



Soil and water conservation techniques generally used in olive orchards in Mediterranean Turkey

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Soil erosion problems are mostly severe in the Mediterranean Turkey where highly vulnerable soils with low organic matter and restricted soil depth, very steep slopes, and very high climatic unevenness exist. Together with the scarcity of the good quality land, human-induced development, over-exploitation, and abandonment as well degrade these lands acutely. This study, on the other hand, reports the past soil and water conservation techniques generally used in olive orchards in Mediterranean Turkey, giving particular emphasis to the fact that people of the region historically used those practices to keep the marginal lands productive and sustainable. The past remedial measures of the region where the cultivation goes back to the ancient times should be very enlightening and helpful to prevent soil from the already ongoing erosion and degradation.

More than 0.5 million ha of olives are grown in Mediterranean Turkey, and, in particular, olive cultivation more concentrates in the eastern part with coverage of 55%. Only 8% is under irrigation while 75% of the olive cultivation is located in highly mountainous regions. Naturally, as a result of this situation, soil erosion is an inevitable problem, and it is also one of the most common types of land degradation processes. Knowing the threat well, the earlier Mediterranean olive cultivator historically tried some methods, of which the most observed are terraces and cross-tillage practices specific to the region. Distinctively, easily picked rock arrangements, half-moon terraces, bench terraces, different tillage systems, and water harvesting systems are exemplars for the inherited soil prevention and water conservation measures. This study conse-

quently presents an overall explanative photo of the olive orchard of the Mediterranean Turkey with inherited previously constructed soil and water conservation practices.

Key words: soil and water conservation, olive orchard, Mediterranean Turkey, protective practices