

Effects of Agricultural Technology and Socio-Economic Factors on Wheat-Cotton Yield in Aegean Region

This project was launched in 1999 with the cooperation of AHRTC Rural Affairs Menemen Research Institute and Israel Regional Meteorological Training Center (RTMC) and completed in 2002.

Main objectives of the project can be summarized as follows;

To determine the effects of agricultural technology and socio-economic factors on wheat-cotton yield in Aegean region

To recommend research programs which can be used in the future to research institutes

The results depend on three integrated approach.

Regional Model According to Cities – It was developed according to independent variable inputs (yield, sowing area, price) acquired from State Statistics Institute. Integrated trial model was developed according to database dating 30 years back in Aegean Region.

This model provided new information about the effects of climate, soil, cultural processes and varieties on wheat and cotton yield.

Simulation model of daily soil moisture.

Integration was performed in two different ways.

Integration between plant input variables.

Integration between different areal scales (trial parcel – commercial production areas)

In addition, two specific management input (water and nitrogen) were analyzed in detail and following to that water and nitrogen balance was focused.