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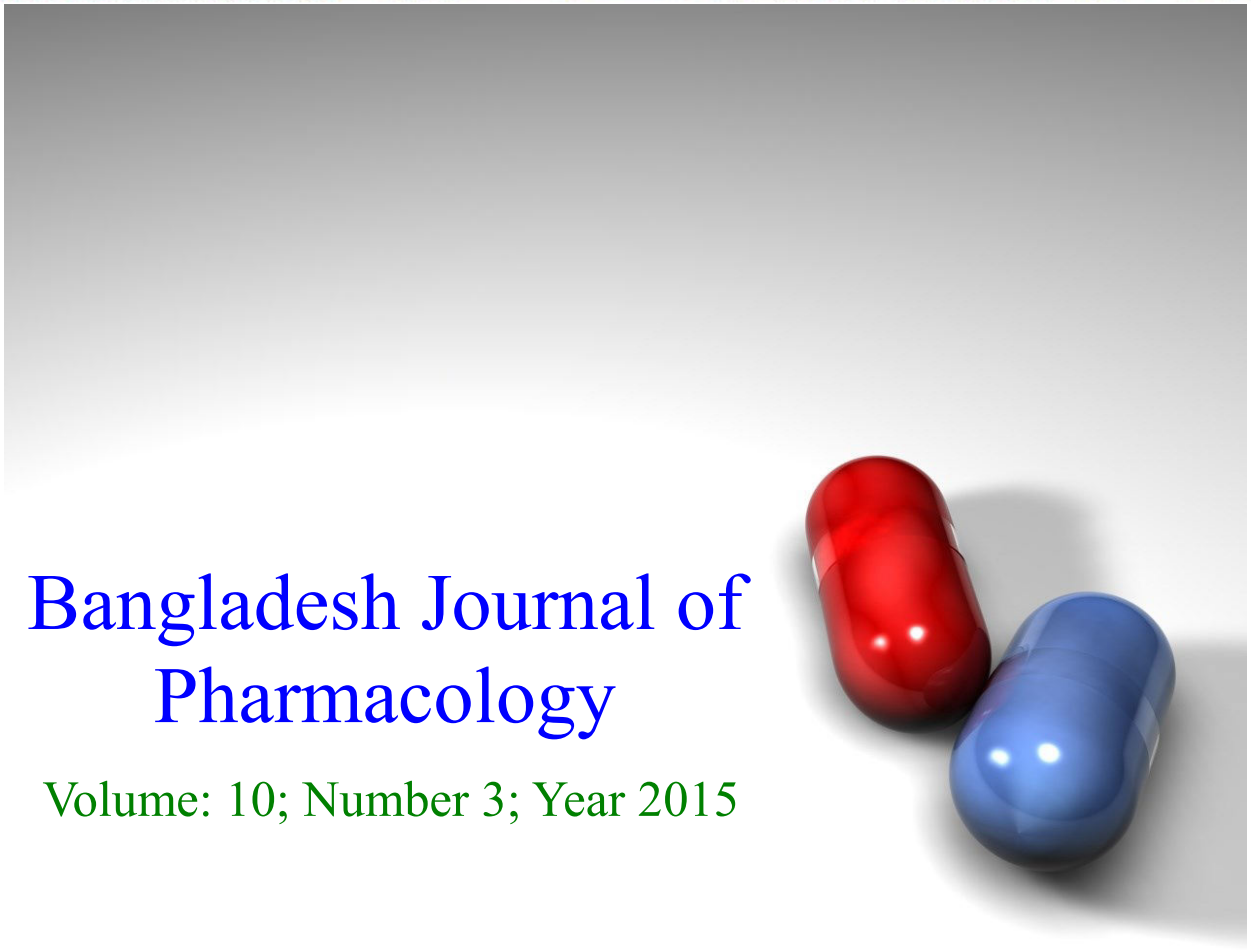

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Letter to the Editor

Antioxidant and antifungal activities of selected fruits of Districts Bannu and Lakki Marwat, Pakistan

Sir,

Scientific research done during the last century has proven the pharmacological activities of many plant parts (Cheruvanky et al., 2000). The majority of current research is directed toward the discovery of commercially useful compounds from medicinal plants and their parts (Vermani and Garg, 2002). It is estimated that 80% of the global population depend on plant derived medicines to address their health care needs (Thaipong et al., 2006). Present study is aimed to evaluate antifungal and anti-oxidants activity of *Archis hypogeal, Phoenix dactylifera* and *Vitis vinifera*.

Two fifty gram powder from each of the samples were taken and placed in the 70% commercial grade methanol and stirred well, then after passing of 72 hours the extracts were filtered by using qualitative Whatman filter paper. In wise bath the filtrate was placed at 40°C and thus the entire methanol was evaporated, so the crude extract of the plant fruits were obtained and stored in the refrigerator at 4°C for the purpose of future *in vitro* studies.

DPPH assays of sample fruits were performed accor-ding to the procedure as reported by Gyamfi et al. (1999) with some modifications. The antifungal activity of the fruits methanol extracts of *A. hypogea, P. dactyl-lifera* and *V. vinifera* were screened through the agar tube dilution method by using the protocol of Duraipandiyan and Ignacimuthu (2009).

The scavenging results were observed during scavenging of free radicles viz; 76.1 ± 0.03% of *V. vinifera,* 72.0 ± 0.0% of *A. hypogea* and 79.0 ± 0.0% of *P. dactylifera* against DPPH at 500 µg/mL were obtained as shown in Table I.

40.7% inhibition of *Vitis vinifera* against *Aspergillus flavus,* 26.4% inhibition of *Arachis hypogea* against *Aspergillus niger* and 50.7% inhibition of *Phoenix dactylifera* against *Aspergillus niger* were recorded as shown in Table II.

Table II

Antifungal activity of methanol extract of *Archis hypogeal, Phoenix dactylifera and Vitis vinifera*

	% inhibition	
	Aspergillus niger	*Aspergillus flavius*
Archis hypogea	26.4 ± 0.0	20.0 ± 0.0
Phoenix dactylifera	50.7 ± 0.0	41.0 ± 0.0
Vitis vinifera	38.0 ± 0.0	40.7 ± 0.0
Terbinafine	99.4 ± 5.5	98.1 ± 3.7

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Table I

DPPH free radicals scavenging activity of fruit methanol extracts

Concentration	Free radicals scavenging activity (mean ± SD)			
	Archis hypogea	*Phoenix dactylifera*	*Vitis vinifera*	Ascorbic acid
50 µg/mL	16.1 ± 0.2	21.1 ± 0.2	22.4 ± 0.1	52.0 ± 0.0
100 µg/mL	28.0 ± 0.1	42.0 ± 0.1	32.0 ± 0.2	72.0 ± 0.1
150 µg/mL	42.0 ± 0.1	56.0 ± 0.1	48.2 ± 1.0	80.0 ± 0.0
200 µg/mL	52.0 ± 0.1	64.0 ± 0.0	56.0 ± 0.1	83.0 ± 0.0
250 µg/mL	62.0 ± 0.0	70.1 ± 0.2	65.0 ± 0.0	86.1 ± 0.0
500 µg/mL	72.0 ± 0.0	79.0 ± 0.0	76.1 ± 0.0	90.1 ± 0.1

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