

**PHYSICO-CHEMICAL PROPERTIES, PHENOLIC CONTENTS AND ANTIOXIDANT
ACTIVITY OF SUDANESE HONEY**

Yousif Mohamed Ahmed Idris^a , Abdalbasit A. Mariod^{a*} and Somia Ibrahim Hamad^a

^aDepartment of Food Science and Technology, College of Agricultural Studies, Sudan University
of Science and Technology, P.O. Box 71, Khartoum North, Sudan

*Corresponding author: basitmariod@yahoo.com,

Fax: +249185311896

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ABSTRACT

The physico-chemical properties, antioxidant activities and phenolic contents of seven types of Sudanese honeys derived from flowers of *Acacia nilotica*, *Acacia seyal*, *Azadirachta indica*, *Cucurbita maxima*, *Balanites aegyptiaca* and two *Ziziphus spina christi* plant species were evaluated. The moisture content was in the range from 16.2 to 21.3, g/100 g honey, ash content from 0.121 to 1.205 g/100 g honey, nitrogen from 0.032 to 0.046 g/100 g honey while the corresponding protein content was 0.200 to 0.286 g/100 g honey. Total phenolic content varied from 4.44 to 201.08 mg/100 g honey as gallic acid equivalent. The values of the antioxidant activities were in a range from 3177 to 6247 μg for the IC_{50} . No significant correlation was established between antioxidant activity and total phenolic contents.

KEYWORDS: Antioxidant activity; Sudanese honeys; Total phenolic contents; Thiobarbituric reactive substances (TBARS)