COSMETIC SOAP WITH HORSE CHESTNUT - TECHNOLOGY AND BENEFICIAL EFFECTS

Musaeva Saodat Odil kizi
3rd year undergraduate
Tashkent Institute of Chemical Technology

Akramova Rano Ramizitdinovna
Professor
Tashkent Institute of Chemical Technology

Annotation. This paper examines the development and production of cosmetic soap with horse chestnut extract (Aesculus hippocastanum). Particular attention is paid to the soap production technology, which preserves biologically active substances-escin, esculin, and flavonoids-which have anti-inflammatory, toning, and strengthening effects. The use of horse chestnut extract in soapmaking helps improve skin condition, increase elasticity, reduce swelling and redness, and maintain a healthy complexion. This paper highlights the relevance of using natural plant-based ingredients in modern cosmetics focused on safety, effectiveness, and comprehensive skin care.

Keywords: cosmetic soap, horse chestnut, plant extract, escin, esculin, natural cosmetics, anti-inflammatory effect, toning effect, skin care, soap making.

Introduction. In today's world, there is a steady growth in interest in natural cosmetics that combine effectiveness and safety for skin health. Consumers are increasingly choosing products containing plant-based ingredients with biologically active properties. One such ingredient is horse chestnut (Aesculus hippocastanum), known for its venotonic, anti-inflammatory, and antioxidant properties.

Horse chestnut extract contains escin, esculin, and flavonoids, which have a beneficial effect on the skin: they improve microcirculation, reduce swelling and redness, and improve skin elasticity and tone. Using horse chestnut extract in

cosmetic soaps combines the cleansing properties of soap with the healing and caring effects of the natural ingredient. The relevance of this research stems from the need to create safe and effective personal care products using natural ingredients. Studying the production technology of horse chestnut soap and evaluating its beneficial effects opens up prospects for expanding the range of natural cosmetics and meeting the growing demand for organic products.

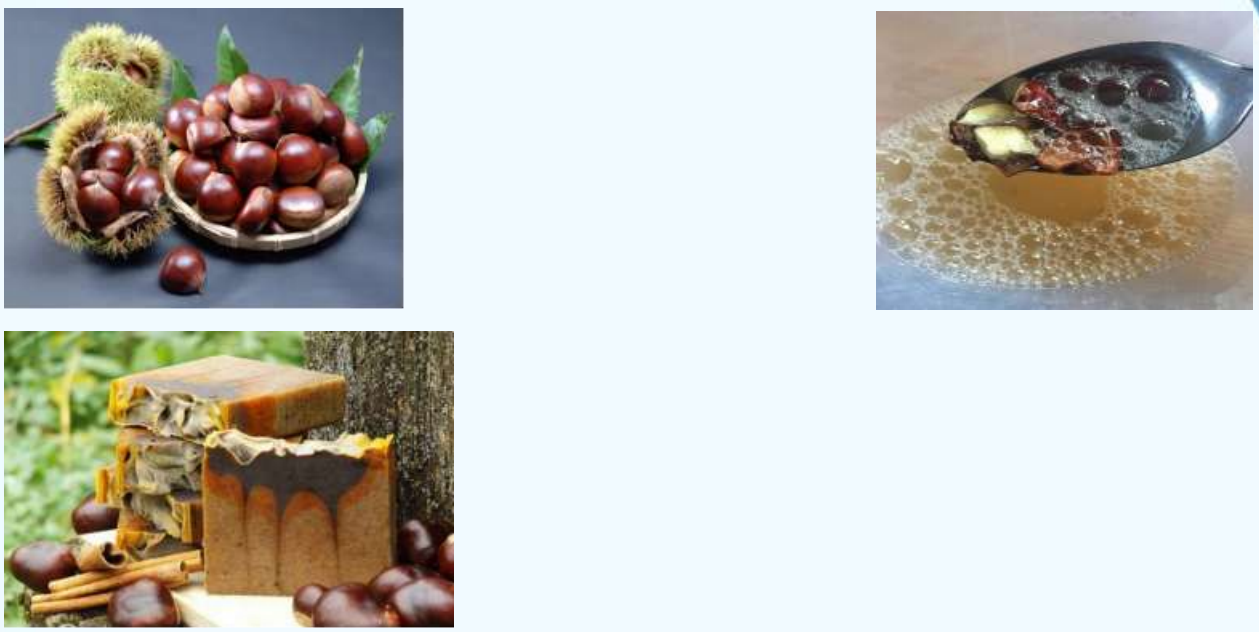

Fig. 1. Stages of obtaining cosmetic soap with horse chestnut

The aim of the study is to develop a technology for producing cosmetic soap with horse chestnut extract and to study its beneficial effects on the skin. Horse chestnut-based cosmetic soap is made from plant material, extracted from the seeds of which contains biologically active substances. The extract is added to a soap base consisting of a prepared base and saponified vegetable oils. During the soap preparation stage, the extract is added to preserve the active ingredients, and the resulting mixture is thoroughly mixed. Natural oils, glycerin, and essential oils are also added to enhance the skin's nourishing properties.

The resulting soap mass is a natural cosmetic soap with a cleansing, toning, and strengthening effect on the skin, capable of improving microcirculation, reducing swelling and redness (rosacea), and increasing skin elasticity and tone.

Conclusion

The study examined the production of cosmetic soap with horse chestnut extract and its beneficial properties. It was established that horse chestnut is a valuable plant material containing biologically active substances-escin, esculin, and flavonoids-which have anti-inflammatory, toning, and strengthening effects on the skin. The production technology for soap with horse chestnut extract preserves the activity of natural ingredients and creates a product with not only cleansing but also caring properties. This soap improves microcirculation, reduces swelling, redness, and fatigue, and increases skin firmness and elasticity. This cosmetic soap with horse chestnut extract is recommended for daily facial and body care. It is suitable for all skin types, especially sensitive skin prone to irritation and redness. Use 1-2 times daily. Apply to damp skin, lather, gently massage, and rinse with warm water. After use, it is recommended to apply a moisturizer or lotion to maintain the effect.

Regular use of this soap improves skin tone, reduces puffiness, and increases elasticity, leaving skin looking fresh and healthy. The development of cosmetic soap with horse chestnut confirms the potential of using plant-based raw materials in cosmetology. The use of natural ingredients contributes to the creation of environmentally safe and effective skin care products that meet modern requirements for the quality and naturalness of cosmetic products.

References.

1. Grebenyuk, V. A., Phytocosmetology: The Use of Plant Extracts in Cosmetics. Moscow: Cosmetics and Health, 2020.

2. Sokolova, E. I., Petrova, T. N., Natural Ingredients in Modern Cosmetology. St. Petersburg: Profession, 2021.

3. Litvinova, A. P., Soap Making Technology and Fundamentals of Cosmetic Chemistry. Moscow: Academy, 2019.

4. Semyonova, L. V., Horse Chestnut: Pharmacological Properties and Application in Cosmetology. Natural Cosmetics Magazine, No. 4, 2022.

5. GOST 28546–2002. Toilet Soap. General Specifications. Moscow: Standards Publishing House, 2002.

6. Khramova, N. V., Natural Soap Making: Technology, Formulations, and Application. - Ekaterinburg: Ural, 2023.

7.Ubbiniyazova A. M. Characteristic of a functional condition of an organism of workers of the Tashkent tractor plant //Medical magazine of Uzbekistan. – 2012. – С. 80-82.

8.Ataniyazova R. A. et al. Assessment of knowledge and skills of hand hygiene among representatives of three generations of the family living in different regions of Uzbekistan.

9.Madaminova M. A. et al. The dynamics are changes in organoleptic parameters and chemical composition of amudarya river water //European Journal of Molecular and Clinical Medicine. – 2020. – Т. 7. – №. 7. – С. 537-545.

10.Атаханова Д. О., Уббиниязова А. М., Садирова М. К. ОСНОВНЫЕ ГИГИЕНИЧЕСКИЕ ПРОБЛЕМЫ КЛАССИФИКАЦИИ ЗАГРЯЗНЕНИЯ ПОЧВ В КАРАКАЛПАКСТАНЕ //The Way of Science. – 2014. – С. 77.

11.Iskandarova G. T., Ubbiniyazova A. M. PROBLEMS OF ANTI-INFECTION PROTECTION IN BEAUTY AND HEALTH INSTITUTIONS //Медицинский журнал молодых ученых. – 2025. – №. 15 (09). – С. 202-205.