

Unconventional technique of conditioning and storage of agricultural production

(IIth Year of study, I SEMESTER)

Credits transferable value: 9

Course category

Domain (imposed)

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 knowledge 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)

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

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

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

Evaluation form	Evaluation Methods	Percentage of the final grade
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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