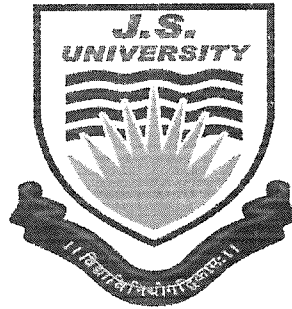


J.S. University, Shikohabad

Established by UP Govt. Act No. 07 of 2015


Recognized by U.G.C. under section 2 (f) of Act-1956



VALUE ADDED COURSE

"Beneficial Insects and Natural Enemies: Conservation and Utilization for Biological Control"

Faculty of Agricultural Sciences

	J.S. University, Shikohabad	Value Added Course
	Faculty of Agricultural Sciences	AGVAC-11

“Beneficial Insects and Natural Enemies: Conservation and Utilization for Biological Control”

Learning Objectives:

This value-added course will provide students with an understanding of the role of beneficial insects and natural enemies in agriculture and the principles of biological control. Students will learn about the identification and ecology of beneficial insects and natural enemies, the strategies for conserving and enhancing their populations, and the practical applications of biological control for managing pest populations.


Course Outcomes:

Upon completion of this course, students will be able to:

1. Identify and classify beneficial insects and natural enemies
2. Understand the ecology and behavior of beneficial insects and natural enemies
3. Develop strategies for conserving and enhancing beneficial insect populations
4. Apply the principles of biological control to manage pest populations

Duration: 8-10 weeks (depending on the pace of the student)

Intake: 60 students

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Course Modules (Syllabus):

Module-1

Introduction to Beneficial Insects and Natural Enemies

- Overview of beneficial insects and their role in agriculture
- Identifying and classifying beneficial insects and natural enemies
- The ecological and behavioral characteristics of beneficial insects and natural enemies

Module-2

Conservation and Enhancement of Beneficial Insects and Natural Enemies

- Strategies for conserving and enhancing beneficial insect populations
- The use of habitat management and diversification to support beneficial insects and natural enemies
- Methods for assessing and monitoring beneficial insect populations

Module-3


Biological Control of Pests

- Principles and practices of biological control
- Selection and use of natural enemies for managing pest populations
- Integration of biological control with other pest management strategies

Module-4

Applications of Beneficial Insects and Natural Enemies

- Case studies of successful biological control programs
- Use of beneficial insects and natural enemies in crop production systems
- The economic and ecological benefits of biological control

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Assessment:

- Weekly quizzes and assignments
- Final project on designing and implementing conservation and utilization of beneficial insects plan.

Reference books:

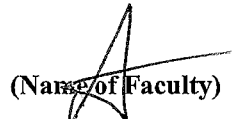
1. Biological Control of Insect Pests in India by V. C. Kapoor and R. K. Gautam
2. Biocontrol of Insect Pests by S. K. Jalali and K. Singh
3. Insect Pests and their Control by S. P. Singh and P. Singh
4. Insect Ecology and Integrated Pest Management by K. S. Ahuja and P. K. Deka
5. The Role of Natural Enemies in Pest Management and Conservation in India by A. K. Chakravarthy and N. K. Krishna Kumar



(Name of Faculty)

Course Coordinator


Dr. Ravi
Kumar



(Name of Faculty)

Dean of Faculty,

Dr. Akhlesh



(Name of Faculty)

Director General

Dr. R.A. Kushwan



J.S. University, Shikohabad
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