

Course objectives:

To study toxicity and insecticide formulations, mode of action, residues of insecticides and various types of spray equipments

Learning Outcomes:

To provide concept of toxicity and insecticide formulations, mode of action, residues of insecticides and various types of spray equipments.

Course Content:

Introduction; nomenclature, classification on the basis of mode of entry, chemical nature (natural and synthetic insecticides), mode of action, toxicity and insecticides formulations; compatibility, physico-chemical properties, residues of insecticides; insecticide resistance and its management, hazards and safety measures; functioning of various types of hand and power operated equipments for insecticide application. Types of nozzles. Information about insecticide legislation.

Teaching-Learning Strategies

Teaching will be a combination of class lectures, class discussions, and group work. Short videos /films will be shown on occasion.

Assignments

The sessional work will be a combination of written assignments, class quizzes, presentation, and class participation/attendance.

Assessments and Examination

Sessional Work:	25 marks
Midterm Exam:	35 marks
Final term Exam:	40 marks

Recommended Books:

1. Pedigo, L.P. and Marlin, E. R. 2009. Entomology and Pest Management, 6th Edition, Person Education Inc., Upper Saddle River, New Jersey 07458, U.S.A.
2. Dovener, R.A. Mueninghoff, J.C. and Volgar, G.C. 2002. Pesticides formulation and delivery systems: meeting the challenges of the current crop protection industry. ASTM, USA
3. Dodia, D.A. Petel, I.S. and Petal, G.M. 2008. Botanical Pesticides for Pest Management. Scientific Publisher (India) Jodhpur.
4. Ishaaya, I. and Degheele, D. 1998. Insecticides with Novel Modes of Action: Mechanism and Application. Norosa Publishing House, New Delhi.
5. Mathews G.A. 2002. Pesticide Application Methods. 4thEd. Intercept. UK.
6. Otto, D. and Weber, B. 1991. Insecticides: Mechanism of Action and Resistance. Intercept Ltd., U.K.
7. Roy, N.K. 2006. Chemistry of Pesticides. Asia Printograph Shahdara Delhi.
8. Saleem, M.A. 2009. Principles of Insect Toxicology. Vol.-I. Izhar sons Printers. Lahore.
9. Krieger, R. I. 2001. Handbook of Pesticide Toxicology. Vol-II. Academic Press. Orlando Florida.

UZO-516 Insecticides and their Application (Lab.)

Cr. 1

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Learning Outcomes:

To provide concept of toxicity and insecticide formulations, mode of action, residues of insecticides and various types of spray equipments.

Course Content:

Computation, preparation and field application of different formulations of insecticides; identification, classification, handling and maintenance of application equipments. Visit to pesticides industries/field visits.

Teaching-Learning Strategies

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