Thesis Title	Effect of Blanching Condition on Firmness of Babycorn
Thesis Credits	12
Candidate	Miss Panaikorn Chanamporn
Supervisors	Dr. Ampawan Tansakul
	Assoc. Prof. Dr. Sakarindr Bhumiratana
	Mr. Suwit Siriwattanayotin
Degree of Study	Master of Engineering
Department	Food Engineering
Academic Year	1999

Abstract

The objective of this research was to study the effect of blanching condition on firmness of babycorn. An empirical model was created to show the correlation between blanching process parameters (temperature and time) and firmness of babycorn. The research was set on two hypotheses. First, the blanching process parameters affected to babycorn composition, such as moisture content, total soluble solid, fibre and starch. Next, their compositions affected to the firmness of babycorn.

Thai supersweet composite # 1 DMR babycorn, 6-9 cm. length and 1-1.5 cm. diameter, was blanched in 0.2 percent (w/v) of citric acid solution at specified temperatures (60, 70, 80, 90 and 100 $^{\circ}$C) and times (3, 7, 11 and 15 min.) It was found that temperature and time affected to their compositions. Firmness significantly ($P<0.001$) depended on moisture content and fibre. The empirical model for predicting the firmness of babycorn is

$$F = 15.12 - 0.0592T - 0.1736t - 0.00074Tt$$

When F = firmness of babycorn (N/cm^2)

T = blanching temperature ($^{\circ}C$)

t = blanching time (min)

Keywords : Babycorn / Blanching Temperature / Blanching Time / Firmness / Empirical Model