ABSTRACT

Nur Rozalina, Formulation of Hand Sanitizer Gel from Red Ginger Extract (Zingiber officinale Var Rubrum Rhizoma). Supervised by Elok Widayanti, S.Si,. M.Si.

Red ginger extract (Zingiber officinale Var Rubrum Rhizoma) contains flavonoids, phenols, essential oils, triterpenoids and tannins which can provide antibacterial activity. Therefore, red ginger has the potential to be used as an antiseptic in the form of hand sanitizer gel. The aim of this research is to create a red ginger extract hand sanitizer gel formulation based on carbopol 940. This research uses a laboratory experimental method by extracting red ginger by maceration which is then continued with gel preparation formulations with concentrations of 5%, 10%, 15% and 20%. %. Gel evaluation includes organoleptic tests, homogeneity, spreadability, pH and irritation. Research shows all gels are homogeneous. The color of the extract gel, ranging from bright light brown to cloudy light brown to blackish brown, has a distinctive extract aroma and semi-solid form. The spreadability of red ginger extract gel still meets the range of a good gel. In the pH test, it still did not meet the parameter requirements for the gel preparation. The irritation test showed that all preparations gave negative results. The results obtained, red ginger extract gel can be formulated as a hand sanitizer gel preparation.

Keywords: Red ginger extract (Zingiber officinale Var Rubrum Rhizoma), hand sanitizer, formulation