

## Courses

- PLPT 264 "Pesticides and Occupational Health Safety"
- PLPT 361 "Pesticides Residue Analysis"
- PLPT 404 "Research and Discussion"
- PLPT 503 "Pesticides and Environment"
- PLPT 506 "Chemistry of Pesticides advanced".
- PLPT 526 "Chemistry and Instruments of Pesticides Analysis "
- PLPT 529 "Pesticides Residue Analysis"
- PLPT 517 "Pesticides for non-insect animal pests"
- PLPT 595 "Seminar"
- PPS 347 "Weed Control"
- ENVS 525 "Environmental Toxicology"
- ENVS 512 "Environmental Chemistry"
- ENVS 591 "Seminar"
- ENVS 599 "Research project"
- Agr-501"

### **PLPT 261 General Pesticides**

**3(2+1)**

Classification of pesticides based on their usage (Insecticide, Nematocide, Fungicide, Herbicide, Rodenticide, Mulascicide and Recent Biopesticides). Chemical groups, structure, formulation and methods of application. Bioassay tests and formulation stability.

### **PLPT 264 Pesticides and Occupational Safety**

**1(0+1)**

Occupational safety scopes and responsibility. Pesticides occupational hazards

Practices in case of accidents and emergency. Personal protection tools.

Measurements of some air, water, radiation and noise pollutants and their TLV-Values

### **PLPT 361 Pesticide Residue Analysis**

**2 (1+1)**

Importance of residue analysis in relation to human health, general idea of methods of sampling, separation and extraction of some pesticide residues and the analytical instruments, analysis of some pesticide

### **PLPT 404 Research and Discussion**

**(1) Special topics**

### **PLPT 503 Pesticides and the Environment (2 credit-hours).**

The Agro-ecosystem. Mutual effects of pesticides and the environments. Hazards of pesticides to wildlife, man and farm animals pesticide registration, storage, disposal and handling precautions. (Prerequisite: PLPT 261).

### **PLPT 506 Chemistry of Pesticides (Advanced ) (2 credit-hours)**

Chemistry of the different of pesticides. Physical and chemical characteristics of pesticides. Relations between the chemical structure and biological activity. (Prerequisite: PLPT 360).

### **PLPT 517 Pesticides for Non-Insect Animal Pests (2 credit-hours)**

Nematicides, molluscicides, acaricides, rodenticides, avicides and piscicides. Structure / activity relationships. Formulations and methods of application. (Prerequisite PLPT 261 ).

**PLPT 526 Chemistry and Instruments of Pesticide Analysis (2 credit-hours)**

Methods of chemical analysis of pesticides: chromatography, spectrophotometry, gravimetry and volumetry. Handling and use of pesticide analysis instruments, spectral photometry, flame-emission spectrometry, chromatographic separation and nuclear magnetic resonance. (Prerequisite PLPT 506).

**PLPT 529 Residue Analysis of Pesticides (2 credit-hours)**

Importance of residue analysis in relation to human health methods of sampling, separation and extraction of residues. Problems of instrumental analysis of pesticide residues. Residue analysis of pesticides in certain biological media. (Prerequisite PLPT 526).

**PLPT 595 Seminar (1 credit-hour)**

Lecture presentation by the student in major field of specialization.

**PLPT 600 Research and Thesis (6 credit-hours)**

Six credit hours will be approved for the student for conducting research and submitting his thesis. (Prerequisite PLPT 595).