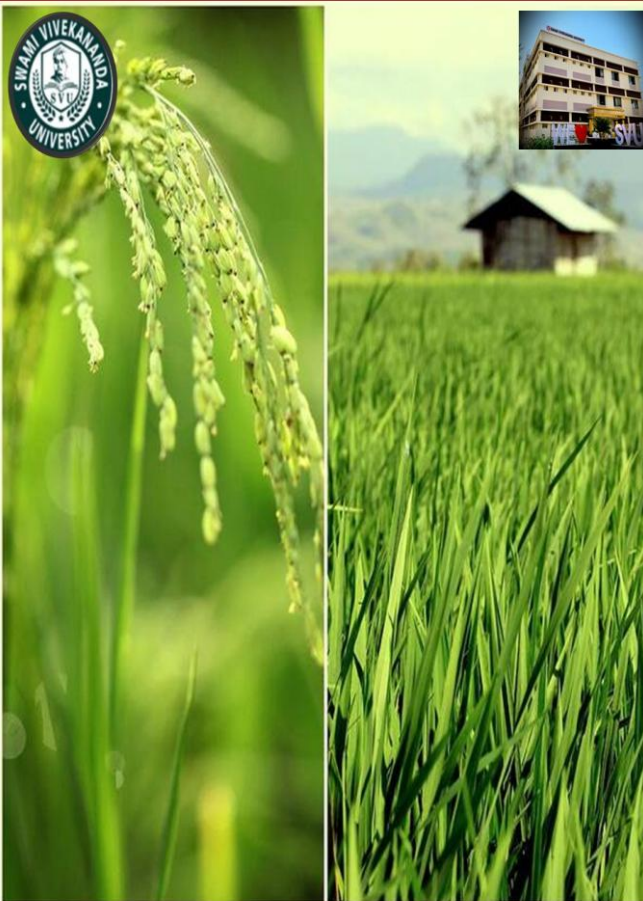


Green Harvest

Agriculture Newsletter

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School of Agriculture
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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.

Hands-on-training programmes/ Workshops and conference

Workshop on “The future of Farming Hi-Tech solutions for ongoing challenges”

A one-day workshop titled “The Future of Farming: Hi-Tech Solutions for Ongoing Challenges” was organized at Swami Vivekananda University on 9th April 2025. The event aimed to explore innovative technologies and sustainable practices to address the pressing challenges in the agricultural sector. The Chief Guest, Sri Sovandeb Chattopadhyay, Minister in Charge of Agriculture and Parliamentary Affairs, Government of West Bengal, graced the occasion and shared valuable insights on the state's initiatives toward modernizing agriculture through technology and policy support.

Students and faculty members from various departments actively participated in this training program, engaging in discussions and practical sessions on topics such as precision farming, smart irrigation, and the use of digital tools to enhance productivity and sustainability. The workshop concluded with an interactive session emphasizing

the importance of collaboration between academia, industry, and government for the future growth and innovation in Indian agriculture.



Training program on “Hands-on Training Program on Paddy Straw Mushroom Cultivation”

A “Hands-on Training Program on Paddy Straw Mushroom Cultivation” was organized by School of Agriculture, at Swami Vivekananda University, Barrackpore, from 21st to 23rd May 2025. The three-day program was designed to provide participants with in-depth practical knowledge of mushroom cultivation techniques, focusing on sustainable agriculture, resource utilization, and entrepreneurship development.



More than 40 students from various disciplines enthusiastically participated in the training. The sessions were conducted by experienced resource persons and experts in the field of mushroom cultivation. The training covered both theoretical and practical aspects, beginning with an introduction to the importance, nutritional value, and market potential of paddy straw mushrooms.

During the practical sessions, the entire cultivation process from substrate preparation, soaking, and spawning to incubation, cropping, and harvesting was demonstrated in both the laboratory and the field.



Students actively performed each step under the guidance of trainers, allowing them to gain genuine hands-on experience. They also learned about maintaining hygienic conditions, pest and disease management, post-harvest handling, and packaging to ensure quality production.

The program created an engaging learning environment that combined scientific understanding with practical application. It successfully enhanced students' technical competence, problem-solving skills, and confidence in implementing what they learned. By showcasing the economic viability of mushroom cultivation, the training encouraged participants to view it as a promising avenue for entrepreneurship, income generation, and rural development.

Overall, the workshop served as a valuable platform for students to bridge the gap between academic knowledge and real-world agricultural practices,

inspiring them to contribute to innovative and sustainable agri-based enterprises.



Demonstration on In Vitro and In Vivo Tissue Culture of Banana Plants

A Demonstration on In Vitro and In Vivo Tissue Culture of Banana Plants was organized by the Department of Agriculture, Swami Vivekananda University, Barrackpore, from 11th to 13th June 2025. The three-day program aimed to impart both theoretical knowledge and practical skills related to plant tissue culture techniques, with a focus on banana plant propagation and improvement. Around 50 students from the Department of Agriculture actively participated in the event. The program began with theoretical sessions that introduced the principles of plant tissue culture, including concepts such as aseptic techniques, media preparation, explant selection, callus formation, and micropropagation. These sessions highlighted the importance of tissue culture in producing disease-free, genetically uniform, and high-yielding banana plants.

The practical demonstrations allowed students to observe and perform key steps in both in vitro (laboratory-based) and in vivo (field-based) tissue

culture processes. Students gained hands-on experience in media preparation, inoculation, incubation, and acclimatization of banana plantlets under expert guidance. The field component demonstrated the transfer of plantlets from controlled lab conditions to soil, emphasizing techniques for successful hardening and growth management. The training provided a comprehensive understanding of modern plant propagation techniques and their applications in sustainable agriculture. It also encouraged students to explore entrepreneurial opportunities in the area of commercial tissue culture and nursery management.

Overall, the demonstration successfully combined scientific theory with practical learning, enriching students' technical skills and strengthening their foundation in advanced agricultural biotechnology.



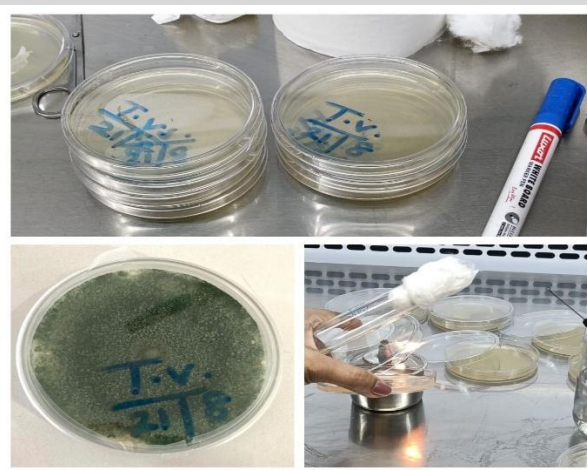
Workshop on Biopesticide Production: *Trichoderma viride*

A Workshop on Biopesticide Production: *Trichoderma viride* was organized by the Department of Agriculture, Swami Vivekananda University, Barrackpore, on 23rd and 24th June 2025. The two-day workshop aimed to provide participants with both theoretical understanding and practical training in the production, formulation, and application of biopesticides, focusing on the use of *Trichoderma viride* as an effective and eco-friendly biological control agent. Around 100 students from the Department of Agriculture actively participated in the workshop. The theoretical sessions covered the importance of biopesticides in sustainable agriculture, the biological role of *Trichoderma viride* in suppressing plant diseases, and its contribution to improving soil fertility and crop productivity. Participants gained insights into the mechanisms of biocontrol, formulation strategies, and the relevance of *Trichoderma* in integrated pest management (IPM).

During the practical demonstrations, students received hands-on training on culture maintenance, mass multiplication, substrate preparation, and formulation techniques for *Trichoderma viride*. They also learned about proper packaging, storage conditions, and field-level application methods to ensure product efficacy.

The workshop successfully enhanced students' technical knowledge, practical skills, and entrepreneurial awareness in the field of biopesticide production. By integrating science with practice, it encouraged participants to explore sustainable and eco-friendly solutions for pest

management and to consider bio-based agribusiness opportunities in the future.



List of publications

Faculty members of School of Agriculture have published 2 articles in international reputed journals, under the SVU affiliation.

Patra, S. K., Banik, M., Sengupta, S., & Datta, A. (2025). Optimizing Onion Yield by Exploring Seasonal Evapotranspiration, Water Productivity and Crop Water Production Functions Under Microsprinkler Irrigation and Nitrogen Fertilization. *Irrigation and Drainage*.

Das, S., Dutta, S., Choudhury, M. R., Garai, S., Mukherjee, S., Sengupta, S., ... & Awasthi, A. (2025). Regenerating rural soil and ecosystems: A 15-year systematic review of emerging methods and technologies. *Science of the Total Environment*, 990, 179926.

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