

Different Tillage Possibilities for Second Crop in Green Bean Farming

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Abstract : In this study, determining of reduced tillage techniques in green bean farming as a second crop after harvesting wheat was targeted. To this aim, four different soil tillage methods namely, heavy-duty disc harrow (HD), rotary tiller (ROT), heavy-duty disc harrow plus rotary tiller (HD+ROT) and no-tillage (NT) (seeding by direct drill) were examined. Experiments were arranged in a randomized block design with three replications. The highest green beans yields were obtained in HD+ROT and NT as 5,862.1 and 5,829.3 Mg/ha, respectively. The lowest green bean yield was found in HD as 3,076.7 Mg/ha. The highest fuel consumption was measured 30.60 L ha⁻¹ for HD+ROT whereas the lowest value was found 7.50 L ha⁻¹ for NT. No tillage method gave the best results for fuel consumption and effective power requirement. It is concluded that no-tillage method can be used in second crop green bean in the Thrace Region due to economic and erosion conditions.

Keywords : green bean, soil tillage, yield, vegetative

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