

OINTMENT FOR SKIN TREATMENT, AND METHOD OF ITS MANUFACTURE

The present invention relates to an ointment effective in the treatment of the skin, such as burns and psoriasis.

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The treatment of wounds and other damages to the epidermis is conceivably the oldest medicinal activity of mankind. Nevertheless, so far no broadly effective treatment has been found. Some proposals have been made on the basis of
10 herbal extracts (one example is EP 0 967 988 B1), but have proven to be of limited potential. Other proposals based on synthetic medicaments have adverse side effects, some of which may be severe. Thus, in recent years, the demand for a purely natural uhmedicament has increased.

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The present invention aims at overcoming the drawbacks of the prior art, and at providing an ointment that has a broader scope of indications and/or is more effective.

20 In this regard, the invention provides an ointment for skin treatment comprising extracts of at least juniper berries in a fatty base, a method of manufacturing the ointment and a composition mainly consisting of lipophilic extracts of juniper berries and several other ingredients.

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In the present application, treatment is to be understood as topical treatment. The extracts are made by admixing the ingredients to a fatty base, prolonged heating and subsequent filtering, and are therefore considered to be lipo-
30 philic; a detailed chemical analysis is not available.

The inventor has found that the ointment is effective in the treatment of burns including sunburns, herpes-induced lesions, neurodermitis, psoriasis, acne, insect bites or stings, hematomas, bacterially or virally infected lesions
5 of the skin and mucous membranes, and fungal lesions.

According to a first example, 832 g of suet were mixed with 125 g each of juniper berries (*Juniperus comm. fruct.*), roots of *Symphytum off.*, flowers of *Calendula off.*, leaves
10 of *Plantago lanceolata*, and flowers of *Matricaria chamomilla*, each of these ingredients in macerated dried form. These ingredients form a first group. The proportion by weight was thus 8.6 % for each of the five ingredients and 57 % for the suet as the fatty base. In general, the weight
15 proportion of each of the ingredients may be 6.5 % to 9.5 %, or more generally 5-10 %. Accordingly, the percentage by weight of the fatty base may range from 50 % to 60 % or even to 65 %.

20 According to a second example, the final ointment contains an additional 40 g of beeswax, or more generally 30-100 g corresponding to 2 - 3.5 % or -7 % by weight of the mixture.

25 In either case, the suet is heated to 150°C-200°C and held at this temperature for 5 minutes. The ingredients are then added to the heated fat and left to simmer for about an hour. Thereafter, the pot is left to cool for about 24 hrs. Then, the mixture is heated again to become just flowable
30 (about 30-40°C), and filtered by pressing it through a silk cloth. In the second example, the beeswax is then added and the mixture is again heated (to about 60-100°C) and stirred

to homogenize. In either case, the filtrate is then cooled and stored in the cool.

The constituents of *Juniperus comm.*, α -pinene, sabinene, α -cadinene, α -terpinene, γ -terpinene, and α -tujene (about 2.5 % ethereal oils), bring about the meritorious effect in combination with other ingredients of the first group. Juniper berries further contain invert sugar (33 %), resins (10 %), tannins (8 %), waxes, flavonoids, and juniperozide.

According to embodiments, ingredients of a second group are further added, namely *Equiseti herba* and/or *Hypericum perforatum*. Other constituents are not added, however.

The ointment is suitable for the treatment of skin and mucous skin (such as of nose, mouth, genital, and anal). In particular, the ointment is substantially free of heavy metals, such as lead, cadmium, chromium, nickel, arsen, and mercury. The ointment is usually slightly acidic (pH 4-5).

The fatty base is mainly (>50 % by weight) suet, i.e. bovine fat. If this is not available, a plant oil such as olive oil may additionally or alternatively be used.

It may be noted that while not all ingredients (except for juniper berries) are strictly required, the best results are usually obtained with the extracts of the first group in combination with juniper.

Claims

1. An ointment for topical skin treatment, comprising an extract of juniper berries, *Juniperus comm. fruct.*, in
5 a fatty base and further comprising at least one extract selected from a first group consisting of *Symphytum off.*, *Calendula off.*, *Plantago lanceolata* and *Matricaria chamomilla* wherein the first group consists of extracts from roots of *Symphytum off.*,
10 flowers of *Calendula off.*, leaves of *Plantago lanceolata* and flowers of *Matricaria chamomilla*.
2. The ointment of claim 1, wherein the constituents of the ointment includes an effective amount of *Juniperus comm.*, α -pinene, sabinene, α -cadinene, α -terpinene, γ -terpinene, and α -tujene (preferably about 2.5%
15 ethereal oils), in combination with other ingredients of the first group.
- 20 3. The ointment of claim 1 or 2, comprising at least two extracts selected from the first group.
4. The ointment of claim 1 or 2, comprising at least three extracts selected from the first group.
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5. The ointment of claim 1 or 2, comprising all four extracts constituting the first group.
6. The ointment of one of claims 1 to 5, further
30 comprising at least one extract selected from a second group consisting of *Equiseti herba* and *Hypericum perforatum*.

7. The ointment of claim 6, comprising all six extracts constituting the first and second groups.

5 8. The ointment of one of claims 1 to 7, wherein the fatty base is mainly comprised of suet.

9. A process of manufacturing the ointment of any one of claims 1 to 8, comprising heating the fatty base to
10 above 100°C, admixing the ingredients, and filtering the mixture to obtain the filtrate as the ointment.

10. The process of claim 9, wherein beeswax is added to the filtrate.

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11. The process of claim 9 or 10, wherein the total amount of the admixed dried ingredients is substantially in the range of two thirds to one third of the mixture, and the amount of the fatty base is substantially in
20 the range of one third to two thirds of the mixture.

12. The process of one of claims 9 to 11, wherein the mixture is heated to at least 150°C.

25 13. The process of claim 12, wherein the mixture is kept at substantially 150°C to 200°C for at least 1/2 hr.

14. The process of one of claims 9 to 13, wherein all four ingredients of the first group are used, and the
30 amounts of the dried ingredients are each in the range of at least one eighth and at most one half of the total amount of the ingredients.

15. An effective composition suitable for the treatment of skin and mucous skin (such as of nose, mouth, genital, and anal) comprising lipophilic extracts of juniper berries, *Juniperus comm. fruct.*, *Symphytum off.*, *Calendula off.*, *Plantago lanceolata* and *Matricaria chamomilla*; and preferably further includes *Equiseti herba* and *Hypericum perforatum*.
16. A process of manufacturing the ointment for topical skin treatment, comprising an extract of juniper berries, *Juniperus comm. fruct.*, in a fatty base including the steps of:
- providing a suet as a fatty base;
 - mixing into the suet each of juniper berries (*Juniperus comm. fruct.*), roots of *Symphytum off.*, flowers of *Calendula off.*, leaves of *Plantago lanceolata*, and flowers of *Matricaria chamomilla*, each of these ingredients in macerated dried form, wherein these ingredients form a first group, the proportion by weight was thus generally 5-10 % for each of the five ingredients and from 50 % to 60 % or even to 65 %;
 - heating the suet to 150°C-200°C and holding at this temperature for about 5 minutes;
 - adding the ingredients of the first group to the heated fat and simmer for about an hour;
 - allowing the mixture to cool for about 24 hrs;
 - reheating the mixture again to become just flowable (about 30-40°C);
 - filtering the mixture such as by pressing it through a silk cloth; and

h. cooling the filtrate and storing in the cool.

17. A process of manufacturing the ointment for topical skin treatment of claim 16, further including the steps of: the final ointment containing an additional beeswax, corresponding to 3.5 % or to 7 % by weight of the mixture; and as beeswax has been added the mixture is again heated (to about 60-100°C) and stirred to homogenize; and cooling the filtrate and storing in the cool.

18. An ointment for topical skin treatment, comprising an extract of juniper berries, *Juniperus comm. fruct.*, in a fatty base, in particular as obtainable from the process of any one of claims 9 to 14 or 16.

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Abstract

- 5 An ointment for topical skin treatment comprises an extract of juniper berries, *Juniperus comm. fruct.*, in a fatty base, and may further comprise *Symphytum off.*, *Calendula off.*, *Plantago lanceolata*, *Matricaria chamomilla*, *Equiseti herba*, and/or *Hypericum perforatum*.