

## THE PRELIMINARY SCREENING OF PHENYLPROPANOIDS IN LIQUID EXTRACTS FROM *POTENTILLA ALBA* L.

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**Introduction.** *Potentilla alba* L. (White Cinquefoil) belongs to *Potentilla* L. genus of the family *Rosaceae*. *P. alba* is native to Europe. *P. alba* is a clumping terrestrial plant of about 15 cm high; basal leaves palmate divided into 5 finger-like dark green leaflets; flowers white, five-petaled, in apical cymes of 2-5 flowers. The flowering stage: from April till June. *P. alba* accumulates major and trace elements, polysaccharides, phenol carboxylic acids, flavonoids, tannins, triterpenes. White Cinquefoil is a unique species possessing thyrotropic properties and successfully used for the treatment of hypo- and hyperthyroid conditions. Nowadays, there are many domestic herbal preparations from underground parts of *P. alba* marked as remedies for the treatment of thyroid disorders.

**Aim.** We aimed at preliminary screening of phenylpropanoids, namely, flavonoids and tannic materials, in liquid extracts from *P. alba* underground organs.

**Materials and methods.** Two marked liquid extracts from *P. alba* underground organs obtained with different extragents (extract I and extract II) were the objects of the present study. The preliminary screening of phenylpropanoids was performed using well-known identification reactions. Flavonoids were identified using alkaline solution, 3% solution of FeCl<sub>3</sub>; tannic materials were identified using precipitation reactions with 1% gelatine and 1% quinine hydrochloride solutions, 10% solution of lead (II) acetate basic; by the reaction with iron ammonium alum solution the group of tannins was detected.

**Results and discussion.** In extract I and extract II, the dark green colouration with 3% solution of FeCl<sub>3</sub> detected flavonols and flavones; the development of red colouration with alkaline solution showed the presence of polyoxyflavonols; in extract I aglycones and glycosides of flavonoids are present in almost equal amounts, whereas in extract II aglycones prevail.

A precipitation with 1% gelatine and 1% quinine hydrochloride solutions identified tannins in both extracts studied, and dark-green coloration revealed the presence of condensed tannins.

**Conclusions.** The results obtained showed the presence of flavonoid aglycones and glycosides, as well as condensed tannins in the objects studied. Still, there were some differences in analytical effects of the performed identification reactions, what justifies further comparative chemical profiling of the liquid extracts from *P. alba*.

## THE RESEARCH INTO AMYRIN DERIVATIVES IN HERBAL DRUGS PREPARATIONS FROM *ASTERACEAE* SPECIES

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**Introduction.** In large amounts, triterpene saponins accumulate mostly in underground organs, seeds, fruits, stems. The chemical structure of saponins is variable; consequently, a wide range of physical, chemical, biological and pharmacological properties is provided. Derivatives of