Abstract Title: A preparation for treating mud fever in horses

A composition comprising petroleum jelly, silicone, phenoxy ethanol, chlorhexidine digluconate, triclosan, lanolin, calendula, allantoin, alpha bisabolol and at least one branched chain ester and which is suitable for treating equine mud fever. Preferably the branched chain ester is crodamol CAP (cetearyl octanoate and isopropyl myristate). The preparation may also contain panthenol, tee tree oil, zinc oxide or monopropylene glycol. The preparation may be used to treat mud fever, cracked heel, rain scald or rain rot.
A PREPARATION FOR
TREATING MUD FEVER IN HORSES

This invention relates to a preparation for treating Mud Fever in horses.

Mud Fever is an ailment that affects the legs of horses. The ailment is caused by the bacterium dermatophilus congoensis which lies in wet and muddy soil. When the legs of the horses become wet and muddy, the skin on the legs of the horses becomes soft. The soft skin is highly susceptible to infection from the dermatophilus congoensis. The Mud Fever is at its most potent in winter when rain and mud are usually in abundance. The Mud Fever is however an all year ailment and one which causes horses considerable problems. In addition to the skin on the horses' legs becoming soft in muddy and wet conditions, continual wetting and drying of the skin on the horses' legs often causes the skin to chap, which in turn facilitates entry of the dermatophilus congoensis into the horses' skin. Scratches and grazes also facilitate the entry of the dermatophilus congoensis.

It is an aim of the present invention to provide a preparation for treating Mud Fever in horses.

Accordingly, in one non-limiting embodiment of the present invention there is provided a preparation for treating Mud Fever in horses, which preparation comprises:
(i) petroleum jelly;
(ii) silicone;
(iii) phenoxy ethanol;
(iv) chlorhexidine diglucomate;
(v) triclosan;
(vi) lanolin;
(vii) calendula;
(viii) allantoin;
(ix) alpha bisabolol; and
(x) at least one branched chain ester able to seal an area being treated for the Mud Fever whilst allowing skin on the area to breathe.

The preparation of the present invention is such that the petroleum jelly and the silicon act as a barrier to help repel water from the skin of the horses' legs. The phenoxy ethanol, the chlorhexidine diglucomate and the triclosan act as germicidal ingredients for helping to kill the dermatophilus congoensis. The lanolin, calendula and the petroleum jelly act to soothe the infected area. The allantoin and alpha bisabolol act to heal the infected skin. The branched chain ester or esters act to enable the skin on the horses' legs to breath and this helps facilitate healing. The preparation provides a technically complex and advanced formulation for facilitating the removal of crusts and scabs associated with Mud Fever, the killing of the dermatophilus congoensis, and the provision of a sanitised and waterproof
barrier for helping to protect against re-infection. The affected area is resealed after application of the preparation, thereby helping to protect the affected area from wet any muddy conditions.

Preferably, the preparation comprises:

(i) 65 – 75% petroleum jelly;
(ii) 0.1 – 10% silicone;
(iii) 1% phenoxy ethanol;
(iv) 0.1 – 1% chlorhexidine digluconate;
(v) 0.1 – 1% triclosan;
(vi) 3 – 7% lanolin;
(vii) 2% calendula;
(viii) 0.1 – 1% allantoin;
(ix) 0.1 – 1% alpha bisabolol; and
(x) 2% of the said at least one branched ester.

As used herein, all percentages are by weight.

A variety of branched chain esters may be employed, either singly or combined. With a mixture of branched chain esters, then a preferred product is crodamol CAP, which is a blend of cetearyl octanoate and isopropyl myristate.

The preparation may include panthenol. Preferably, there is 0.1 – 1% of the panthenol in the preparation.

The preparation may include tee tree oil. Preferably, there is 0.1 – 1% of the tee tree oil in the preparation.
The preparation may include zinc oxide. Preferably, there is 5 – 12% of the zinc oxide.

The preparation may include monopropylene glycol. Preferably, there is 3 – 10% of the monopropylene glycol.

The preparation is preferably in the form of a cream. The preparation may however be in the form of a paste, salve, liquid or any other suitable form for external application.

Reference will now be made to the following Examples.

**EXAMPLE 1**

A preparation was formulated comprising the following ingredients:

(i) 65 – 75% petroleum jelly;
(ii) 0.1 – 10% silicone;
(iii) 1% phenoxy ethanol;
(iv) 0.1 – 1% chlorhexidine diglucomate;
(v) 0.1 – 1% triclosan;
(vi) 3 – 7% lanolin;
(vii) 2% calendula;
(viii) 0.1 – 1% allantoin;
(ix) 0.1 – 1% alpha bisabolol; and
(x) 2% crodamol CAP.

The above preparation was formulated by mixing the ingredients together at room temperature.
Some horses in a field were diagnosed with Mud Fever. They were so diagnosed by virtue of the fact that the legs of the horses had matted hair, crusty exudates, and scabs that had formed on the legs of the horses. It was noted that horses with white or hairless pasterns with pink skin tended to suffer more than those horses with hairy legs.

The infected legs of the horses were treated with the preparation. The preparation firstly assisted in the removal of the crusts and scabs so that the dermatophilus conglolensis bacterium was able to be eliminated. The preparation offered a sanitised and waterproof barrier that was able to protect against re-infection. The affected area was able to be sealed against the further ingress of dermatophilus conglolensis due to the horses being permanently in wet and muddy conditions.

It was found that one application of the preparation was able to have a sealing effect on infected areas for up to one week. This sealing promoted skin and hair regrowth.

The Mud Fever crusts and scabs were able to be removed easily and in a faster time than required by many known preparations for treating Mud Fever.

It was found that a re-application of the preparation once per week was effective to prevent the reoccurrence of the Mud Fever.

**EXAMPLE II**

Another group of horses were treated with the preparation of Example I. It was found that in addition to successfully treating the Mud
Fever, the preparation was also effective in treating cracked heals, rain scald and rain rot that are found in the horses.

It is to be appreciated that the Examples given above are for illustrative purposes and that modifications may be effected. Thus percentages other than those shown may be employed. In addition, the preparation may include other ingredients such for example as panthenol, tee tree oil, zinc oxide and monopropylene glycol.
CLAIMS

1. A preparation for treating Mud Fever in horses, which preparation comprises:
   (i) petroleum jelly;
   (ii) silicone;
   (iii) phenoxy ethanol;
   (iv) chlorhexidine diglucomate;
   (v) triclosan;
   (vi) lanolin;
   (vii) calendula;
   (viii) allantoin;
   (ix) alpha bisabolol; and
   (x) at least one branched chain ester able to seal an area being treated for the Mud Fever whilst allowing skin on the area to breath.

2. A preparation according to claim 1 and which comprises:
   (i) 65 – 75% petroleum jelly;
   (ii) 0.1 – 10% silicone;
   (iii) 1% phenoxy ethanol;
   (iv) 0.1 – 1% chlorhexidine diglucomate;
   (v) 0.1 – 1% triclosan;
   (vi) 3 – 7% lanolin;
(vii) 2% calendula;
(viii) 0.1 – 1% allantoin;
(ix) 0.1 – 1% alpha bisabolol; and
(x) 2% of the said at least one branched chain ester.

3. A preparation according to claim 1 or claim 2 in which there is a mixture of the branched chain esters.

4. A preparation according to claim 3 in which the mixture of the branched chain esters is in the form of crodamol CAP.

5. A preparation according to any one of the preceding claims and including panthanol.

6. A preparation according to claim 5 in which there is 0.1 – 1% of the panthenol.

7. A preparation according to any one of the preceding claims and including tee tree oil.

8. A preparation according to claim 7 in which there is 0.1 – 1% of the tee tree oil.
9. A preparation according to any one of the preceding claims and including zinc oxide.

10. A preparation according to claim 9 in which there is 5 – 12% of the zinc oxide.

11. A preparation according to any one of the preceding claims and including monopropylene glycol.

12. A preparation according to claim 11 in which there is 3 – 10% of the monopropylene glycol.
Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

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<th>Relevance to claims</th>
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The following online and other databases have been used in the preparation of this search report

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