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**Fourth Pharmaceutical Business Forum  
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**„INNOVATIONS AND PROSPECTS  
IN PHARMACEUTICAL PRACTICE“**

**Book of Abstracts**

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## RATIONALE FOR CHOOSING OF EXTRACTION SOLVENT FOR OBTAINING LIQUID EXTRACT FROM THE ROOTS OF HARPAGOPHYTUM PROCUMBENS DC

Anna Kriukova<sup>1</sup>, Inna Vladymyrova<sup>2</sup>, Tatyana Tishakova<sup>3</sup>

National University of Pharmacy, Ukraine, <sup>1</sup>PhD student at Pharmacognosy Department, <sup>2</sup>Assoc. Prof. at Pharmacognosy Department, <sup>3</sup>Assistant at Medical and Bioorganic Chemistry Department

Improvement of extraction process of herbal raw materials for the purpose of enhancing of the yield of biologically active substances is one of the main tendency of the development of pharmaceutical science. Creation of liquid preparation from the herbal raw materials includes selection of many criteria, such as choice of extraction solvent and its concentration.

**Aim:** The aim of this work was to determine extractive substances in the extracts obtained from the roots of *Harpagophytum procumbens*, to choose optimal extraction solvent for the creation of new dosage forms.

**Materials:** Liquid extracts of the roots of *Harpagophytum procumbens* were the object of research («Starwest Botanicals», USA). Ethanol in different concentrations (20 %, 40 %, 60 %, 80 %) was used as extraction solvent. Duration of extraction using magnetic stirrer was one, two and three hours.

**Methods:** Determination of extractive substances (residue on evaporation) in the extracts was done in accordance with the procedure of State Pharmacopoeia of Ukraine 2.0 (2.8.16).

**Results.** Obtained data indicate that maximum yield of extractive substances in the extract of the roots of *Harpagophytum procumbens* was obtained after the extraction for two hours for all used concentrations of extraction solvent: 20%, 40%, 60%, 80% ethanol (74.74±0.41%; 68.65±0.29%; 53.33±0.21%; 54.48±0.32%; 50.61±0.35 %, respectively).

**Conclusion:** Experiments proved that ethanol (20%;v/v) is an efficient extraction solvent for preparation of liquid extract from the roots of *Harpagophytum procumbens*, if a duration of extraction (with the use of magnetic stirrer) is two hours.

**Keywords:** *Harpagophytum procumbens*, Liquid extracts, extraction solvent, extraction duration