Journal

J. Biol. Chem. Environ. Sci., 2017, Vol. 12(3): 315-326
http://biochemv.blogspot.com.eg/

BIOACTIVE COMPOUND AND PHYTOCHEMICAL SCREENING OF BANANA PEEL.

Abdel -Samad, A.*; Nadia M,Abdel-Moein, *;Amal, H. Mahmoud,and Shaimaa, M.Hassaan, **.**

**Biochemistry Department, Faculty of Agriculture, Cairo University, Egypt.*
***Food Technology Research Institute, Agricultural Research Center, Giza, Egypt*.

ABSTRACT

Banana *(Musa sapientum and Musa cavendish*), are grown worldwide and consumed as ripe fruit or used for culinary purposes. Peels form about 18-33% of the whole fruit and are a waste product. With a view to exploiting banana peel as a source of valuable components, the antioxidant components were determined. The phytochemical analysis of aqueous and organic solvent extracts of banana peel (*Musa sapientum and Musa cavendish*) reveal the presence of alkaloids, flavanoids, Tannins, Terpenoid and Glycosides. The phytochemicals alkaloids, flavanoids and tannins have a very good antioxidant property while terpenoids has antimicrobial activity. *Musa sapientum and Musa cavendish* peel extract were evaluated for their antioxidant potential using the DPPH scavenging method, Total phenolic content determination and total flavonoid determination. The result showed that methanolic extract is a more potent antioxidant than the hexane extract. Both extracts showed DPPH scavenging effect in dose dependent manner. Total flavonoid and total phenolic are higher in methanolic extract as compared to hexane extract of banana.

Key words: Antioxidant, Banana, *Musa cavandish*, *Musa sapientum* , Phenolic HPLC ,Flavonoids HPLC and Phytochemical screening.