PHARMACY SECTION

COMPARATIVE STUDY OF EXTRACTION TECHNIQUES FOR *CYNARA SCOLYMUS* L. CULTIVATED IN THE REPUBLIC OF MOLDOVA

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Introduction: Artichoke *Cynara scolymus* L. is a plant native to the Mediterranean basin with a long folk history in treating many liver diseases was introduced and adapted to specific climatic conditions of the Republic of Moldova.

Aim: This study aimed to analyze artichoke leaves extraction to identify its contents and to optimize conventional extraction of biologically active compounds various extraction techniques, solvent ratio were used.

Materials and methods: The dry leaves of *C. scolymus* L.were provided from the Centre for the Cultivation of Medicinal plants of the State Medical and Pharmaceutical University "Nicolae Testemițanu". The powdered leaves were subjected to extraction by Soxhlet extraction, maceration and percolation with ethanol (35, 70 and 90 %) and absolute methanol, using several sampling techniques multiple stage extraction, Squibb's and Bosin's exhaustive extraction. The extracts were further subjected to phytochemical tests using standard procedures.

Rezults: The tested ethanol plant extracts contained appreciable amounts of flavonoids. The highest flavonoids yield were exhibited in extracts with ethanol 70% as solvent: artichoke tincture (1:5) - (1,38%); fluid extract (1:2) – (0.77%). Generally higher total flavonoids content were obtained using aqueous (2,06 %) and methanol solvents (5,62%), as compared to the respective ethanol solvents.

Conclusions: The results of this study showed that the aqueous and methanol extracts can be used as raw materials for artichoke dry extract obtain. The Bosin percolation with ethanol 70% solvent was the suitable method for reaching fluid extracts with the highest yield of the flavonoids content.

Keywords: Artichoke, extraction, percolation, flavonoids.

SYNTHESIS AND ANTIOXIDANT POTENTIAL EVALUATION OF SOME NEW THIAZOLIDINE-4-ONE DERIVATIVES

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Introduction: Diabetes mellitus (DM) is a chronic metabolic disorder resulting from a defect in insulin secretion, insulin action, or both. It is a major and growing threat to global public health. It is estimated that more than 285 million people worldwide have DM and according to WHO statistics, in 2025 the number of those affected by this disease will have risen to over 380 million. There are two main categories of this disease. Type 1, diabetes mellitus (T1DM), also called insulin-dependent diabetes mellitus and Type 2, diabetes mellitus (T2DM), the noninsulin dependent diabetes mellitus.