## **ABSTRACT**

Tofu is a product of food seems like soft solid making from the process of soy beans with principle protein deposition or without the addition allowed of other material. The purpose of this research was to study the best consentration of averrhoa bilimbi extract to produce the best winged bean tofu characteristic and the best temperature for coagulation process to produce the best winged bean tofu characteristic. The model of experimental design used in the making winged bean tofu research is Group Random Design (RAK) with two factors, three times repeats, and so obtained 27 unit of the experiment. Experimental variables include consentration of averrhoa bilimbi extract that is 4%, 6%, 8% and the coagulation temperature 60 °C, 70 °C, 80 °C. A chemical respon is a content protein analysis, content dust analysis, and crude fiber analysis. The research result obtained that immersion of Martin method modification and the best determine is that method the result for content dust analysis is 0,5% and crude fiber analysis is 2%. The result of duo trio test for the best three sampel winged bean tofu is  $k_1s_1$ ,  $k_3s_2$ ,  $k_1s_2$  no significant difference with milk tofu control. Consentration of averrhoa bilimbi and coagulation temperature and interactions are both influential to protein content. Coagulation temperature is not influential to dust content. Consentration of averrhoa bilimbi and coagulation temperature and interactions are both is not influential to crude fiber content.

**Key Word**: Tofu, winged bean, goats etawa milk, averrhoa bilimbi, and coagulation.