

## **SHORT COMMUNICATION**

## **OPEN ACCESS**

# Rice Riche - Rice Bran Oil based Pain Relieving Gel M. Mohibbe Azam\*

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Rice bran, a by-product of the rice processing industry is a potential source of edible and healthful products and is a rich source of various micronutrients, protein and high quality oil. Oil (RBO) contains various antioxidants including vitamin E, oryzanol. These antioxidants fight with free radicals and slow down the effect of aging. The oil which is popularly known as rice bran oil (RBO) is very light and is easily absorbed in the skin. With this in view, the present product for relieving pain was developed.

The aim of the present invention is to provide a topical composition for fast relief of aches and pains of muscles and joints associated with simple strains, bruises and sprains.

Another object of the present invention is to provide compositions containing analgesic/anti-inflammatory agents dissolved in fast absorbing rice bran oil for quick penetration of the active components.

This product can be prepared in one hour duration and production cost at laboratory level is around Rs. 18.50 (for 33 g) which does not include labor charges and energy cost.

#### Feature and benefit of the invention

The product of the present invention is a herbal formulation containing rice bran oil. The composition is either in gel form or in liquid form. Both the forms are stable at room temperature for an extended period of time without spoilage. Oryzanol and other anti-oxidants present in the oil improve shelf life of the product. As the rice bran oil has quick absorbing property, dissolve active ingredients in the composition get absorbed fast and provide quick relief. The composition is new, very safe, eco-friendly and does not produce any harmful effects (Fig. 1).

# Comparison with related products available in the market

Topical pain relieving compositions are commercially available. These topical compositions are often used to treat sore muscles, pain associated with the joints of a body, arthritis and other similar conditions. Many of these topical compositions are thick and have a heavy texture. Such products typically take a considerable amount of time to reach the desired area of treatment. Additionally, these compositions often leave an oil residue on the surface of the skin leaving the skin feeling greasy, slippery, and wet until the material is either

ultimately absorbed into the skin or is sufficiently rubbed off the surface of the skin. This oily residue remaining on the skin can provide an uncomfortable feeling for the person as well as get on clothing worn by the person. Product of the present invention takes care of these problems.

### Feedback of the users

Fifty persons (both gender) suffering from different kind of pain were provided with 50 g sample of pain relief composition, along with a questionnaire for continuous use of the product for at least one week. The identified persons were monitored periodically for follow-up action on actual use of the product. The analysis of data revealed that 100 % users reported that they are satisfied or extremely satisfied with the performance of the product. They got immediate relief from muscle pain/sprain/joint pain.

The product absorbs quickly, it was felt by majority of the users (57%). 57% respondents felt that the smell was verypleasant while remaining (43 % users) also reported that the smell is pleasant. None of the users found the smell unpleasant.

Vey high percentage of the respondents (71.5%) felt that this product was better / much better than the available products in the market. Remaining users (28.5%) also found that the product was at par with the available products. None of the users found the product inferior to market products.

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Fig. 1. Gel made of rice bran oil - Rice Riche pain relieving gel