Lesson 2

Analysis of medicinal plant raw materials containing flavonoids (II).

QUESTIONS:

1. Medicinal plants and raw materials containing flavonoids:
- Violae herba;
- Helicrysi arenarii flores;
- Aroniae melanocarpae fructus.

Work 1. Study of morphological and anatomical features of raw material of Helicrysum arenarium.

Yellow everlasting flowers - Helichrysi arenarii flores

Producing plant: Yellow everlasting - *Helichrysum arenarium* (L.) Moench

Family ***Asteraceae***

1. Study producing plants from herbarium specimens and tables, to identify diagnostic features for recognition.

2. Describe the raw materials.

3. Prepare a temporary microslide of tubular flowers and wrapper leaflet, previously boiled in alkali solution. Examine at low and high magnification of the microscope. Identify anatomo-diagnostic features of the raw material. Draw the microscopy.

4.Conclusion on the authenticity of the raw material.

5. Study the chemical composition of raw materials.

6. Specify the pharmacological action and uses of raw materials.

Work 2: Study of morphological and anatomical features of raw material "Violet herb"

Violet herb – Violae herba

Producing plants: Field violet - *Viola arvensis* Murr.

Wild pansy (garden violet) - *Viola tricolor* L.

Family ***Violaceae***

1. Study producing plants from herbarium specimens and tables, to identify diagnostic features for recognition.

2. Describe the raw materials.

3. Carry out microscopic analysis of the studied raw material. Identify anatomo-diagnostic features of raw materials. Draw the microscopy.

4. Conclusion on the authenticity of the raw material.

5. Study the chemical composition of raw materials.

6. Specify the pharmacological action and uses of raw materials.

Work 3. Study of morphological features of fruits of chokeberry.

Black chokeberry fruit –Aroniae melanocarpae recens fructus

Producing plant: Black chokeberry – *Aronia melanocarpa* (Michx.) Elliot

Family ***Rosaceae***

1. Study producing plants from herbarium specimens and tables, to identify diagnostic features for recognition.

2. Describe the raw materials.

3.Study the chemical composition of raw materials.

4. Specify the pharmacological action and uses of raw materials.