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CHEMICAL CONTENTS STUDY OF METHANOL AND AQUEOUS EXTRACTS OF BLACK MULBERRY FRUITS *(MORUS NIGRA L.)* BY HPLC

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ABSTRACT

Black mulberry fruits were examined for their total anthocyanin, total and reducing sugar, and determination of total phenolic and total flavonoids. Results of the total anthocyanin revealed that the black mulberry, methanolic and aqueous extracts as 578,890 and 430 mg/100g respectively. The reducing and total sugar in black mulberry was 28.16 and 41.56 mg/100g respectively, while the estimated value in extracts mulberry was methanol extracts 53.43 and 55.29 mg/100 g respectively and aqueous extract was 5.73 and 5.84 mg/100g respectively. Total phenolic compounds in black mulberry was 71.51 mg/100g while, the estimated value in extracts mulberry were hexane 280.22, ethyl acetate 942.21,methanol extracts 107.12 and aqueous extracts 374.95 mg/100g as Gallic acid respectively. Total flavonoid in different extracts of black mulberry were 0.106, hexane 1.97, ethyl acetate 0.25, methanol extract 6.76 and aqueous extract 5.43 mg/100g as Qercetine respectively. Major compounds in methanolic extract are Pyrogallol, iso Ferulic, Epi-catechin and Oleuropein; while, Pyrogallol in aqueous extract (5.47 mg/10g). It was found that the highest Hespirdin compounds in methanolic extract followed by aqueous extract and where the Luteolin and Naringin in major in methanolic extract.

Key words: antioxidant, black mulberry, HPLC, oxidative stress.