

V. CONCLUSIONS AND SUGGESTIONS

A. Conclusions

Based on the results of the study, it can be concluded that :

1. The encapsulation of LAB LG-90 using sodium alginate was able to maintain viability in the simulation of stomach acid and small intestinal pH pressure for 60 minutes continuously compared to LAB LG-90 without encapsulation. The encapsulation treatment with sodium alginate produced a viability of 46.04%, while the addition of pineapple juice in the encapsulation of sodium alginate resulted in a viability of 40.89%.
2. The encapsulation of LAB LG-90 with sodium alginate and pineapple juice was able to maintain viability during 4 weeks of storage at 4°C.

B. Suggestion

Based on the research that has been carried out, there are several suggestions, namely:

1. The viability test of LAB LG-90 encapsulated in sodium alginate and pineapple juice in the simulation of stomach acid and small intestinal pH conditions should be carried out with the addition of enzymes present in the gastrointestinal tract to obtain more representative results.
2. The viability test of LAB LG-90 encapsulated in sodium alginate and pineapple juice during storage at 4°C needs to be compared with storage at room temperature to determine the difference in viability stability.