PROSPECTS OF CREATING A NEW HEPATOPROTECTIVE REMEDY BASED ON THE FLORA OF UZBEKISTAN

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Abstract: Liver diseases remain a global health challenge, necessitating the development of effective, low-toxicity hepatoprotective agents. Uzbekistan's unique climatic conditions favor the growth of medicinal plants rich in specific secondary metabolites. This study explores the scientific potential of creating a multicomponent dry extract with hepatoprotective properties based on *Rosa canina*, *Origanum tyttanthum*, and *Codonopsis clematidea*.

Keywords: Hepatoprotector, *Rosa canina*, *Origanum tyttanthum*, *Codonopsis clematidea*, dry extract, Uzbekistan flora, pharmaceutical technology.

Methods: The research involved a systematic review of the phytochemical profiles of selected species native to the Uzbekistan region. Methodological approaches include analyzing traditional extraction techniques versus modern intensification methods to preserve thermolabile biologically active substances (BAS). The integration of local scholarly works (e.g., studies by academician S.Y. Yunusov's school and contemporary Uzbek pharmaceutical researchers) served as the theoretical framework.

Results: Preliminary analysis indicates that the combination of *Rosa canina* (rich in ascorbic acid and polyphenols), *Origanum tyttanthum* (high essential oil and flavonoid content), and *Codonopsis clematidea* (specific alkaloids and polysaccharides) offers a synergistic effect in stabilizing hepatocyte membranes. The presence of antioxidant complexes in these plants suggests a high efficacy in neutralizing lipid peroxidation products. *Codonopsis clematidea*, a relatively understudied species in the local pharmaceutical industry, shows particular promise for its adaptogenic and regenerative properties.

Conclusion: The development of a standardized dry extract from these local raw materials provides a sustainable basis for the production of domestic dietary supplements (DS). This approach aligns with the national strategy of import substitution and the rational utilization of Uzbekistan's biodiversity. Future research will focus on optimizing the extraction parameters and establishing quality control standards for the resulting hepatoprotective supplement.

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