

receiving - growing, harvesting and processing). But gasoline can return only 80% of the energy spent on its production. In other words, bioethanol is highly profitable and not harmful to the environment.

In conclusion, I would like to say that biofuels are our renewable future!

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USING BLACKCURRANT POMACE (WASTE PRODUCT) IN COSMETICS

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The concept of greening and implementation of "green" technologies is one of the key trends in the development of modern chemical technology. Significant interest in industrial waste as a secondary resource in the production of chemically active substances, the demand for which is in various fields of chemical technology, especially in cosmetics, is based on the economic and environmental feasibility of their use.

Blackcurrant pomace was extracted by conventional maceration directly in a hydroalcoholic mixture of solvent (EtOH/H₂O 50/50). Such a hydroalcoholic solvent also revealed itself appropriate for the extraction of the compounds of cosmetic

interest from agricultural by-products. (Plainfosse, Trinel, Verger-Dubois, Azoulay, Burger, Fernandez, 2020, p.6)

Extract of blackcurrant pomace has a high antioxidant capacity and is rich in anthocyanins. Anthocyanins have a stabilizing effect and antioxidant properties. Anthocyanins will also give the cosmetic a light purple color. Saccharides have the following properties: moisturize, increase skin elasticity, rejuvenate and have an anti-aging effect. Citric and malic acids normalize the acid-base balance, improve skin respiration. Citric acid is also good in the treatment of acne, for people with oily skin, pigmentation, as an antioxidant to prevent premature skin aging.

Due to the component composition of blackcurrant pomace extract, it will be advisable to use it in a cosmetic lotion to provide moisturizing, healing and antioxidant properties, or in a hair dye, as anthocyanins, which are component of black currant extract, give a purple color.

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1. Plainfosse, H., Trinel, M., Verger-Dubois, G., Azoulay, S., Burger, P., & Fernandez, X. (2020). Valorisation of *Ribes nigrum* L. Pomace, an Agri-Food By-Product to Design a New Cosmetic Active. *Cosmetics*, 7(3), 56.

2. Rose, P., Cantrill, V., Benohoud, M., Tidder, A., Rayner, C., & Blackburn, R. (2018). Application of Anthocyanins from Blackcurrant (*Ribes nigrum* L.) Fruit Waste as Renewable Hair Dyes. *Journal of Agricultural and Food Chemistry*, 66 (26), 6790-6798.

PROSPECTS OF ARTIFICIAL INTELLIGENCE

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Everyone uses Microsoft Word spelling and grammar checker but is it enough. Using MS Word, it is not difficult to notice various typos are not accurate, and on the other hand, a lot of its suggestions are far from being correct. When we write a formal