

Effects of Different Irrigation Amounts on Yield and Quality Parameters of Flue-Cured Tobacco *Nicotianatobaccum* (cv. K326) in Mazandaran Province

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Abstract

In order to investigate the effects of different irrigation regimes on yield quantity and quality of flue-cured tobacco cv. K₃₂₆, an experiment was carried out based on a randomized complete blocks design (RCBD) with three replications, at Tirtash Tobacco Research Center, in 2011. Treatments were combination of W₁=40%, W₂=60%, W₃=80%, and W₄=100 percent crop water requirement with D₁=5, D₂=10, D₃=15 days irrigation interval with two control treatments (without irrigation (R) and furrow irrigation (I)). The results showed that treatment W₄D₁, W₄D₂, W₄D₃, W₃D₁, W₃D₂, W₃D₃, W₂D₁, and W₁D₁ had statistically significant difference with the other treatments and had more dry leaf yield. Also, the minimum leaf chlorine content was observed in W₄D₂, W₃D₁, W₂D₁, W₂D₂, W₁D₃, and R treatments. Under W₄D₂, W₃D₁, W₃D₃, W₂D₁, W₁D₁, W₁D₂, and W₁D₃ treatments, tobacco had statistically significant difference with other treatments and had higher price. Also, the minimum gross income was obtained under W₂D₂, W₂D₃, W₁D₃, I, and R Treatments.

Key words: Irrigation depth, Irrigation interval, Dry leaf yield, Chlorine percent, Gross income.

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