ABSTRACT

CHARACTERISTICS, PHYSICAL STABILITY, EFFECTIVENESS OF DERMAL COLLAGEN IMPROVEMENT AND ACCEPTABILITY OF TEMU GIRING (Curcuma heyneana Val.,&V.Zijp.) EXTRACT SCRUB

Traditionally, temugiring is often used as scrubs. Temugiring rhizome contains curcumins which are efficacious as antioxidants. Scrub formulas in this research are shake scrub, A/M cream scrub and M/A cream scrub. This research aims to determine the effect of dosage forms and cream types on the characteristics, physical stability, the effectiveness of dermal collagen improvement, and acceptability. The physical stability testing was conducted with the freeze and thaw cycle method. The effectiveness testing was carried out by using experimental animals exposed to the UV-B rays of 1140 mJ/cm^2. Organoleptically, the shake scrub is yellow with a distinctive strong aroma; the A/M cream scrub is brownish yellow, semisolid with a distinctive aroma; the M/A cream scrub is yellow, semisolid with a distinctive aroma. The pH value of the three scrub formulas corresponds to the pH of the skin. The A/M cream scrub does not meet the dispersive power requirement. The A/M cream scrub is also more occlusive. All of the scrub formulas effectively improve the dermal collagen. In the preference criterion, the shake scrub is the most acceptable. In the feeling criterion, the M/A cream scrub is the most acceptable. In the ease of use criterion, ease of scrub rubbed on skin parameter is acceptable for the shake scrub, ease of scrub removing from skin parameter is acceptable for the M/A cream scrubs, and ease of scrub applied on skin parameter is acceptable for the A/M cream scrub. Differences in dosage forms and cream types can affect the characteristics, physical stability, the effectiveness of dermal collagen improvement, and acceptability.

Keywords: scrub, temugiring, characteristics, collagen, acceptability