STUDIES OF THE POSSIBILITY OF OBTAINING ECOLOGICALLY BASED CREAM CAPSAICIN IN THE TREATMENT OF RHEUMATIC DISEASE

Olimpia PANDIA¹, Ion SARACIN², Ion BOZGA¹, Daniel NIJLOVEANU¹

¹University of Agricultural Sciences and Veterinary Medicine, Bucharest, Romania Faculty of Management, Economic Engineering in Agriculture and Rural Development, Slatina Branch, 150, Strehareti Street, Zip Code: 0500, Slatina City, Olt County, Romania, Phone: 0788391615; E-mail: olimpia_pandia@yahoo, Phone:0745752957, Email: nijloveanu_daniel@yahoo.com, Phone:0726148524

²University of Craiova, Faculty of Agriculture and Horticulture, 19 Libertatii Street, Craiova, Romania, Phone:0744162539, E-mail: ion saracin@yahoo,

Corresponding author: olimpia pandia@yahoo.com

Abstract

Since herbal medicine makes strides to improve or cure of diseases or serious diseases to human, where preparations obtained by chemical are replaced successfully with herbal preparations obtained herbs, aromatic or those of spontaneous. Thus, in this paper, several attempts are made to prepare a capsaicin based creams ant rheumatic. This product is an environmentally friendly product, 100% vegetable produced in the laboratory as a base flossing a chilli extract obtained from private household, beeswax, distilled water, alcohol and peppermint oil. By obtaining this cream was intended to improve or cure people suffering from rheumatism, to relieve pain caused by arthritis, you know, is a readily available even at home, easy to manage, with immediate good results without side effects.

Key words: capsaicin, ecologically based cream, rheumatism, treatment

INTRODUCTION

The pepper (*Capsicum annuum* L) originates from Central America and South America. Christopher Columbus found the pepper in Haiti, where it was brought from, to Europe. [2]

The pepper is grown in Europe for the first time mid way through the 16th Century in Spain and Portugal, followed by Germany, England and Hungary.

The pepper reached Romania much later, being brought here by Bulgarian gardeners in the 18th Century. It was fist grown in the south of the country, and was later taken to other more favourable regions. [1]

Ascorbic acid is found in large quantities in the fruit of the pepper, this varies according to species, variety or the maturity of the fruit, reaching levels of 139-160mg/100g of raw substance for fruits arriving at technological maturity and 211-300mg/100g of raw substance for fruits arriving at physiological maturity, some species of the Capsicum

variety may reach higher levels up to 400mg/100g of raw substance — for the Capsicum frutescent species. [1]

Food, cosmetics and pharmaceutical industry successful attempts replacing all products obtained chemically by natural food. Modern agriculture today's together with all related sectors and spontaneous flora from our country, make researchers to do various studies and implement results obtained to promote natural food both in alimentation and herbal medicine, but also cosmetic medicine.

Today exists on the market various natural products derived from herbs, vegetables, fruits, etc. who started to be in high demand by consumers being healthier and easier to get. [4]

This study showed how to obtain a cream base which by adding pepper and other components, to be able to obtain a cream in the house for the relief of conditions and can be easy to prepare mainly for rheumatic pains.

Capsaicin, in modern medicine is used to obtain some medications, ointments, creams, salves having an analgesic effect and circulatory stimulant.

Quickness of pepper fruits is given by concentration of capsaicin from seeds and less from pepper pulp.

MATERIALS AND METHODS

To achieve the first cream was used hot pepper from the local populations harvested from own yard, at physiological maturity. Also was necessary harvesting mint plant (Menthe viridis) for extracting the mint oil which is rich in beneficial chemical compounds like menthol.

Menthol signals feeling cold by stimulating receptors and inhibit the receptors which react to painful stimuli (muscle pain and arthritis). The oil extract from mint plant contains a number of beneficial chemical compounds. To give consistency to natural cream beeswax was used, distilled water and alcohol.

In order to obtain the second cream other amounts of used pepper were used from the same local population instead of peppermint oil, menthol crystals and base for cream poultry fat, distilled water and alcohol.

RESULTS AND DISCUSSIONS

When hot peppers have reached full ripeness, were harvested and minced in particular in the seed spot where the capsaicin is present up to 80-90%.

Material obtained sits in clean trays in thin layers to dry naturally for 10 days. During this time always moving trays for ensure uniform drying.







Photo 1. Preparation of hot pepper to obtain the cream ant rheumatic

When hot pepper fruits were dried, transfer in a glass container than put alcohol 96⁰, containers are closed tightly and composition obtained leave to soak for 14 days, during which the container is shaken daily. After the soaking period, the composition obtained filtered wit filter paper to obtain a brown-red liquid.



Photo 2. Preparation tincture the chili powder and mint oil

In order to obtain oil of peppermint in household, fresh mint plant gather (leaves, flowers and stems) and boiled in a steel pot, glass or copper, which is fitted to the top where cover is 1 winding where vapors pass being copper or heat-resistant glass placed in a flask where cold oil pass.

At the end of the coil is a valve which is open when the pot boiling occurs and reaches T 105-110⁰ C (principle of distillation).

The liquid obtained is form by distilled water and mint oil which float over the water from the collection vessel. The oil obtained must be stored in small glass containers.

If you do not have in house this special dish made spearmint oil can be obtained placing plant mass on a stainless steel grid over which passes a steam. Liquid composed of oil and condensed steam is cooled and can be separated easily



Photo 3. Fat pussy cream base

Another component of the cream is beeswax which offers consistency to the cream and can be purchased from the honeycombs of bees or trade.

Also distilled water is needed which can be used on the one resulted from spearmint oil and gives a pleasant smell or boiled water and leave to cool.

In order to obtain 100 g of cream used for rheumatic pains in the house, use 20 g of beeswax and 80 ml of mint oil is heated in a tank with water at low heat. Separately, 20 ml of warm distilled water on which are placed 20 ml of the concentrate from pepper.

When the beeswax and oil were homogenized, the remaining water was separated and the remaining contents add a little chili concentrate.

The product obtained was allowed until cool, and to give more feeling cool and calming effects of menthol oil we can add 20-25 drops of it. After mixing last component of the cream obtained it is stored in cool places. The

product obtained is rich active principles, 100% naturals, pleasant smell, and removes burning sensation produced by capsaicin.

For the preparation of cream based on fat bird is easier to make. The grease collected from slaughtered birds melts; cream obtained is cooled and filtered.

Take 30 grams of chicken fat to melt mix. From concentration of alcohol and pepper take 30 ml and heat slightly, alcohol evaporation does not occur but menthol crystals 8g dissolve, after that you can add to 20 ml of distilled water. The composition obtained was mixed with poultry fat until they mix, after is put in recipes and it is let at cold temperature.

CONCLUSIONS

Treatment with capsaicin first time must be applied with caution, because each individual has a different reaction at a new therapeutic product, or may be allergic given the allergenic potential of capsaicin.

To obtain rapid effects for rheumatic pains, after applying the cream on the affected place applying a thermal insulator, and after a short time the place is heated and pains disappear. Treatments with obtained cream is shown to be made of 2-3 times per day for 4-5 weeks After using the cream, hands should be washed with soap and water, because as contact with eyes and lips are affected by

Use protective gloves for cream application for people with high sensitivity, with injuries, cuts and recent manicure done, or those that suffer from diabetes.

These creams made in house are cheap, can be prepared easily and quickly, have a period of six months use if they are kept properly and they are 100 % natural, and the results obtained in the treatment of rheumatic diseases is high.

REFERENCES

burning (hot).

[1]Andronicescu, D., Angelescu, H., 1968, Paprika, Agro Bucharest Publishing.

[2]Bereşiu Ileana, Voinea, M, 1977, Culture peppers and pepper paint production technology, Ceres Publishing House Bucharest.

Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development Vol. 14, Issue 2, 2014 PRINT ISSN 2284-7995, E-ISSN 2285-3952

[3]Mougou, A., Filali, N., Verlodt, H., Harbaoui, Y., 1988, Capsicum Newsletter, 7:44-47
[4]Olimpia Pandia., Sărăcin, I., Dinu Mariana, Chiriac, A., 2010, Variation content in vitamin C, carotene and protein depending on the local population of pepper in study. Analele Universității din Craiova, seria Agricultură- Montanologie – Cadastru, vol. XL/1:536 – 541