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Chemical Analysis of Fruits of Some Saudi-Grown Date Palm Cultivars with Emphasis on Their Mineral Content

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The chemical composition of the fruits of 11 date palm cultivars grown at Riyadh region was studied during 1983 season. Results showed that most of the studied characters (moisture, TSS, acidity, protein and crude fat) of both flesh and seeds differed from one cultivar to another. Ash content ranged from 1.88-2.96% in the flesh and 0.99-1.38% in the seeds of different cultivars. Also, mineral contents of both were found to vary among the eleven date palm cultivars. Nitrogen and potassium contents were higher as compared to the other minerals in the different cultivars. The data also revealed that the studied fruits are a good source of various mineral elements.

Date palm tree is a very important traditional fruit tree in Saudi Arabia. Nowadays, Saudi Arabia is considered as one of the leading date producing countries in the world. Its annual production from dates is estimated at about 440,000 tons in 1983 (FAO 1984). In many regions of Saudi Arabia, date fruits still constitute an important part of the diet of most people. Seeds are also considered an important material for feeding livestocks (Sarsam *et al.* 1955).

The chemical composition of the fruits of various date palm cultivars grown at different countries has been investigated by several workers (Haas 1935, Furr and Cook 1952, Minessy *et al.* 1982). In Saudi Arabia, some investigations are available regarding the chemical composition of the different Saudi Arabian date palm cultivars (About 250 cultivars) such as Hussein *et al.* (1974), Hussein and El-Zeid (1975), Abdel Hafiz *et al.* (1980), and Sawaya *et al.* (1982 and 1984). Therefore, the present investigation was carried out to study the chemical composition of 11 date palm cultivars grown at Riyadh region, with emphasis on the mineral contents of the flesh and seeds. Six of the studied cultivars (Barhi, Khudari, Menefi, Muscani, Nebut Seif and Succari) are of the main cultivars in the central region. Two cultivars (Ruzeiz and Shabibi) are important in the Eastern region, while the remaining three cultivars (Anbara, Berni and Hilwa) are important in the western region.