

## **Conservation principles plant products (I th Year of study, I SEMESTER)**

**Credits transferable value: 5**

**Course category**

**Domain (imposed)**

**Masters EFPA**

**Course holder:**

**Associate prof. dr. A. MOGİRZAN**

### **Discipline objectives (course and practical works)**

The aim of the coursework is to have students acquire knowledge on reception, conditioning, storage and preservation methods and storage of agricultural products plant. Also will pursue acquiring knowledge on control of products during storage and calculation of reduction during conditioning and keeping.

Practical work is aimed at acquiring know ledge by students on morphological peculiarities, anatomical and biochemical of agricultural products influencing their preservation. Quality control and establishing reduction during conditioning and keeping agricultural crop.

### **Contents (syllabus)**

<b>Course (chapters\subchapters)</b>
<b>INTRODUCTION:</b> definition, object, research methods, relationship with other disciplines;
<b>SEEDS MASS ATTRIBUTES:</b> physical, biological, biochemical and of quality;
<b>NECESSARY CONDITIONS FOR PRODUCTS STORAGE:</b> construction and storage spaces;
<b>MACHINERY AND EQUIPMENT USED IN PRACTICE OF STORAGE AND PRESERVATION PRODUCTS</b>
<b>RECEIVING AND WEIGHING OF AGRICULTURAL PRODUCTS;</b>
<b>COMPARTMENTALIZATION AND STORAGE OF AGRICULTURAL PRODUCTS (by: species, moisture, foreign bodies %, MH, health status and type of deposit);</b>
<b>CLEANING AND SORTING OF AGRICULTURAL PRODUCTS;</b>
<b>CONSERVATION METHODS FOR AGRICULTURAL PRODUCTS (drying, cooling, ventilation, preservation, chemically, and radiation);</b>
<b>PARTICULARITIES OF PRESERVING AGRICULTURAL PRODUCTS (cereals, grain legumes for oilseeds, sugar beet, potato tubers, narcotic plants, hop cones and medicinal plants);</b>
<b>CONTROL OF PRODUCTS DURING STORAGE (U,T, diseases and pests in storage; combating dust);</b>
<b>VALORISATION OF AGRICULTURAL CROP.</b>

<b>Practical works</b>
<b>SEEDS QUALITY CONTROL</b> (determination of purity, MH, humidity, MMB, MS, glassy, germination).
<b>MORPHOLOGICAL, ANATOMICAL AND BIOCHEMICAL PARTICULARITIES OF AGRICULTURAL PRODUCTS;</b>
<b>DETERMINATION OF AGRICULTURAL PRODUCTS UNIFORMITY;</b>
<b>DETERMINATION PEST INFESTATION VISIBLE AND INVISIBLE;</b>
<b>USEFUL RECORDING CALCULATION AND VALUE OF PRODUCTS;</b>
<b>CALCULATION OF REDUCTION DURING CONDITIONING AND KEEPING AGRICULTURAL PRODUCTS;</b>
<b>FINAL COLLOQUIUM OF VERIFICATION OF KNOWLEDGE.</b>

### **Bibliography**

1. **Axinte M., și colab. - 2002** - FITOTEHNIE : Fitotehnie, caiet pentru lucrări practice, partea I, U.S.A.M.V. Iași, uz intern, 1986.
2. **Beceanu D-tru, Balint G., 2002** – Valorificarea în stare proaspătă a fructelor, legumelor și florilor. Ed. “Ion Ionescu de la Brad” Iași.
3. **Mogârzan Aglaia, Robu T., 2005** – Tehnologia păstrării produselor agricole vegetale, Ed.”Ion Ionescu de la Brad” Iași.
4. **Mogârzan Aglaia, Robu T., Zaharia Marius, 2010** – Fitotehnie, Îndrumător pentru lucrări practice, Ed. I.Ionescu de la Brad, Iași.
5. **Thierer Volf și colab.** – Tehnologia recepționării, depozitării, condiționării și conservării produselor agricole. Ed.Ceres, Buc., 1971.
6. **Thierer Volf** – Determinarea calității produselor agricole vegetale. Ed.Ceres, București, 1971.
7. **Zaharia Marius și colab. 2011** – Fitotehnie, Lucrări de laborator, Editura “Ion Ionescu de la Brad”, Iași.

### **Final evaluation**

<b>Evaluation form</b>	<b>Evaluation Methods</b>	<b>Percentage of the final grade</b>
Exam	Written examination	60%
Appreciation of the activity during the semester	Oral assessment during the semester, verification tests and final laboratory colloquium.	40%

### **Contact person**

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