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KEY WORD: HONEY FRUIT WINE/ WINE/ WINE YEAST/ HONEY

MANANYA SOMBOONSUP : PROCUTION OF HONEY FRUIT WINE FROM SOME THAI AGRICULTURAL PRODUCES. THESIS ADVISOR : ROMANEE SANGUANDEEKUL, Ph.D., 88 pp., ISBN 974-584-470-5

This research involved the study and development of honey fruit wine production using honey from kapok (Bombak ceiba Linn.) as material. Three strains of Saccharamyces cerevisiae : Montrachet (Mn), Pasteur Champagne (Ch) and Epernay 2 (Ep) were used to ferment mead. It was found that the fermentation rate of yeast strains was in the order of Ch, Mn and Ep respectively. Ch produced more essential favour substances i.e. glycerol, ethylacetate, acetaldehyde, total titratable acidity, volatile acid and non-volatile than Mn and Ep. Besides that the sensory evaluation revealed that Ch was more acceptable ($p \leq 0.05$) than the others. Thus, Ch was selected for further experiment. Agricultural produces i.e. tamarind (Tamarindus indica Linn.), roselle (Hibicus sabdarifita Linn.) and pineapple (Ananas comosus (L) Merr.), were used for production of honey fruit wine. Appropriate levels of fruit were selected by using tamarind and roselle at 1.5, 2.0 and 2.5% (w/v), pineapple at 10, 20 and 30% (v/v). It was found that the optimum level for tamarind, roselle and pineapple were 2.0, 2.5 and 30% respectively. Honey roselle wine 2.5% contained more essential flavour substances than the others. From sensory evaluation, honey roselle wine 2.5% was more acceptable than honey tamarind wine 2.0% but no significant difference ($p > 0.05$), honey pineapple wine with significant difference ($p \leq 0.05$) acceptable. Finally, appropriate level, of sucrose and ethanal added to produce fortified honey fruit wine were selected by varying sucrose concentration at 0, 2, 4 and 6% (w/v) and ethanol level in wine at 11.5, 14, 16 and 18% (v/v). It was found that the wines produce by all treatment combinations had nearly the same level of essential flavour substances and 3-methyl-1-butanol and they were all in the acceptable range. Sensory evaluation revealed that the best fortified honey fruit wine contained 2% sucrose and 16% ethanol but with no significant difference ($p > 0.05$).