Conclusions. For the first time, a chromatography-mass spectrometric study of the volatile compounds of leaves of *Cerasus Juliana* Lam. was carried out. The main biologically active substances have been established, which can be used in the future for creating the medicines on base of this herbal drugs.

DUCHESNEA INDICA (ANDR.) FOCKE, A MEDICINAL PLANT WITH BROAD THERAPEUTIC POTENTIAL

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Introduction. *Duchesnea* Smith (*Rosaceae* Juss.) is a genus of perennial herbs, comprising only 2 species. *Duchesnea indica* (Andr.) Focke is the perennial herb with petiolulate leaves, yellow flowers and red, glossy achenes. Naturally, the plant grows at mountain slopes, meadows, riverbanks, wet places. In Ukraine, *D. indica* is cultivated as ornamental plant. *D. indica* is as a rich source of phenolic compounds, and nowadays, worldwide, much attention is paid to therapeutic potential of this plant.

Aim. In this abstract, data on *in vitro* pharmacological studies of *D. indica* carried out worldwide are summarized in order to show a therapeutic potential of this plant, as well as to justify pharmacognostic study of *D. indica* cultivated in Ukraine.

Materials and methods. For the present abstract, we performed a search in NCBI-PubMed database using "*Duchesnea indica*" as a keyword. In the present abstract we report results of five *in vitro* pharmacological studies of *D. indica*.

Results and discussion. X.-F. Li *et al.,* 2011 reported that the ethanol extract from *D. indica* can reduce an inflammatory injury of neurons induced by herpes simplex virus due to the induction of microglia apoptosis. A neutral polysaccharide from *D. indica* exhibited dose-dependent scavenging activities on hydroxyl, DPPH, ABTS radicals, and demonstrated high inhibitory activity against cells of ovarian cancer cell line SKOV-3, as well as human liver cancer cell line Hep-G2 (B. Xiang *et al.,* 2019). P.-N. Chen *et al.,* 2016 established that *D. indica* extracts inhibited cells of highly metastatic lung cancer cell lines A549 and H1299, and reduced the cell adhesion properties. Also, these extracts down-regulated the expression of mesenchymal markers. Authors concluded that *D. indica* extracts have potential to prevent and treat a lung cancer. The leaf extract from *D. indica* increases the cell viability, thymocyte and splenocyte proliferation in the time- and dose-dependent manner demonstrating immunostimulant effect (H. Y. Ang *et al.,* 2014). Fazli Khuda *et al.,* 2014 evaluated the anti-inflammatory potential of ethyl acetate fraction from *D. indica*. The research showed that the studied fraction from *D. indica* showed significant lipoxygenase inhibition activity.

Conclusions. *In vitro* pharmacological studies carried out worldwide showed antitumor, antioxidant, anti-inflammatory and immunostimulant properties of *Duchesnea indica*, what justifies pharmacognostic study of *D. indica* cultivated in Ukraine.