MAIN GROUPS OF BIOLOGICALLY ACTIVE SUBSTANCES OF CHICKWEED *(STELLARIA MEDIA L.)* AND THEIR PHARMACOLOGICAL SIGNIFICANCE

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Relevance: Chickweed *(Stellaria media L.)* is a widespread annual plant in the Caryophyllaceae family, possessing a rich chemical composition. Interest in this species stems from the presence of various biologically active substances, which determine its pharmacological activity and potential for use in herbal medicine. However, despite this, there are no medications based on chickweed *(Stellaria media L.)*. Studying its properties would expand the pharmaceutical market.

Study Objective. To analyze literature data on the chemical composition of chickweed, to determine its pharmacological action, and to identify the main groups of biologically active substances.

Materials and Methods. International literary sources, including data on the phytochemical composition and pharmacological activity of chickweed components, were used. A systematic analysis and synthesis of scientific information was used. Particular attention was paid to studies devoted to the study of flavonoids, saponins, phenolic acids, and vitamins.

Study Results. Based on a review of the literature, it was established that chickweed *(Stellaria media L.)* contains a wide range of biologically active substances. The most significant include flavonoids (rutin, quercetin, apigenin), saponins, phenolic acids (chlorogenic, caffeic, ferulic), as well as vitamins C and E and carotenoids. The flavonoids contained in the plant exhibit pronounced antioxidant activity, helping to neutralize free radicals, reduce inflammation, and strengthen capillary walls. Saponins exhibit immunomodulatory and anti-inflammatory effects and also influence lipid metabolism. Phenolic acids inhibit lipid peroxidation, protecting cells from oxidative stress. The vitamin complex of chickweed enhances its overall tonic effect.

Evidence has also been found of the potential antimicrobial, diuretic, and wound-healing activity of the plant's extracts, confirming its suitability for use in phytotherapeutic formulations. Additionally, literature provides information on hypoglycemic and hypolipidemic effects, opening up potential for the use of chickweed in metabolic disorders. The combination of these properties allows this plant to be considered a source of natural antioxidants and complex biologically active compounds that may be useful in the development of new drugs and dietary supplements.

Conclusion. Thus, chickweed *(Stellaria Media L.)* is a promising source of biologically active substances with a wide range of pharmacological properties. Further research aimed at standardizing the content of active components and assessing their bioavailability is necessary to substantiate medical use and develop effective dosage forms based on this plant.