

## **ASSESSMENT OF SPRINKLER IRRIGATION SYSTEMS USED FOR PEANUT IRRIGATION IN MEDITERRANEAN ZONE, TURKEY**

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### **Abstract**

This study was conducted to evaluate irrigation practices of sprinkler-irrigated peanut farms at Kadirli-Osmaniye province of Turkey. The seasonal number of irrigation in the examined farms varied from 3 to 5. Sprinklers with double nozzle had flow rates ranging from 1.5 to 2.2 m<sup>3</sup>/h. The average rate of sprinkler precipitation was found as 13 mm/h with a 20 h of water application under four irrigation events to the peanut during whole growth cycles, and seasonal applied irrigation water was around 314 mm. Average net grain yield was between 3.15 and 3.50 t/ha. Total labor and irrigation energy costs were 200 USD/ha and 158 USD/ha, respectively. The sprinkler irrigation system was found well suited for peanut irrigation. High quality management of irrigation water resources is necessarily prerequisites for sustainable agro-production particularly at water shortage agro-zones.

**Key words:** Peanut, Sprinkler Irrigation Systems, Irrigation Cost, Water Management

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