

PLANTS KNOWN AND RECOMMENDED IN NATURIST MEDICINE. *ARMORACIA RUSTICANA*

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ABSTRACT

The supremacy of medicinal products obtained by large chemical companies, have pushed into oblivion miraculous plants, used for hundreds of years in natural treatments with miraculous effects in the treatment of various diseases, treatments less expensive but very effective.

This paper describes how to obtain and prepare a product made by me and which aims to study the benefits of the plant studied *Armoracia rusticana*, (known as horseshoe) and refers to obtaining a cream recommended for the treatment of rheumatic diseases, affecting joints, muscles and tendons. To obtain this cream we used horseradish roots harvested from our own garden in combination with food alcohol, bird fat, chilly and stretch foil. In order to obtain the 100% natural product, it was intended that all the products used should be natural, known to relieve rheumatic and muscular pain.

INTRODUCTION

Armoracia rusticana, (known as horseradish) is well known for its irritating, spicy and bitter taste. Herring is cultivated and widely used in the food industry as well as in traditional medicine.

Characteristic odor, taste and possible pharmacological effects come from the essential oil of the plant. Because nature has always been with humans to help, and many of its beneficial resources have remained or are still unknown, and most of the times have been forgotten or less popularized by those who know them, they have made some plants, fruits or vegetables that are true remedies for human health to remain in the shade (*Pandia O., 2013; 2014; 2019*).

The current context of research in the field of pharmacy is experiencing a reorientation towards natural medicine and implicitly towards plant products with special properties. The volume of scientific information in the field of

phytopharmacy has doubled in the last decade, concurrently with the improvement of the methods of analysis and of the apparatus necessary for such determinations of the active principles in plants (<https://agroteca.ro/horseradish>).

This ultra-fast development of the investigation methods is supported by intense researches that seek new resources not yet investigated (*Dobre L., 2010*).

Although traditional medicine makes full use of the therapeutic potential of indigenous plants that are extremely widespread in the flora of our country, they are very little used therapeutically at the industrial pharmaceutical level. These species, if proven to be rich in secondary metabolites and are widespread in indigenous flora, may constitute cheap alternative resources.

The proposed species, *Armoracia rusticana* is an extremely popular plant in

the territory of our country, on which the studies are extremely limited, being known as horseshoe. However, it is known in ethno medicine that it has a stimulating effect on the digestive system, it accelerates the intestinal transit through the laxative or purgative effect, on the outer airways it acts as decongestant and expectorant and is a good cardiac tonic, it treats gout and rheumatism with positive effects on chronic bronchitis (Canari D., 2016).

Substances contained in horseradish are anticoagulants, help regulate blood pressure, stimulate circulation in peripheral areas and increase the elasticity of blood vessels. The horseradish root, contains a lot of vitamin C, is beneficial to the circulatory and immune system, vitamins from complex B, is very rich in mineral salts: calcium, magnesium, sodium, potassium, iron, natural antibiotics, organic acids, contains volatile oil and glycosides sulfurates, which give rise to a substance called odorant which gives it irritating properties. The horseradish root also plays an ant parasitic, vermifugal and diuretic role (<https://www.stylecraze.com>). An argument that was the basis for choosing this theme was its spread on the territory of our country and the accessibility of this extremely high plant.

Internationally, horseradish has been mentioned in ancient writings by Dioscorides and Plinius. The herring was described in detail in the work of the medieval period, English herbal, by John Gerard (Kara R., et al., 2014). The introduction and commercial cultivation of horseradish in the United States in the nineteenth century has aroused the interest of American researchers.

At the beginning of the twentieth century, a great contribution was made by Robinson and Fernald by studying horseradish varieties (Yu J., 2010). Most studies on horseradish have taken place after the Second World War. In Europe,

Moravec had a great contribution to the research of horseradish culture by inventing a hybrid variety of horseradish adapted to the central-European climatic conditions, but also researching the methods of plant propagation (Munteanu N., et al., 2003). Current research on horseradish culture, in particular on its diseases, is being carried out by Babadoost, Uchanski, Bratsch and Shehata (Yu J., 2010).

MATERIAL AND METHOD

In order to obtain the 100% natural product, it was intended that all the products used should be natural, known to relieve rheumatic and muscular pain. The preparation of the product was carried out in the faculty laboratory on a number of three respondents who were our colleagues.

Thus, to obtain 500 grams of finished product, the following were used:

- horseradish roots 800 grams;
- 200 grams of poultry butter which has been melted and left cold for coagulation;
- food alcohol known as ethyl alcohol of agricultural origin min. 96[%] vol;
- red pepper 100 grams;
- stretch foil.

Method of preparation

Fresh main and lateral roots of horseradish were harvested and kept at 4°C for determinations. Because the roots are fibrous and cut hard they were cut and ground to be made as a paste, before mixing, using a commercial electric mixer for 5 minutes.

- preparing the horseradish root for the preparation of the composition;
- chopping red hot pepper;
- the mixture of the two products obtained
- add food alcohol until it passes over the composition;
- the mixture is made with the poultry lard and homogenized.



Photo.1. Preparation of horseradish root for preparing the composition

Source: authors

Due to the characteristic odor and tear effect of horseradish and pepper, the obtained composition was transferred to a glass bowl over which the ethyl alcohol was added until it was covered and hermetically sealed and stored in a cool place without much light. For 14 days as

it was left to macerate, the composition was mixed twice in two days and finally the content was filtered over which the poultry lime was poured. A slightly soluble homogeneous cream was obtained and stored in glass or plastic capsules.



Photo 2. a. completion of the preparation for maceration; b. filtration of the product resulting from maceration. c. cream preparation. Source: authors

The cream obtained is applied to the painful place and then wrapped with stretch foil and covered with a blanket to allow the warm temperature to flow slowly to the sick place. The time is 20-60 minutes and varies from person to person depending on how much it can withstand the irritating action and the cold sensation of the horseradish composition, which doubles the beneficial effect desired by the properties it has.

RESULTS AND DISCUSSIONS

Experimentation

The experiments were performed on our three colleagues aged 22-24 years of different sex, who had rheumatic pain and after applying the product we obtained in the laboratory the results were very good.

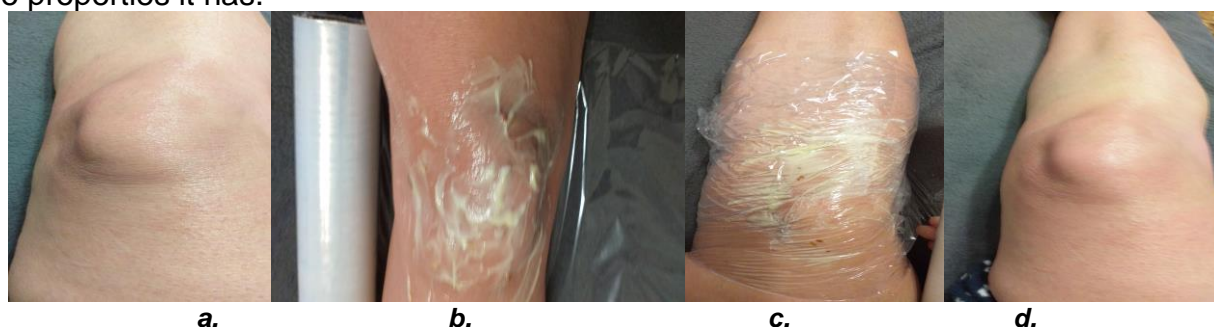
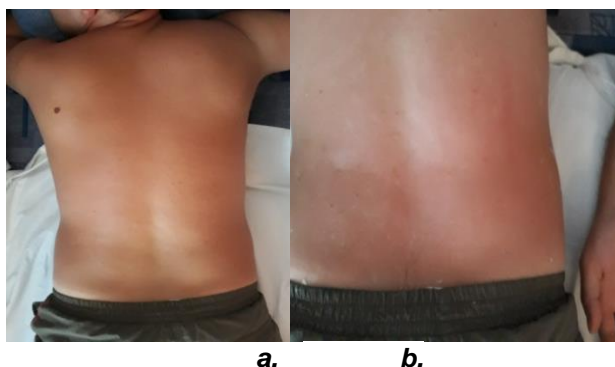


Photo 3. Application of cream on the knee: a. the appearance of the knee before application; b. covering the painful part with the product we have obtained; c. wrapping the knee with stretch foil; d. the result obtained after the removal of our product. Source: authors



a. b.

Photo.7. Application of cream on the lumbar area. a. the appearance of the lumbar before application; b. the result obtained after the removal of our product. Source: authors

From the resulting composition can be used at least 30 times depending on the place administered and the area administered where positive results were obtained after testing this cream on our colleagues who had symptoms of cold and agreed to test our cream them. After 4 applications our colleagues declared themselves satisfied with the result and were not obliged to buy drugs or other solutions in the form of rubbing. A skin

test is performed before application. Apply a thin layer on the smallest surface of the forearm and leave for 10 minutes. If the body supports the composition, then it can be applied on painful areas.

Contraindications

Its application is not recommended in pregnant women, epileptics, those with diabetes, cancer or diseases with hemorrhagic syndrome.

CONCLUSIONS

This preparation has a relatively low cost, but with the role of immediate relief of muscle aches and for a longer period of about 4-5 days, it can even cure.

Following these meetings, the three respondents are satisfied with the very good results obtained. The technical problem that solves the creation of this

100% natural product is that after the tests it proves that it is efficient, without contraindications, easy to administer, it can be prepared in the house and can be used for a longer period of time.

Also important is the storage mode, ie at low temperatures and without light sources.

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