

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/380374253>

Development and analysis of novel herbo-mineral analgesic ointment

Conference Paper · May 2024

CITATIONS

0

READS

61

3 authors:



[Michelle Caroline Buultjens](#)

University of Colombo

1 PUBLICATION 0 CITATIONS

SEE PROFILE



[Herapathdeniya S.K.M.K](#)

University of Colombo

73 PUBLICATIONS 25 CITATIONS

SEE PROFILE



[D. M. Nallaperuma](#)

University of Colombo

17 PUBLICATIONS 1 CITATION

SEE PROFILE

Development and analysis of novel herbo-mineral analgesic ointment

M.C.Buultjens^{1*}, S.K.M.K.Herapathdeniya¹ and D.M.Nallaperuma¹

¹Faculty of Indigenous Medicine, University of Colombo, Sri Lanka

Abstract

Pain occupies a special place in the discussion of the nervous system. People are seeking quick pain-relieving medications as it is one of the most annoying and uncomfortable sufferings that causes great harm. The objective of this study was to develop and analyze a novel herbo-mineral analgesic ointment with reference to the *paribhasha* of *Malahara kalpana* in *Ayurveda*. Initially decoction was prepared using *Vitex negundo*, *Oroxylum indicum*, *Zingiber officinale* and *Salmalia malabarica* as herbal ingredients and purified Sulphur as the mineral component. Sulphur was purified using cow's milk. The prepared decoction was freeze-dried. The freeze-dried aqueous extract was mixed with bee's wax, sesame oil and camphor in a ratio of 1:6:1. Two samples of the ointment were prepared. Sample A was prepared by adding 0.2% Potassium sorbate as a preservative and sample B was prepared without adding any preservative. Then the physicochemical parameters, pH value, moisture content, total ash value, phytochemicals, TLC and HPTLC were carried out. All tests were performed at room temperature. Results of organoleptic parameters revealed that the ointment was brown in colour, oily in consistency, with a smooth texture, a pleasant camphor odour and uniform in nature. pH value was found to be 5, which is favourable for the skin. Moisture content was 7.8%, and total ash value was 0.85%, which is within the standard limits for an ointment. HPTLC (Toluene:Hexane:Ethyl acetate – 1:1:1) fingerprint of the methanol extract was reported with 8 peaks. Phytochemical analysis of the extract indicated the presence of tannins, alkaloids and flavonoids in the methanol extract of the ointment. The results of the pharmacodynamic properties and analysis of phytochemicals concluded that this ointment possesses an analgesic action, which could be due to the presence of these bioactive compounds in the ointment.

Keywords: Analgesic, Herbo-mineral, HPTLC, *Malahara kalpana*, Ointment

michelle.c.buultjens@gmail.com 0772673356