

The development of the national monograph of the State Pharmacopoeia of Ukraine on medicinal plant raw material - Black horehound herb (*Ballotae nigrae herba*)

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Introduction. The State Pharmacopoeia of Ukraine allocated the European part - the translation of the relevant article of the European Pharmacopoeia and the National Ukrainian part, which takes into account the peculiarities of domestic raw materials. In addition, there are purely national general and specific articles, implement a national policy on the quality of medicinal raw materials. The monograph on the grass, Black horehound is absent in the State Pharmacopoeia of Ukraine.

Aim: to study the morphological and anatomical diagnostic features of the Black horehound herb.

Methods. The ground parts of the Black horehound, their transverse sections, surface preparations, the prepared epidermis have been picked in the Kharkiv region. Methods of macro- and microscopic analysis were generally accepted. The microscope PB-2610 and the camera Samsung- PL50 have been used in the study.

Results. The powder shows the following diagnostic characters that meet the requirements of the European Pharmacopoeia 8.0: numerous long, multicellular covering trichomes, thickened and swollen at the junctions; fewer glandular trichomes: some with a unicellular or multicellular stalk and a globose, uni- or bicellular head; fragments of the adaxial leaf epidermis with cells with sinuous walls, accompanied by cells of the palisade parenchyma; fragments of the epidermis of the corolla composed of polygonal cells, those of the inner epidermis of the lips papillose; pollen grains subspherical with 3 pores and a smooth exine; fragments from the stem with groups of collenchymatous cells and lignified vessels, with annular or spiral thickenings. It was also found the signs defined as additional, significant that are not specified in the European Pharmacopoeia 8.0: the covering trichomes of stems, leaves, bracts and cup with 2-6 warty joint-like articulated cells, extended basal cells that immersed in summed up the rosette with 4-8 cells with thickened straight walls; covering trichomes two-lipped curve corolla are abundant, with fallen down thin membranes and warty cuticle; corolla tube with the ring of large conical trichomes inside, in the parenchyma - small druses; pedicle cup with glandular hairs 3-4-cells with a long pedicle and the big head. **Conclusion:** Have been established the morphological and anatomical diagnostic features of the Black horehound herb for the introduction to the National monograph of the State Pharmacopoeia of Ukraine.

References: 1. European Pharmacopoeia. – Strasbourg, 2014. – 1380 p.