STUDIES ON VITAMIN COMPOSITION OF SYRINGA VULGARIS BARK

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Syringa vulgaris is one the most favourite and extended ornamental bushes in our country. There are more than 31 species and more than 1500 varieties of lilac in the world. This diversity of species and varieties promote using the plant for landscaping parks and squares. At present Syringa vulgaris is cultivated in many countries of the world. However, lilac is known not only due to its unique beauty, but also because of its valuable medicinal properties. For a long time this plant was extensively used in folk medicine for many diseases treatment and prevention: rheumatoid arthritis, gout, diabetes mellitus, bronchial asthma, malaria etc. The Syringa vulgaris bark is used in officinal medicine as raw material for syringin (eleutheroside B) extraction, which serves as a marker at standardization of medical preparation, extracted from the raw material of Eleutherococcus senticosus. The purpose of the research was the determination of the qualitative composition and quantitative content of vitamins in the Syringa vulgaris bark. The object of the research was the Syringa vulgaris bark, collected in march 2013 and 2014 in Kharkiv region. The quantitative content of B vitamins was determined by fluorometer EF-3MA (vitamin B_1 in recast on thiamine hydrochloride, vitamin B_2 in recast on riboflavin, vitamin PP – in recast on nicotinic acid). The content of ascorbic acid was determined by the method of PA 38. “The brier fruits” of State Pharmacopeia of USSR XI edition.

As a result of the research the presence and quantitative content of vitamins B and ascorbic acid in the Syringa vulgaris bark were determined. The total content of vitamins made up 6,6 mg/kg, in particular B_1 0.10±0.01 mg/kg, B_2 0.66±0.04 mg/kg, B_5 (PP) 2.50±0.03 mg/kg, C 3.40±0.02 mg/kg. Ascorbic acid (3.40±0.02 mg/kg) prevails among the vitamins in the research object.

The vitamin content of Syringa vulgaris bark was determined. 4 vitamins in the analyzed raw material were identified and quantitatively established with the prevalence of ascorbic acid (3.40±0.02 mg/kg). So, we can make a conclusion that the lilac bark can serve as a valuable source of different vitamins in preventive and medical preparations. The results of quantitative determination of vitamins will be used in the development of the project of quality control methods on “Syringa vulgaris bark”.