The Effect of Tempe Incubation Time on the Yield of Isoflavone Genistein and Total Phenolic Contents

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ABSTRACT

The objective of this study was to evaluate isoflavone genistein contents and total phenolic compounds during 0-day until 9th of incubation time. Isoflavone crude extract were obtained with maceration and partition. Isoflavone genistein contents were analyzed by using High Performance Liquid Chromatography and total phenolic compounds were measured by Folin ciocalteau method. Data yield of isoflavone extract and the total phenolic compounds was analyzed using a randomized completely block design and the mean between treatments were compared with the Honestly Significant Difference (HSD) test with significance level of 5%. The highest content of isoflavones genistein during the incubation time was obtained on 5 day of incubation time, while the highest content of total phenolic compounds was obtained on 4 day of incubation time. The incubation time of tempe induce isoflavone genistein content and the total content of phenolic compounds were fluctuating.

Keywords: Fenolic compounds, Genistein, Incubation time, Tempe