

ABSTRACT

FREEZE-THAW STABILITY TESTING OF GREEN BELT LEAF EXTRACT LOTION PREPARATION (Piper betle L) and BELIMBING WULUH (Averrhoa bilimbi L)

Increasing public awareness of the importance of maintaining healthy skin is a driving factor in increasing demand for cosmetic products to maintain and care for skin. Plants that have antioxidant properties are green betel leaves (Piper betle L) and star fruit (Averrhoa bilimbi L). In terms of practicality and convenience, these two plants are prepared in lotion form. This research aims to determine the ability of green betel leaf lotion (Piper betle L) and star fruit (Averrhoa bilimbi L) to remain within the specified specifications during storage and use, which was carried out by freeze thaw stability testing for 6 cycles at different temperatures, namely a temperature of 4 °C and a temperature of 40 °C for 24 hours then the physical characteristics of the lotion preparation were tested. The organoleptic test results showed that F1, F2 had a slightly liquid consistency and F3 was slightly thick, light brown in color and had a typical jasmine odor. In the homogeneity tests F1, F2, and F3 the results obtained were homogeneous and there were no coarse grains or separated particles in the preparation. In the pH test, the results of the paired t-test F2 (0.030) changed significantly <0.05, F1 (0.081) and F3 (0.077) did not change significantly >0.05. In the dispersion power test, the results of the paired t-test F1 (0.026) and F2 (0.006) changed significantly <0.05, F3 (0.119) did not change significantly >0.05.

Keyword : Lotion, Stability test, Physical characteristics, Freeze thaw