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Phytochemical Composition And Antioxidant Activity Of Composite Flour From Banana, Corn And Sago

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Abstract: Banana, corn and sago are well recognised as excellent source of phytochemicals and macronutrients. It has been developed composite flour that has high antioxidant and synergist effect on the activity of three plants.The objective of this study was to evaluate phytochemical content and to determine antioxidant activity in composite flour from banana, corn and sago.The extracts from composite flour were measured for phytochemical content and antioxidant activities using spectroscopic method.The results showed that extraction of cosolvent mixtures had significant influence on phytochemicals content and antioxidant activity. The highest total phenolic content was found in 80% methanol and 80% ethanol for F1 and F2, whereas F3 was found in 80% acetone in composite flour. In addition, acetone 80% in F3 showed the highest total carotenoid content followed with F2 and F1. Conversely, 80% acetone in F2 showed the highest free radical scavenging activity comparable that of F1 and F3.The results also showed that 80% acetone in F3 were found highest total antioxidant capacity than F1 and F3. The results suggest that 80% acetone to extract phenolic phytochemicals in composite flour from banana, corn and sago.
Keywords : Composite flour, banana, corn, sago,phytochemicals, antioxidant.

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