

STUDY OF MORPHOLOGY AND ANATOMY OF CARDUUS PSEUDOCOLLINUS

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Introduction. The *Carduus* generation numbers more than hundred species in the world and thirteen species in Ukraine. The most widespread species in Ukraine are *Carduus nutans*, *Carduus acantoides* and *Carduus pseudocollinus*. Analysis of literature sources shows that herb of *Carduus nutans* and *Carduus acantoides* are used in medicine and have anti-inflammatory, choleric, diuretic and bactericide activity. It helps to normalize metabolic processes in organism. The plants of these three species are very similar by morphological features and *Carduus nutans* and *Carduus acantoides* are used in medicine that is why the studying of morphology and anatomy of *Carduus pseudocollinus* was actual as it can be admixture of *Carduus nutans* and *Carduus acantoides*.

Aim. The aim of the work is studying morphology and anatomy of *Carduus pseudocollinus* herb.

Research techniques. The *Carduus* herb was prepared in the area of Vinnytsia and Khmelnytskyi regions in 2015-2016 in phase of mass flowering. The fresh, dried and fixed raw material was used for preparing microslides. The anatomical structure was studied on the surface and cross section view.

Results and discussion. It was determined macroscopical features of *Carduus pseudocollinus* herb. It is a branchy and upright stem with dentate wings on the length. The leaves of root rosette and basal stem leaves are short petiolar, pinnatisected and elliptical oblong. The middle and upper stem leaves are pinnatipartite, pinnatilobate and oblong. All leaves have crisp venation and small thorns on the margin. Flowers are formed inflorescence of anthodium. The involucre of anthodium are calyciform. The leaves of involucre are narrow spear-shaped with short thorns on the top.

The form of epidermal cells, character of indumentums and structure of trichomes, the multilayer angular collenchyma in edges of vein, the parenchymatous encasing of vein's and stem's conductive bundles is microscopical features.

Conclusions. As the result of studying morphology and anatomy of *Carduus pseudocollinus* herb the macro- and microscopical features were determined. The obtained data will be used in further researches and for identification of raw material.