CHAPTER XI

CONCLUSION AND RECOMMENDATION

11.1 Conclusion

Yeast extract could be produced from spent brewer's yeast at 10.86% nitrogen (based on dry weight), 11.06 mg/100 g riboflavin as recommended by standard commercial autolysed yeast extract (The Oxoid Mannual, 1968) with following aspects :

1. Nitrogen content of spent brewer's yeast is relative constant. Methods of washing yeast cells by alkaline and distilled water do not seriously affect yeast extract product.

2. The factors that will affect yeast autolysis are incubating temperature and addition of papain.

The optimum incubating temperature for yeast autolysis is 40° to 50° C. At the lower temperature of 30-40° C, the addition of preservative agents such as sodium chloride and ethanol is necessary to suppress putrefaction.

The optimum dosage of papain in yeast slurries is 0. 1% (based on dry weight of yeast protein).

3. The yeast extract obtained is characterized by high riboflavin, high amino acids, and it is able to used for glucose isomerase production.

11.2 Recommendation for further study

The experiment described in this investigation is only a preliminary study on the production of yeast extract from spent brewer's yeasts. Further efforts should be made to :

1. explore the pilot process of producing yeast extract.

2. establish the potential marketing of the product prior to further development for commercial production.