

Essential Oil of *Linosyris Villosa*

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Essential oils are composite organic compounds consisting of alcoholic substances, acids, aldehydes, ketones, complex esters, terpenes, phenols and hydrocarbons. Essential oils have a beneficent influence on the human nervous system. They are usually divided into stimulators, adaptogenes and sedatives. The object of our research is the essential oil of the herb *Linosyris Villosa*. *Linosyris Villosa* is a perennial herbaceous plant which chemical composition is studied for the first time. Phytochemical analysis combined with the method of paper chromatography after developing the extract with some specific reactants allowed to find phenolic acids, amino acids, carbohydrates, flavones and their glycosides, tannins, vitamins and essential oils. The method of hydro distilling allowed us to get from the plant the essential oil with an output of 0, 62 per cent. The component structure of the essential oil of *Linosyris Villosa* has been defined with the help of the capillary gas and liquid chromatography (GLC) on a chromatograph "Chrom-5" on the low polarity phase "Ultra-2" with the programmed temperature in the interval between 80-250°C. Analysing chromatograms of the capillary GLC and chromatograms of the fractions got with the help of preparation division on the scale-boards "Silufol" we identified 72 components of the oil of *Linosyris Villosa*. The identification has been carried out according to the program including 390 genuine terpenic compounds on retention indexes. The main ingredients of the essential oil of *Linosyris Villosa* are presented in table 1.

Component structure of the essential oil of *Linosyris Villosa*. Table 1.

Pic #	Component	Quantity %	Pic #	Component	Quantity, %
5	β -Citronelal	3,77	75	Ledol	1,00
22	Chrysanthemon	1,94	83	γ -Cadinen	10,93
26	α -Citronellol	1,96	84	Farnezol	6,69
27	Fellandral	1,82	85	β -Bessabolol	1,53
36	Artemiziyaacetat	4,14	88	Cedrol	1,48
48	Nerilacetat	1,01	90	Sabinilvaleriat	1,74
49	Eugenol	1,31	96	β -santalol	4,55
53	γ -Elemen	1,23	104	Farnezilatsetat	3,55
66	γ -Selenin	1,32	105	Famazulen	1,07

The following compounds prevail: γ -cadinen (10,93 %), farnesol (6,69 %), β -santalol (4,55 %), artemiziya acetat (4,14 %), β -citronelal (3,77 %) and farnezilacetat (3,55 %). According to the preliminary data of the bacteriological laboratory of the regional TB centre in Petropavlovsk, the essential oil of *Linosyris Villosa* suppresses growth of some mycobacteria of tuberculosis.