# Complex Utilization of Artemisia Glabella

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In order to study the possibility of rational utilization of valuable medicinal material we studied chemical make-up of essential oil of *Artemisia glabella* Kar. Et Kir. *(Compositae* family). Yield of essential oil is from 0.4 to 1.2%. Produced oil is a liquid of bluish-green color with pleasant smell with the following constants: $d_{20}^{20}$ 0,9351; $n_D^{20}$ 1,4603; k.f. 4.5; es.f. 36.6.

Component composition of the essential oil was analysed by the method of gaseous-liquid chromatography on the chromatographer of 3700 model with flame-ionizing detector. Data of the study showed that it contains over 100 components including (%): sabinen – 8,2; β-mircene – 0,3; α-terpinene – 0,5; limonene – 0,6; 1,8-cineol – 20,7; γ -terpinene – 1,3; β-tuijon – 7,8; camphor – 11,8; isoborneol – 4.0; borneol – 1.7; α -terpineol – 1,6; geranial – 3,6; timol – 1,7; α-pharnesene – 1,2; chamazulene – 0,2; guaiazulene – 0,1.

After extraction of essential oil from *Artemisia glabella Kar.et Kir* by means of hydrodistillation, the raw material was extracted with chloroform. The following sesquiterpene lactones: arglabin – 0,59% and argolide – 0,025% were isolated from 73 g of tar by column chromatography using KCK type silica gel as a sorbent.

After extracting of essential oil and sesquiterpene lactones, produced raw material of *Artemisia glabella Kar. et Kir*. was completely extracted by ethanol in «Soxlet» apparatus for extraction of flavonoids. Three flavonoid aglicons were isolated with the help of column chromatography on L 40/100 silica gel (Czechia) which were identified by determination of melting point and studying of spectral data (UV, IR, NMR and mass). Comparing of the obtained data with literature references allowed to relate the isolated compounds to circilineol (5,4′-dihydroxy-6,7,3′-threemethoxyflavon), bonansine (5,7-dihydroxy-3,6,3′,4′-tetramethoxyflavon).