

and correlation coefficient  $R_c^{model}$  ;

• for estimation of parameters of linear dependence obtained using calibration samples it has been suggested to proceed from assumption of equality of the calibration uncertainty and the uncertainty of measuring the absorbance and sample

preparation of the sample to be analysed; within this approach the acceptability criteria have been offered for residual standard deviation  $RSD_0$  and correlation coefficient  $R_c$ ; the parameters of within-run (within-day) and between-run (between-day) linearity should satisfy these criteria.

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## K.S. Musienko, V.S. Kyslychenko TO THE QUESTION OF WILD PRIVET LEAVES STANDARDIZATION

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The search of prospective available sources of the medicinal plant material is one of the most urgent and priority tasks of contemporary pharmacy. The plants of the *Oleaceae* family are widely distributed all over our country and has long been used in folk medicine. The Privet genus unites more than 50 species. These plants are used as ornamental, melliferous and can also be used as dyes.

The wild privet (*Ligustrum vulgare* L.) has attracted our attention. The raw material of this plant is used in folk medicine. The literature data has shown that the branches, bark, leaves, flowers and fruits can be used as the plant material. Wild privet possesses anti-inflammatory, haemostatic, antimicrobial, laxative and expectorant activity. The wild privet bark infusion prepared on wine is used at chronic obstructive bronchitis, pneumonia, peptic ulcer, erosive gastritis with a tendency to bleeding, tonsillitis, pharyngitis, stomatitis and female diseases. The leaves are used in tonsillitis, pharyngitis, inflammatory diseases of the female genital organs. Galenic medicines of the leaves possess cardiogenic, hypotensive, protistocidal, antibacterial against *Staphylococcus aureus*, *Bacillus subtilis*, *Escherichia coli*. Flowers are used in laryngitis, tonsillitis, stomatitis, and fever. The fruits can be used as a

laxative. To date, the chemical composition of wild privet is studied insufficiently. The bark is found to contain phenols and their derivatives, resins; flowers contain sugars, carotenoids, vitamin C, up to 0,3 % of alkaloids, apigenin, luteolin and quercetin glycosides, tannins; flowers – essential oil; fruits – cyaniding and malvidin glycosides. Bark, leaves and flowers are found to contain glycoside ligustrin (syringin).

The aim of the work is to choose the proper extractant for the most effective extraction of the biologically active compounds of wild privet leaves.

The plant material collected in Kharkiv region after complete opening of leaf lamina was used for the study; as extraction solvents water and water-alcohol mixtures with the increase of the content of the latter were used; the evaluation criteria were the extractive matter yield and the sum of oxidized phenols (investigation method – according to the USSR Pharmacopoeia, XI ed.).

As a result of the experiment carried out the dynamics of the extractive matter and the sum of oxidized phenols yield was determined and 50 % ethanol was found to be the best extractant. The data obtained will be used in the technology of galenic medicines from wild privet leaves working out.

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## N.M. Yolkina THE LEVEL OF ANTIOXIDANT ACTIVITY IN ERYTHROCYTES OF PATIENTS WITH CIRRHOSIS OF LIVER AND IRON- DEFICIENCY ANEMIA

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It has been shown that in erythrocytes of patients with cirrhosis of liver and iron- deficiency anemia the activity of catalase and glutathione-reductase is increased, that may have some compensatory value.

It is known that many diseases disturbed prooxidant-antioxidant balance, that is accompanied by the development of oxidative stress. Given this, it is worth while to study the state of the anti-

oxidant system in erythrocytes under diseases of different character.

The material for the study served the erythrocytes of patients with iron- deficiency anemia and patients with cirrhosis of liver. The blood of patients with iron- deficiency anemia and cirrhosis of liver was taken at the 7 City Hospital of Simferopol. The control group consisted of practically healthy people. The group of ill included 9 pa-