Irrigation frequency and amount affect yield and quality of field-grown melon
(Cucumis melo L.)

Suat Sensoy  Ahmet Ertek  Ibrahim Gedik  Cenk Kucukyumuk

Agricultural Water Management 88 (2007) 269–274

A B S T R A C T
This study was conducted to determine the most suitable irrigation frequency and quantity for field-
grown melon. Irrigation quantities were determined based on pan evaporation (Epan) from a
cleared Class-A pan. Four different irrigation treatments employing two different irrigation
intervals (I1: 6 days; I2: 12 days) and two different plant-pan coefficients (Kcp1: 0.60; Kcp2: 0.90)
were tested. Total irrigation quantities (Ir), plant water consumption (Et), and melon yields varied
from 405 to 549 mm, 481–637 mm and 18.0–32.4 Mg ha⁻¹, respectively. The highest yield was
obtained from the treatment employing the greatest frequency and quantity of irrigation (I1Kcp2).
Most fruit traits were significantly affected by differences in irrigation treatment.

Keywords:Irrigation Irrigation scheduling Melon (Cucumis melo L.) Pan evaporation