

## Kombinasi Fermentasi Bakteri Asam Laktat dan Pemanasan Bertekanan-Pendinginan dalam Pembentukan Pati Resisten Tepung Talas Beneng (*Xanthosoma undipes* K. Koch)

<b>Title</b>	Kombinasi Fermentasi Bakteri Asam Laktat dan Pemanasan Bertekanan-Pendinginan dalam Pembentukan Pati Resisten Tepung Talas Beneng ( <i>Xanthosoma undipes</i> K. Koch)
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<b>Abstract</b>	<p>The study aimed to determine the effect of lactic acid bacteria, fermentation time, and pressurized heating-cooling cycle on the formation of resistant starch content of beneng taro (<i>Xanthosoma undipes</i> K. Koch) flour. The materials used were beneng corm, isolates of lactic acid bacteria <i>Lactobacillus casei</i> and <i>Streptococcus thermophilus</i>, and MRSB media. The experimental design was randomized block design factorial with two factors: fermentation time (0, 18, and 24 hours) and pressurized-cooling heating (1, 2, and 3- cycles) in 3 replicates. The data were analyzed using analysis of variance and if necessary continued with Duncan's Multiple Range Test at a level of 95%. The tested parameters were the content of resistant starch, amylose, and amylopectin and the data were treated using variance of analysis. The results showed that the combination of <i>L. casei</i> and <i>S. thermophilus</i> produced the highest resistant starch content of 5.66%. Fermentation time of 18 and 24 hours produced resistant starch content of 4.46% and 4.51%, respectively. Autoclaving-cooling of 1-, 2-, and 3-cycle produced a similar type of resistant starch of 3.81%, 4.26%, and 4.16%, respectively. Therefore, the combination of <i>L. casei</i> and <i>S. thermophilus</i> fermented in 18 hours and 1-cycle of autoclaving-cooling is recommended to produce resistant beneng taro flour starch content. Keywords: fermentation, autoclaving-cooling, resistant starch, taro beneng, <i>Xanthosoma undipes</i> K. Koch</p>
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