

## PHYSICOCHEMICAL PROPERTIES, PHENOLIC CONTENTS AND ANTIOXIDANT ACTIVITY OF SUDANESE HONEY

**Yousif Mohamed Ahmed Idris, Abdalbasit A. Mariod, and Somia Ibrahim Hamad**

*Department of Food Science and Technology, College of Agricultural Studies, Sudan University of Science and Technology, Khartoum North, Sudan*

*The physicochemical 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  $\mu\text{g}$  for the  $\text{IC}_{50}$ . No significant correlation was established between antioxidant activity and total phenolic contents.*

**Keywords:** *Antioxidant activity, Sudanese honeys, Total phenolic contents, Thiobarbituric reactive substances (TBARS).*