## Preparation and physicochemical evaluation of herbal semisolid formulation from common malva

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**Introduction**: *Malva Sylvestris* has been used orally for inflammation of respiratory tract and laxative and mucolytic. Furthermore, sheets of this plant have been applied for treatment of skin ulcers and skin local inflammation from long time ago. In this investigation we tried to make best formulation of ointment for this plant in order to treat the skin ulcers in future studies.

**Method**: sheets of Malva were collected and dried, and then the hydroalcoholic extract was prepared with maceration technique. Different formulations of ointment were prepared and the best formulation based on texture and appearance was chosen and physicochemical properties such as viscosity, pH, consistency and spreadability were studied. In addition, release of extract from best formulation applying suitable membrane and assay of phenolic contents were studied.

**Results:** The best formulation of ointment was prepared applying the ingredients such as cholesterol, stearyl alcohol, petrolatum gelly, propylene glycol, paraffin, water and the plant extract. Appearance of ointment was acceptable. The physicochemical properties was according to acceptable criteria and release studies was done based on phenolic compounds. The kinetics of release was zero order and really surprising. Also, the stability studies were performed and the results showed stable ointment after 6 months.

**Conclusion:** we aimed to prepare a semisolid formulation of the plant "Malva sylvestris", as the traditional medicine documents claim for therapeutic effects on skin and ulcer. An acceptable formulation of plant extract was prepared and good results were achieved for physicochemical evaluation. We hope that after more stability and in-vivo studies, we could present a product in the close future.

**Key word:** common malva, ointment, herbal formulation, physicochemical evaluation

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