

## ABSTRACT

*Cacao is one of commodities that are quite often found in Indonesia. Almost every circle likes cacao's processed product such as chocolate bar due to its delicious taste. But its role in fulfilling consumer's nutrition needs are not fulfilled yet as not many manufacturer that care, and not many people knows the benefit of consuming chocolate. Therefore, in this research, the active compound that contained in dark chocolate will furthermore identified, that diversified by adding beneficial active compound such as catechin from matcha green tea as a polyphenol and genistein fromsoy powder as an antioxidant. From this research, will be expected to benefit for Indonesia in cocoa utilization. Randomized Complete Block Design is used as data analysis, by using 1 : 0, 1 : 1 and 0 : 1 proportion to soy powder with milk powder as factors, with 6 %, 8% and 10 % matcha green tea concentration. Response on this research is organoleptic, which is ranking test with texture, taste, flavor, andafter taste attribute then continued with identifying alkaloid active compound, catechin and genistein in dark chocolate product.*

*The result of stage - 1 research is getting selected sample from organoleptic test ranking, where the best texture attribute sample is 165 (proportion insoy powder with milk powder by 1 : 0, green tea concentration by 6%), best taste attribute sample is 683 (proportion insoy powder with milk powder by 1 : 1), best flavor attribute sample is 372 (proportion insoy powder with milk powder by 1 : 0, green tea concentration by 10%) and bestafter taste attribute sample is 372 (proportion insoy powder with milk powder by 1 : 0, green tea concentration by 10%). Hereafter, stage - 2 research is identifying active compound for total value of alkaloid sample with highest value of sample number 683 as much as 4,72 %. Total value of flavonoid sample with highest flavonoid value is sample number 683 as much as 1.21%, the identification result using HPLC (High Performance Liquid Chromatography) got the best sample for catechin identification is sample 683 with catechin content 0,81 % and for genistein identification is sample 372 with genistein content 0,20 %.*

*Keyword : Alkaloid, Catechin, Dark chololate, Flavonoid,Genistein*