



CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

In this work, the enzymatic hydrolysis was performed by using two effective isolates (strain A 002 and M 015), *Microcerotermes* sp., from Thai higher termites. The optimum conditions for the maximum glucose production were from the hydrolysis of the 60 mesh size corncob with the strain A 002 at 37 °C about 1.08 g/L. The bacteria strain played an important role on the hydrolysis. The type of production media has an important effect on glucose production. Both bacteria strains did not work under other mineral mixture except 65 modified DSMZ broth medium 2 without CMC. The glucose concentration from strain A 002 was much higher than that from strain M 015. The glucose production of both strain at 37 °C operating temperature was higher than at 30 °C.

5.2 Recommendations

The recommendations for future work as follows:

1. The effect of corncob pretreatment on the hydrolysis should be investigated.
2. The enzymatic hydrolysis using bacteria should be compared with commercial cellulase enzyme in order to evaluate an activity and cost.