

ABSTRAC

Rose Febriana Widyanti NIM 20160010014 S1 Clinical and Community Pharmacy Study Program	Advisor apt. April Nuraini, S.Farm. M.Farm NIDN.0717048303
<i>THE FORMULATION AND EVALUATION OF ASTAXANTHIN GEL AS SUNSCREEN</i>	
<i>ABSTRACT</i> <i>Sunscreen was a cosmetic preparation that can physically or chemically reflect or actively absorb sunlight, especially in areas with UV wave emissions so that it can prevent skin disorders due to UV rays. One of the compounds that has the potential to be a sunscreen is astaxanthin because it can protect skin damage due to UV rays exposure by reducing the enzyme tyrosinase so that it has the ability to exert its photoprotective effect by absorbing UV energy. The purpose of study is to determine the physical evaluation of sunscreen gel and SPF value of astaxanthin compounds with different concentrations.</i> <i>The method used in this study was the true experimental method. The sample used was astaxanthin with concentration variations, namely F1 (0.5%), F2 (1%), F3 (2%). The tests was carried out included organoleptics, homogeneity, pH, adhesion, dispersion and SPF value tests using UV-Vis spectrophotometry with a wavelength of 290-320nm.</i> <i>The results of this study showed that the gel preparation had met the physical standard, but the dispersion value at F0 was not in accordance with the standard of a good gel preparation. The highest SPF value of astaxanthin gel preparations, which was at F3 10.8, is in the maximal category. The results of statistical test analysis with one-way anova on the pH test were obtained $p=0.000$ ($p<0.05$) and adhesion was obtained $p=0.041$ ($p<0.05$), meaning that there was a significant difference in the concentration of astaxanthin sunscreen gel. Meanwhile, in the dispersion test, $p=0.655$ ($p>0.05$) was obtained, meaning that there was no significant difference in the concentration of astaxanthin sunscreen gel.</i>	
<i>Keywords : Astaxanthin, Sunscreen, Gel</i>	