PHYTOCHEMICAL RESEARCH OF SALIX VIMINALIS L.

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Introduction. Willows (genus Salix, family Salicaceae) are popular plants since more than 400 species occur in Nature (including Salix viminalis). Particularly, Northern Hemisphere is a natural region for different willow species bearing sometimes traditional and very unique names like Sageleaf Willow, Goat Willow, Pussy Willow, Coastal Plain Willow, Kimura, Grey Willow, Sand Dune Willow. The variety of willow species partly results from ease of hybrid formation by cross-fertile of particular Salix genotypes in a natural process and/or by planned cultivation.

Salix viminalis L. is a species of willow (Salix) native to Europe and western Asia. Common names: Osier willow, Common Osier, Basket Willow, Energetic Willow. It is commonly found by streams and other wet places. The exact native range is uncertain due to extensive historical cultivation; it is certainly native from central Europe east to western Asia. It is one of the least variable willows, but it will hybridise with several other species. Their bark, buds and the leaves of Salix L. which contain phenolic glycosides, flavonoids, tannin, organic acids, vitamins, terpenoids. However the Salix genus plants aren't studied enough.

Our goal is the research of qualitative composition and quantitative composition of flavonoids in the branch of Salix viminalis L.

Materials and methods. These branch were gathered for the research in Kharkov regions in 2015. Chromatographic method (TLC , paper "Filtrak"(FN № 1,4,12)). Spectrometric method (410 nm on the spectrophotometr SPh-46).

Results and discussion. There were pointed the presence of phenolic compounds (phenolic glycosides , flavonoids, tannin) when the primary studying of the Salix viminalis L. leaves was. The presence of fl avonoids was defined in the ethanol extracts with cyanidin test, ferric(III) chloride. In results of reaction show the presence of fl avonoid aglycones and glycosides. Besides the substances of flavonoids were discovered due to chromatographic method. For this method the and silica gel TLC plats were used. In accordance with the reference pattern rutin, quercetin, ferulic, chlorogenic, salicylic asides were identified. The method of spectrophotometrywas applied for the analysis of flavonoids. The contain of flavonoids is turned out not less 2.3%.

Conclusions.The Salix viminalis L. has the practical interest as a source for getting plant drugs of many-sided pharmacological action due to considerable quantity of phenolic compounds.