

RESPONSE OF "SEEWY" DATE PALM TO SALINITY OF IRRIGATION WATER UNDER SIWA OASIS CONDITIONS

G. Abdel-Nasser and M. M. Harhash

**Faculty of Agriculture, Saba Bacha, Alexandria University,
Alexandria, Egypt.**

Ten date palm (*Phoenix dactylifera* L.) orchards, CV. Seewy at Siwa Oasis were selected according to salinity of well waters to study the effect of well water quality on growth, leaves elemental contents, yield and fruit quality during 1999 and 2000 growing seasons. Irrigation water for every orchard was taken from one well drilled in each orchard. The saline water having salinity concentrations ranged between 2.5 to 14.6 dS/m. The yield, fruit quality, and leaf characteristics were examined. The data generally revealed that, increasing salinity of well water ($E_{c_{iw}}$) markedly decreased yield, fruit weight, length and diameter. The data also, indicated that increasing salinity of irrigation water leads to accumulate Na, K, and Cl in the leaves, but other elements were decreased.