

## **Utilization of a computer software for the prediction of olive yield in developing plantation sites**

**A. talaei<sup>1</sup>, H. Sadeghi<sup>2</sup> and A.R. Ghaffari<sup>3</sup>**

**1. Dept. of Horticulture, College of Agriculture, Tehran University, Karaj.**

**2. College of Agriculture, Mazandaran University, Sari.**

**3. Dept. of Computer and Statistic, Seed and Plant Improvement Institute, Karaj.**

Olive (*Olea europae*) oil, has raised up the interest of the world due to its high nutritional value. The yield of this crop varies in different environmental conditions and decrease proportional to several parameters and the amount of their deviation from the optimum growth condition. Determination of the best olive plantation regions in a vast country as Iran, necessitates to carry out long term experiments of adaptability and durability of the plantation in each site, which will be evidently very expensive and time consuming.

To overcome this problem an olive yield evaluation software has been written to estimate the yield proportional to environmental varieties in each region. This software has been developed under foxpro 2.5 medium with farsi language and consisted of 12 programs.

The main programs are composed of inserting systems, data processing, reporting, and the minor programs provide useful abilities for users.

This software evaluates the interaction of environmental parameters such as: opt. max. and min temperatures, amount of precipitation, land slope, soil humidity, texture, drainage, structure, pH level, calcium carbonate and calcium sulphate content, and the under ground water level, affecting the yield of the crop, and predicts the expected yield in selected areas.