

## ABSTRACT

Armand Yahyapermana (000000026715)

### **UTILIZATION OF KEY LIME (*Citrus x aurantiifolia*) AS SUBSTITUTE OF ACIDIC COAGULANT IN TOFU PRODUCTION**

Thesis, Faculty of Science and Technology (2020).

(xii + 42 pages; 3 figures; 11 tables; 3 appendices)

Key-lime (*Citrus x aurantiifolia*) is a fruit widely known for its high citric acid content. The objective of this research was to utilize key lime (*Citrus x aurantiifolia*) as substitute of tofu coagulant. Tofu production required coagulant in order to coagulate the soymilk into tofu curd. As key-lime is still underutilized although it is a part of local commodity, the high citric acid content in key-lime can be used to coagulate soymilk into bean curd. In general, the types of coagulant used in producing tofu are synthetic. As consumers are looking for more organic-food due to the fear of consumption of chemical component in food, natural food additive such as key-lime can be utilized to produce healthier food, specifically tofu. The general objective of this research is to utilize key lime (*Citrus x aurantiifolia*) as substitute of tofu coagulant. This research was conducted in two main stages, in which the first stage focused on observing the different concentration of natural coagulant used (15, 20 and 25%) and the different coagulation temperature (60, 70 and 80 °C). The second stage focused on sensory and hedonic test on three selected parameters for the best treatments. The selected treatments for tofu production was the tofu made at coagulation temperature of 80 °C by using 25 % natural coagulant which resulted in the protein content of 91.3550 %, moderate bulk yield of 26,2144 %, and moderate fat content of 24.94± 2.09%.

Keywords: Regular Tofu, Momen tofu, Key lime, natural coagulant

Reference: 19 (2000-2020)