PHARMACOGNOSY

for 3rd year students 22 Public health 226 «Pharmacy, industrial parmacy», educational program «Pharmacy» Фм17(5,0д) англ 1, 2, 3, 4, 5, 6, 7, 8 groups

13.04 – 7, 8 groups

15.04 – 1, 2 group

16.04 – 3, 4 groups

17.04 – 5, 6 group

**LABORATORY CLASS. Topic: «MP and MPM, containing different groups of BAC.»**

**OBJECTIVE.**

Study of medicinal plant and the raw material containing different groups of compounds.

**RELEVANCE.**

**Allantoin** is a chemical compound with the formula C4H6N4O3. It is also called 5-ureidohydantoin or glyoxyldiureide. It is a diureide of glyoxylic acid.

Manufacturers cite several beneficial effects for allantoin as an active ingredient in over-the-counter cosmetics: the moisturizing and keratolytic effect, increasing the water content of the extracellular matrix, increasing the smoothness of the skin; promoting cell proliferation and wound healing; and the soothing, anti-irritant, and skin protectant effect by forming complexes with irritant and sensitizing agents. It is frequently present in toothpaste, [mouthwash](http://en.wikipedia.org/wiki/Mouthwash), and other oral hygiene products, in shampoos, anti-acne products, sun care products, and clarifying lotions, various cosmetic lotions and creams, and other cosmetic and pharmaceutical products.

**CONTROL QUESTIONS.**

1. Write the structure of allantoin.
2. Write medicine use of allantoin.
3. What is allantoin used for over-the-counter cosmetics?
4. Write the Latin names of plant material, plant and family for medicinal plants that contain allantoin.

**TEST.**

1. Write Latin names of plant, plant material and family and make a logic chain: active compound – pharmacological activity.

|  |  |
| --- | --- |
| Comfrey | |
| a. Alkaloids | 1. Sedative |
| b. Bufadienolides | 2. Anti-inflammatory, vulnerary |
| c. Symphytine | 3. Spasmolytic |

1. Write Latin names of plant, plant material and family and make a logic chain: active compound – pharmacological activity.

|  |  |
| --- | --- |
| Kalanchoe | |
| a. [Bryophillin A](http://en.wikipedia.org/w/index.php?title=Bryophillin_A&action=edit&redlink=1) | 1. Antiseptic, anti-inflammatory |
| b. Thermopsine | 2. Uterotonic |
| c. Volatile oils | 3. Cholagogue |

1. Write Latin names of plant, plant material and family and make a logic chain: active compound – pharmacological activity.

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| --- | --- |
| Mugwort | |
| a. Essential oils | 1. Sedative |
| b. Fatty oils | 2. Analgesic |
| c. Tannins | 3. Anthelminthic |

1. Write Latin names of plant, plant material and family and make a logic chain: active compound – pharmacological activity.

|  |  |
| --- | --- |
| Kidney-bean | |
| a. Vitamins | 1. Anthiasmatic |
| b. Inulin | 2. Diuretic, antidiabetic |
| c. Silicic acid, allantoin | 3. Expectorant |

1. Write Latin names of plant, plant material and family and make a logic chain: active compound – pharmacological activity.

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| --- | --- |
| Chaga | |
| a. Fructose | 1. Diuretic |
| b. Bitter | 2. Antitumor |
| c. Betulin | 3. Insecticidal |

**LITERATURE TO PREPARE FOR THE LESSON.**

1. Pharmacognosy: textbook for higher school students / V.S. Kyslychenko, L.V. Upyr, Ya.V. Dyakonova, V.Yu. Kuznetsova, I.G. Zinchenko, O.A. Kyslychenko; ed. by V.S. Kyslychenko. – Kharkiv : NUPH: GoldenPages, 2011. – 552 p.; il.
2. Pharmacognosy: textbook for higher school students / V.S. Kyslychenko, L.V. Lenchyk, I.G. Gurieva et al.; ed. by V.S. Kyslychenko. – Kharkiv : NUPH: GoldenPages, 2019. – 584 p.