

Odessa National Medical University

Department of General and Clinical Pharmacology and Pharmacognosy

**GUIDELINES**  
for independent work of students (IWS)

Discipline: "Resursovedenie"

Study subject CDS "Using the LR and herbal remedies in the modern world medical practice.

The use of medicinal plants of European medicine. LR in the traditional medical systems of the East "

Course 5 Faculty medico-pharmaceutical

approved by  
in the methodical meeting of the  
Department  
August 28, 2025  
Protocol № 1  
Head. Department of



\_\_\_\_\_ prof. Rozhkovsky YV

Theme № 3 "Using the LR and herbal remedies in the modern world medical practice.

The use of medicinal plants of European medicine. LR in the traditional medical systems of the East "in '10

**1. Background.** Range of medicinal plants, using modern world medicine, largely account for species that do not have a distribution in Ukraine, including those borrowed from the traditional medical systems in the East. This range is already included in the European Pharmacopoeia and will necessarily find full reflection in the HFC, the principle of which is to harmonize with PhEur. Therefore, future pharmacists just need to know as vegetable sources of imported products in order to better focus on the market of pharmaceutical services. For this reason, the most detailed study of the types of merit, which was pointed out in the previous course of Pharmacognosy.

**2. Purpose of the activity:**

- to expand the range of HR knowledge and specifics of their use in medicine of different countries and peoples,
- sformirovat idea of the possibilities of the world of flora as a source of replenishment of medicines domestic medicine.

1.

**2. 3. Interdisciplinary integration:**

number pp	discipline	Know	be able to
one.	previous Medical botany	Phase of development, the environmental conditions of growth of medicinal plants;	To assess the current conditions of growth of specific types of LR
2.	pharmacognosy	The effect of various factors on the contents of the main storage and a bar RL	Choosing optimum blank areas and periods native RL
3.	Intra integration (the topic of this discipline, which integrates that which is studied) ...	Resursovedenie as science and academic discipline. The raw material base of medicinal plants in Ukraine. The use of herbal medicines in the Republic of Lithuania and the modern world medical practice.	develop: on the harvesting instructions, drying and storage of raw wild higher plants, algae, lichens and fungi, newsletters; make reports for doctors and

		Accounting for medicinal plant resources, the principles of their management and protection. Cultivation of Latvia in Ukraine and the world.	advise the public on matters related to the harvesting and use of raw materials and products of natural origin.
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#### 4.Zadaniya for independent work during preparation for classes

4.1. The list of key terms, parameters, characteristics which students must learn in preparation for the class:

The term (the term), zapitannya one	Definition (content) response 2
Write HR types that are best used in medicine east	
Write HR types that are best used in the European medicine	

Teoretichni power to zanyattya:

1. Why the European medicine also called the world?
2. What you are aware of the medical system? The concept of "medical system" differs from the term "traditional medicine"?
3. What are the most used in modern medicine LR and RL of Mediterranean origin.
4. What are you known LR modern scientific medicine, which can be attributed to the plant-cosmopolitan.
5. What are the most common LR and RL with arid (dry) areas of Asia.
6. Name the LR and RL of modern scientific medicine, are Hispanic.

4.3. Practical work (tasks) to be performed in class:

**Exercise 1.** Preview of the State Register of medicaments for the Ukraine, to isolate and analyze the composition of the most well-known products containing vegetable components circulation (fill .. Table 1).

Table 1

Analysis phytopreparations registered in Ukraine

number s / n	drug Name		Manufacturer	Herbal ingredients in the product
	international	commercial		
one	2	3	four	five



5. Фармакогнозія: підручник для студентів фармацевтичних факультетів / Посилкіна О. В. та ін. – Харків: НФаУ, 2015–2018 (розділи, присвячені сировинній базі).
6. Тржецинський С. Д., Доля В. С., Денисенко О. М. Ресурсознавство лікарських рослин : навч.-метод. посіб. Запоріжжя : ЗДМУ, 2015. 115 с.
7. Грицик А. Р., Водославський В. М., Мельник М. В. Фармакогнозія. Ресурсознавство лікарських рослин : навч. посіб. Івано-Франківськ : ПП Голіней О. М., 2019. 248 с.
8. Зузук Б. М. Ресурсознавство лікарських рослин : навч. посіб. для студ. вищ. фармац. навч. закл. Вінниця : Нова Книга, 2015. 232 с.
9. Heinrich M., Barnes J., Prieto-Garcia J., Gibbons S., Williamson E. M. *Fundamentals of Pharmacognosy and Phytotherapy*. 3rd ed. Elsevier, 2023. 282 p.
10. *Medicinal Plant Resources : textbook* / V. M. Minarchenko et al. Kyiv : Palyvoda A. V., 2019. 128 p.
11. *Bioprospecting of Ethnomedicinal Plant Resources: Sustainable Utilization and Restoration* / ed. by G. Shukla et al. CRC Press, 2024. 466 p.
12. *Medicinal Plants: Bioprospecting and Pharmacognosy* / ed. by A. B. Sharangi, K. V. Peter. Apple Academic Press, 2022. 602 p.
13. Van Wyk B. E., Wink M. *Medicinal Plants of the World*. 2nd ed. CABI, 2017.

#### **Additional literature:**

14. Лікарські рослини: Рекомендаційний список літератури (актуальні видання 2024 року) / Уманський НУС.
15. Малопоширені ароматичні види лікарських рослин / Наукове видання. – Берегове: ЗУІ ім. Ф. Ракоці II, 2025.
16. Лабораторний журнал з ресурсознавства лікарських рослин : [посібник] / В. М. Мінарченко та ін. Київ : Паливода А. В., 2018. 94 с.
17. Фармакогнозія : підручник для студ. вищ. навч. закл. / В. С. Кисличенко та ін. ; за ред. В. С. Кисличенко. Харків : НФаУ : Золоті сторінки, 2015. 736 с.
18. Державна Фармакопея України : в 3 т. / ДП «Український науковий фармакопейний центр якості лікарських засобів». 2-е вид. Харків : Науковий фармакопейний центр, 2015. Т. 1. 1128 с. 520 p.

#### **electronic resources**

19. Medicinal Plant Names Services (MPNS) Resource. Kew Royal Botanic Gardens. URL: [kew.org](http://kew.org) (дата звернення: 22.03.2026).
20. Ресурсознавство лікарських рослин : презентація лекції. Нац. фармац. ун-т. URL: [https://cnc.nuph.edu.ua/wp-content/uploads/2023/09/prezentatsiia\\_resursoznnavstvo-lr.pdf](https://cnc.nuph.edu.ua/wp-content/uploads/2023/09/prezentatsiia_resursoznnavstvo-lr.pdf) (дата звернення: 22.03.2026).

#### 7. Materiali for self-control.

### *7.1. Questions for self-control*

1. The history of the use of LR world medicine.
2. The Republic of Lithuania in the traditional medical systems.
3. LR place in the modern world medicine and pharmacy.
4. The geographical confinement of sources of raw materials of herbal remedies by the European Pharmacopoeia.
5. The range of herbal drugs, the most used in the world of modern medicine, the rate of harvesting.
6. Features of use of herbal drugs in traditional and official medicine of the East and the West.
7. What is the continent of the Earth is the least studied for use LR?
8. What is the continent of the Earth is the most studied for the use of the Republic of Lithuania?

### *7.2. Tests for self-control*

1. For some traditional medical system brought to the world of modern scientific medicine raw materials - roots of aconite?
  - A. China
  - B. Tibet
  - B. Indian (Ayurveda)
  - G. Arab
  - D. Slavic
2. Many food plants exhibit curative and preventive properties. So, in a very large number of domestic pharmacy uses as a source of herbal drugs
  - A. Tomatoes
  - B. Cucumbers
  - B. Carrots
  - G. Apples
  - D. Melons
3. It is in Ukraine officinal herbal drug contains saponins. Its dust causes irritation of the mucous membranes, so work with this raw material requires caution. Call it raw
  - A. Rhizoma et radices Polemonii
  - B. Rhizomata Tormentillae
  - B. Radices Araliae
  - G. Rhizomata Bistortae
  - D. Rhizomata et radices Rubiae
4. On analysis it domestic wild medicinal plants of the family Polygonaceae. Herbaceous plant, the leaves are lanceolate with a red stain, available sockets film coated compressed hairs. Inflorescence terminal, spicate dense brush. The plant is diagnosed as:

- A. Ordinary Sporysh
- B. Highlander pepper
- B. Persicaria maculosa.
- G. Highlander snake.
- D. Buckwheat.

5. Trava yarrow is part of the stomach and fees used in Ukraine for the production of herbal medicines. According to the requirements of HFC quality of this raw material is evaluated by content:

- A. Kardioglikozidov,
- B. alkaloids,
- B. polysaccharides
- G. essential oil and proazulen,
- D. vitamins.

6. World hepatoprotective medicine uses of vegetable origin. Name medicinal plant material, which contains silybin and reveals a hepatoprotective effect.

- A. The fruits of fennel.
- B. Flax seeds.
- B. Schisandra seeds.
- G. The fruits of milk thistle.
- D. pumpkin seeds.

7. In the arsenal of the modern world of medicine is an ointment with reparative properties, for the preparation of which are necessary fatty oils, which have the ability to dry out. It:

- A. Oleum Cucurbitae
- B. Oleum Lini
- B. Oleum Persicorum
- G. Oleum Jecoris
- D. Oleum Cacao

8. preventive properties soizdavna used oriental medicine, but now it is the source substances comprising the drugs with hepatoprotective action. What BAR soybeans rise to such action?

- A. polysaccharides
- B. micronutrients
- B. pigments,
- G. essential oils,
- D. phospholipids.

9. Listya eucalyptus comprising an essential oil used for the production of European and Russian phytopreparations with bactericidal action. According to the requirements of SPU identification of raw materials is carried out by thin layer chromatography. Chromatography plate after reagent treatment are identified:

- A .Kvertsetin,
- B. scopoletin,
- B. cineol,
- G. apigenin,
- D. glaucine.

10. Flower buds tropical allspice contain essential oil used in Europe for the production of herbal medicines with an antiseptic action. According to the requirements of the State Pharmacopoeia of Ukraine, identification of raw materials is carried out by thin layer chromatography. Chromatography plate after reagent treatment zone is identified:

- A. scopoletin and umbeliferon,
- B. quercetin and rutin,
- B. scopolamine and hyoscyamine,
- G. apigenin and luteolin,
- D. eugenol and kariofilenu.

11. Fitosredstva from the leaves of ginkgo world medicine used in the treatment of patients with impaired cerebral circulation. According to the requirements of the State Pharmacopoeia of Ukraine purity raw ginkgo is determined by content:

- A anthraquinones
- B flavonoids,
- The polysaccharides
- Mr. alkaloids
- D vitamins.

12. Preparations of modern European medicine "Pasito", "novopassit" in Ukraine registered as a tranquilizing, sedative and mild hypnotic. Choose the source of these drugs

- A. Grass series
- B. Passiflora Grass
- B. The leaves of sage
- G. Leaves cranberries
- D. Grass periwinkle

9. Individualnye assignments for students on classes.

1. Give the examples that traditional medical systems of the East is one of the sources of European medicine and pharmacy.

2. Propose possible vegetable oils, fatty sources, which are used by global medicine and pharmacy, distributing them over the principle: a) - springs with a temperate climate; b) - a tropical plant sources.

*Methodical recommendations were made by*

A handwritten signature in black ink, appearing to be 'Boyko IA', written in a cursive style.

*associate professor Boyko IA*