Agus Setiawan, 2011, “Synthesis and Characterization Bioselulosa - Chitosan And Utilization In Medical Field”, This Final Assignment under guidance Drs.Djoni Izak R.,M.Si and Jan Ady, S.Si.,M.Si, Physics departement, Faculty of Science and technology, Airlangga university.

Abstract

In the studies have been conducted by making bioselulosa-chitosan material by using 100 ml of palm sap, 10 grams sucrose, 0.5 grams of urea, then stirred in the mix and added acetic acid to pH 4. Further variation is added chitosan mass of 1 gram, 2 grams, 3 grams, 4 grams and 5 grams. To this mixture was added 20 ml of Acetobacter xylinum then fermented diving 8 days. The results obtained in the form of a layer that floats on the surface pelikel media, after it dried, forming a layer pelikel bioselulosa-chitosan coating material. This material is expected as a multifunctional material. From FTIR analysis of test results, Pull Test, Test morphology and Test Swelling, the best results shown by the addition of 3 grams of chitosan mass because it has the most delicate surfaces, the greatest strength of 11876.64 N/cm², elastic 3.278689% and the percentage of swelling 59.1472%.

Key words: Bioselulosa and chitosan