

C626612 : MAJOR BIOTECHNOLOGY

KEY WORD: MA-KIENG / MEAD / HONEY / MA-KIENG MEAD

ANGKANA CHAWENGPUT: MA-KIENG MEAD FERMENTATION AND CHANGES MA-KIENG MEAD BY SOME YEAST STRAINS DURING FERMENTATION AND MATURATION

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Quatitative value of chemical changes of Ma-Kieng (*Cleistocalyx operculatus* var. *paniala*)

mead using honey from Siam weed (*Eupatorium odoratum* Linn.) was studied. The must was adjusted to total acidity of 0.5 and 0.6% as citric acid. Three strains of *saccharomyces cerevisiae*: Montrachet (Mn)

Bayanus (Ba) and Burgundy (Bu) were used to ferment Ma-Kieng mead. The results indicated that quantitative value of reducing sugar, sucrose and anthocyanin content were decreased during fermentation and maturation. Besides that essential flavour substances i.e, total acidity, volatile acid, non-volatile acid, glycerol, ester and intensity of colour increased during fermentation and maturation. The fermentation rate of yeast strains were in the order of Ba, Bu and Mn. The must with 0.6% total acidity resulted in wine with higher alcohol content and essential flavour substances than the one with 0.5% total acidity. Sensory evaluation revealed there were no significant difference ($p > 0.05$) of wine produced by different yeast strains but the panelists accepted Ma-Kieng mead prepared from the must of 0.6% total acidity more than the other ($p \leq 0.05$).

ภาควิชา.....

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