultural**

risk management, farmer protection, and the future of insurance in farming systems. Their expert insights enriched participants' understanding of how financial instruments can strengthen resilience in the agricultural sector. Such initiatives play a vital role in connecting agriculture with financial security, paving the way for a more sustainable and resilient farming community.

Research Corner

☆ **Banik *et al.* (2026)** found that integrated microsprinkler irrigation and balanced nitrogen fertilization significantly improved winter onion productivity and resource-use efficiency in the Indo-Gangetic plains. The highest bulb yield was achieved under 1.2 ETc irrigation with 100% recommended nitrogen (96 kg N ha^{-1}), which enhanced plant growth, chlorophyll content, leaf water status, and nitrate reductase activity. Under water-limited conditions, 0.9 ETc with adequate nitrogen emerged as a sustainable option, maximizing water-use efficiency with minimal yield loss. Stress from limited water and nitrogen increased proline accumulation, antioxidant activity, and lipid peroxidation, reducing productivity. The study highlights optimized water–nitrogen management as a key strategy for sustainable onion production.

☆ **Sengupta et al. (2026)** demonstrated that arsenic retention in soils is strongly governed by molecular-scale interactions with clay minerals. Using DFT and molecular modeling, the study showed that As(V) adsorbed more strongly than As(III), with the most stable binding occurring at three-fold hollow sites, particularly on kaolinite, which exhibited the highest binding energy. In contrast, As(III) displayed weaker adsorption and greater mobility due to lower binding energies and larger equilibrium distances. The addition of vermicompost-derived organic matter reduced arsenate binding on most clay minerals, suggesting increased arsenic mobility. These findings provide crucial atomistic insights for arsenic stabilization and soil remediation strategies.

☆ **Majumder *et al.* (2026)** reported a field observation of predation involving the coccinellid beetle *Serangium parcesetosum* and a lynx spider (*Oxyopes* sp.) in guava orchards of West Bengal. During a February 2025 survey at the ICAR-AICRP on Fruits Research Unit, Mondouri, Bidhan Chandra Krishi Viswavidyalaya, an adult *S. parcesetosum* was seen actively foraging on whitefly-infested guava leaves when it was swiftly attacked, captured, and subdued by a lynx spider positioned on a nearby leaf margin. This observation provides valuable insight into predator–predator interactions and intraguild predation among natural enemies, which may influence biological control efficiency and arthropod community dynamics in guava ecosystems.

Students' Activity

Hands-on Mushroom Spawn Production and Cultivation

Students of the **Department of Agriculture, Swami Vivekananda University (SVU)** actively participated in **mushroom spawn production, culture maintenance, and commercial mushroom cultivation** as part of their practical training. They gained hands-on experience in **pure culture preparation, mother spawn development, substrate sterilization, bag filling, spawning, incubation, and crop management**.

The activity also trained them in maintaining proper **temperature, humidity, hygiene, and harvesting techniques** for quality mushroom production. Such experiential learning enhances their skills in **sustainable agriculture, crop diversification, and agripreneurship**, while promoting low-cost income generation

opportunities and strengthening their scientific understanding of protected cultivation and modern mushroom production technologies.

Insect Culturing

They actively carried out **insect culturing and rearing of tiger butterfly larvae under controlled conditions** as part of advanced practical training in entomology. They were trained in **host plant–based nutrition management, life cycle observation, larval growth monitoring, and maintenance of hygienic rearing conditions** to ensure healthy insect development. This hands-on activity is highly significant for **future bioefficacy studies of biopesticides**, where uniform insect populations are essential for testing pest control performance. Such experiential learning strengthens students' expertise in **insect biology, laboratory rearing techniques, and eco-friendly pest management research**, supporting innovation in sustainable crop protection.

List of Publications

Faculty members of School of Agriculture have published 3 articles in international reputed journals under the SVU affiliation.

- ☆ Sengupta, S., Bhattacharyya, K., Mandal, J., & Chattopadhyay, A. P. (2026). Molecular Modeling of Arsenic Species Adsorption on Clay Minerals and in the Presence of Organic Matter. Minerals, 16(3), 319.
- ☆ Banik, M., Patra, S. K., Sengupta, S., Datta, A., & Pramanik, S. (2026). Effect of Graded Nitrogen Fertilization Under Different Microsprinkling Irrigation Levels on Growth, Water Status, Bulb Yield, Water, and Nitrogen use Efficiency of Winter Onion. New Zealand Journal of Crop and Horticultural Science, 54(1), e70143.
- ☆ Majumder, T., Shekhar, S., Roy, K., & Sen, S. (2026). Unusual Encounter: First Photographic Documentation of a Lynx Spider Oxyopes sp.(Araneae: Oxyopidae) Preying on Serangium parcesetosum Sicard, 1929 (Coleoptera: Coccinellidae) from India. *Entomological News*, *133*(2), 207-211.

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