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BOOK OF ABSTRACTS

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Production of liqueur from green walnuts using ionizing radiation

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Liqueur from green walnuts is one of the many traditional medicines in folk medicine. It owes its healing properties to the main ingredient - unripe green walnuts. Green walnuts are a natural reservoir of vitamin C, vitamin B complex, vitamin E, calcium, potassium, magnesium, phosphorus, iron, zinc and iodine. Liqueur made from green walnuts is mostly used for problems with the thyroid gland, anemia, and various stomach infections.

The liqueur is made by adding green walnuts to a container with sugar or honey and brandy, and leaving them to be exposed to the sun's rays for a period of 40 days. Photons accelerate the release of medicinal substances from green walnuts.

This period of exposure is quite long, the quality of the liqueur is affected by the amount of solar energy delivered during that period, and contamination may occur during manual handling. All these problems can be solved by using photons from a radioactive gamma source instead of photons from the sun.

The paper describes the process of obtaining liqueur from green walnuts using gamma radiation, as well as the comparison of the composition of liqueur obtained in the traditional way, with the effect of sunlight, and the application of an innovative method using gamma rays.

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