ABSTRACT
Zinger (Zingiber Officinale) is the most popular plant as medical material and spices. In the daily life, zinger is used as season, flavor agent and taste agent for snack etc. While for drinks, it could be made in the form of syrup and hot drink. The zinger effervescent tablet is made of zinger extracted into powder and added by main ingredients, they are citrate acid and bicarbonate sodium, and other ingredients as stabilizers, they are sucrose and dextrose, then made into effervescent tablet. The purpose of the research is to make diversification of zinger into functional food product in the form of effervescent tablet. The special purpose is to examine the influence of citrate acid and bicarbonate sodium addition concentration on the zinger effervescent tablet and its influence on the physical, chemical characteristics and organoleptic.

The research was held using Group Random Design (RAK) that was factorial arranged, consisting of 2 factors, 3 repetitions. The 1 factor is concentration of 10%, 15% and 20% citrate acid. The 2 factor is the bicarbonate sodium addition of 30%, 40% and 50%. The parameters include solubility, pH, texture, water content, oleoresin content, viscosity, color test consisting of bright level, redness, yellowness, and organoleptic (taste, flavor, color and tablet appearance)

The research result shows that there is interaction between concentration of citrate acid and bicarbonate sodium concentration on the tablet stiffness, water content, viscosity and oleoresin content of zinger effervescent tablet. The best zinger effervescent tablet is from the combined treatment of concentration of 15% citrate acid and 50% bicarbonate sodium, where the stiffness is 37.00 kg/cm², the solubility is 0.01 g/dt, the yellowness level (b+) of tablet is 17.73, the bright level (L) is 88.70, the redness level (a+) of tablet is 0.97, the yellowness level (b+) of solution is 6.3, the bright level (L) of solution is 51.70, the redness level (a-) is 2.9, the water content is 5.94%, the oleoresin content is 1788.31 ppm, the pH of solution is 7.44, the viscosity of solution is 33.25 cps, the tablet appearance is 3.25 (slightly interesting), the drink color is 2.81 (slightly interesting), the drink flavor is 2.94 (rather hard) and the drink taste is 2.88 (slightly delicious).