ABSTRACT

Cocoa powder and cinnamon are the main ingredients for making chocolate functional drink. Some different type and fat treatment of cocoa powder had analyzed based on their antioxidant activity, phenolics content, and flavonoid content. Type of the cocoa powder was based on the pH, and the fat treatment was based on the defatted and non-defatted method. Defatting cocoa powder was using centrifugation method and petroleum ether as the solvent. Based on the analyzed, the cocoa powders with non-defatted method had no significance difference (α=0,05), but the antioxidant activity are higher than the cocoa powders with defatted method. The “Dark” non-defatted cocoa powder had higher antioxidant activity (±50 ppm) among the other, such as “Classic” (±40 ppm) and “Gold” (±44 ppm).

Cinnamomum burmanii was the cinnamon species that being used for the research. The cinnamon was analyzed based on the antioxidant activity, phenolics content, and flavonoid content. Cinnamon had highest antioxidant activity than the cacao powder (±8.80 ppm), and the antioxidant activity comes from the phenolics content (50.48 mg GAE/ml sample). The formula of the functional drink was determined on the chocolate concentration (100-65%), cinnamon concentration (0-20%), and sugar concentration (0-13%). The formula that had higher antioxidant activity and being approved by the panelist is 75% cocoa powder, 15% cinnamon, and 10% sugar (±290 ppm).