BIOACTIVE COMPONENTS OF ALLIUM URSINUM FROM TOMNATIC, CRAIULUI FOREST MOUNTAINS

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Abstract

This paper is based on studies conducted both in the field in the Craiului Forest Mountains but also on analyzes performed on soil and tincture of Allium Ursinum, collected, prepared and notified by us. The soil analyzes were performed in the OSPA Bihor laboratories, while the analyzes of the finished product were performed by the Bihor Public Health Directorate. The Allium Ursinum tincture studied in the DSP Bihor laboratories, comes from the plant harvested in the studied area from the Pădurea Craiului Mountains, namely from the area of Tomnatic village, Vadu Crișului commune, Bihor county. The allium ursinum, was harvested when the plant was maturing, when, according to specialists, the active principles of the plant are at maximum capacity to interact with the human body.

Key words: massive, spontaneous flora, climate, forest, allium ursinum

INTRODUCTION

The area, studied by us, corresponds from a qualitative point of view for the cultivation of medicinal plants and obtaining phytotherapeutic products: teas, tinctures, syrups, etc. The Pădurea Craiului Mountains area is an ecological area, unaffected by daily pollution only to a small extent. The results of the soil tests, made by OSPA Bihor specialists certify this. Soil structure is an important agronomic index, because it is a property on which some soil properties depend directly, especially the physical ones influencing the chemical and biochemical processes in the soil, the activity of microorganisms, the mobility of nutrients (Brejea, 2017). The Pădurea Craiului Mountains represent the compartment between the Crișului Repede and Crișului Negru valleys of the Apuseni Mountains, separated from Vlădeasa by the Iada and Meziad valleys, reaching the Tășadului Hills in the west, (Brejea, Domuța, 2009). Drumul Aștilenilor, the harvest point of bear's garlic is located at an altitude of 608 m, Latitude 46 54 41N and Longitude 22 26 46 E, in Tomnatic locality, Vadu Crisului commune.



Fig. 1. The road of the Aştilenilor- Tomnatic 2021



Fig. 2. The place of harvest of the Allium ursinum- Tomnatic 2021

At the same time, we managed to produce Allium ursinum tincture, and the analyzes made by the specialists of the Bihor Public Health Directorate confirm that the values of this tincture are clearly superior to other similar products existing on the shelves of specialty stores in Romania.

MATERIAL AND METHOD

Allium ursinum, also called "wild garlic", grows in forests and its leaves, with a slight smell of garlic, are a rich source of health. For fresh food and preparation, the young, young leaves are harvested in March and April. The Latin name of the wild garlic is Allium ursinum. It is a medicinal plant that grows in the alpine area or in plains with fertile soil, loving moisture.

Strong healing forces lie in it and it is said that bears also look for it when they come out of hibernation to clean their stomachs, intestines and blood. Because the leaves lose their healing function in the dry state, Allium ursinum tincture is prepared by chopping the green leaves, which are mixed with alcohol at 40 degrees, which is then left to soak for two weeks, preferably near a heat source. Allium ursinum, has a favorable effect on the digestive tract, colic, intestinal worms, worms, prevents insomnia, heart disorders, hypertension, also cleanses the kidneys and bladder, promoting urination (Treben, 2007). To see how well-known Allium ursinum is, we designed questionnaire on the degree of product satisfaction.

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Fig. 3. Question about the Allium ursinum

This product must be notified in order to be placed on the market. Consequently, Allium ursinum tincture was notified on the website of the European Commission (Cosmetic Product Notification Portal), where the data needed to approve the marketing of this product were presented. REFERENCE CPNP: 3795490 REFERENCE INDUSTRIAL: 1 VERSION: 1 Date of first notification 03/10/2021 10:37:37 Date of last change: 03.10.2021 10:37:37

The name of the product Shades (If applicable) Language

Tincture of <u>leurde</u> ID: 89211 Romanian

RESPONSIBLE PERSON: HERBAMON SRL The address of the responsible person: Romania, <u>Bihor</u>, <u>Oradea</u>,410211, Phone: 0040740936045 E-mail: <u>office@herbamon.ro</u>

Contact person: Matei Mircea The address of the contact person: Menlor, 410117 Oradea, Romania F-mail: mircea.matei3@gmail.com

Product imported into the community: No. Member State in which it was first placed on the market: Romania

Product details

Category level: 1 Physical forms: Liquid Packaging: Pressurized container Type of notification: exact concentrations CMR No one NANOMATERIALS No one NAME Capture 16 jpg Original label: photo original packaging: photo Capture 17 jpg

Fig. 4. Product Notification Data



Fig. 5 Commercial Presentation Of The Product

RESULTS AND DISCUSSION

Allium ursinum tincture is a hydroalcoholic solution which makes it very easily assimilated by the body. Contains 1: 2 extract in hydroalcoholic solution (ethyl alcohol / water - 45/55 by mass) from Allium ursinum leaves.

It is recommended for; to fluidize the blood, keep the concentration of cholesterol in the blood within normal limits, against fat deposition on the walls of blood vessels, protect blood capillaries, prevent sclerosis of blood vessels and promote cerebral circulation, eliminate the discomfort that occurs in: venous system of the lower limbs and hemorrhoidal veins, eliminates excess fluid retained in the body, maintains blood pressure within normal limits, detoxifies the body and fights intestinal parasites, protective role of cells against oxidative stress.

Do not administer, in bleeding, pregnancy, lactation (Allium ursinum transmits an unpleasant taste to milk), intolerance to any of the components of the product. It is administered with caution to people undergoing treatment with anticoagulant drugs. In people with gastric sensitivity, it is recommended to administer the product after a meal. The product is administered internally, before use the product will be shaken. Keep well closed, protected from moisture and heat.

CONCLUSIONS

Due to the fact that it has been scientifically proven that natural products are good for the body and to reduce the consumption of medicines we recommend you to consume natural products from ecological areas.

At the same time, besides the fact that the products are of quality, the spontaneous flora and the soil are not polluted, you can enjoy a walk in nature, and if you don't do this, we recommend you to buy products from us. Products beneficial to your health.

In conclusion: Take care of your health!

REFERENCES

- 1. Bandici Gh., 2001, Fiziologia plantelor lemnoase, Ed. Universității din Oradea
- 2. Bandici Gh, Borza Ioana, Ardelean Ileana, 2007, Ecoagricultură, Ed. Universității din Oradea
- 3. Bandici E. Gh., 2018, Fiziologia plantelor, Ed. Universității din Oradea
- 4. Brejea Radu, 2014, Tehnologi de protecția solului. Ed. Universității din Oradea
- 5. Brejea Radu., 2017, Soil protection technologies and Landscap reconstruction in North-West Romania, Publishing House. Academy of Scientists, pp. 136
- Breja Radu., Domuţa Cornel, Restoration and protection of lands from bauxite quarries in the Pădurea Craiului mountains, University of Oradea Publishing House, pp. 68
- 7. Brejea Radu, 2010, Soil science a guide to practical work. University of Oradea Publishing House.
- 8. Coiciu E. și Rácz G., Medicinal and aromatic plants, Romanian Academy Publishing House, Bucharest. 1962
- 9. Contz O., Oțelean Rodica, Bojor O., Jecu M., ICSMCF's contribution to the improvement of Romanian medicine. Bucharest Medical Publishing House, 1978
- 10. Corcheș Dorin, The state of soil supply with nutrients. OSPA BIhor, 2020
- 11. Cucu V., Bodea C., Cioacă C., , Treatise on plant biochemistry, IV, Medicinal and aromatic plants, Ed. Of the Romanian Academy Bucharest, 1982
- 12. Domuta Cornel, Brejea Radu, Monitoringul mediului University of Oradea Publishing House, 2010,
- Muntean Leon Sorin, Treatise on cultivated and spontaneous medicinal plants, Risoprint Publishing House, Cluj-Napoca, 2007
- 14. Salontai Al., Aromatic and medicinal plants, in Phytotechnics, E.D.P. Bucharest, 1983
- 15. Treben M., 2007, Health from the Good's Pharmacy, HungaLibri Publishing House, Satu Mare, 2008, pp. 30-31
- 16. https://lege5.ro/gratuit/gi2tsmrrgq/aspecte-generale-privind-cultivarea-plantelormedicinale-si-aromatice-ghid?dp=gu3dmnbtg4yts
- 17. https://www.agrim.ro/books/tratat-de-plante-medicinale-cultivate-si-spon tane/
- 18. https://docs.google.com/forms/d/1leFt5Z8mks9rB2yBeUgfQHJd_Fu8Jn4caxl48nh 9R5I/edit?pli=1&vc=0&c=0&w=1&flr=0&gxids=7628&pli=1#responses