

**STUDY OF CHEMICAL COMPOSITION AND BIOLOGICAL ACTIVITY
OF THE DRY EXTRACT OBTAINED FROM THE AERIAL PARTS OF
*Allium motor***

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The aerial parts of *Allium motor* collected from Zarkent village, Parkent district, Tashkent region, Uzbekistan, were used as the research material. The plant material was shade-dried, ground into powder, and extracted with water and ethanol of different concentrations. The aqueous extract was concentrated and dried to obtain a dry extract, while the ethanolic extract was evaporated to remove ethanol completely. The extraction yield was **1.11%** for the aqueous extract and **12.0%** for the alcoholic extract relative to the initial plant material. The higher yield obtained with the alcoholic solvent indicates its greater efficiency in extracting biologically active phytochemicals from *Allium motor*. This difference may be attributed to the higher solubility of flavonoids, phenolic compounds, and other secondary metabolites in hydroalcoholic media. HPLC analysis of the *Allium motor* dry extract revealed several biologically active phenolic compounds. Hyperoside and rutin were the predominant constituents, while kaempferol and quercetin were detected only in sample Motor M2. Robinin and apigenin were not detected. Information on the vitamin composition was obtained from published literature. Dry extracts of *Allium motor* have been submitted for pharmacological evaluation. If significant biological activity is confirmed, the major bioactive compounds will be isolated by column chromatography and characterized using modern analytical techniques to support the development of standardized phytopharmaceuticals.

References.

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