

LAND MANAGEMENT PRACTICES AND SOIL THREATS IN THE ISLAND OF CRETE

THREATS TO BE ADDRESSED...

Soil erosion

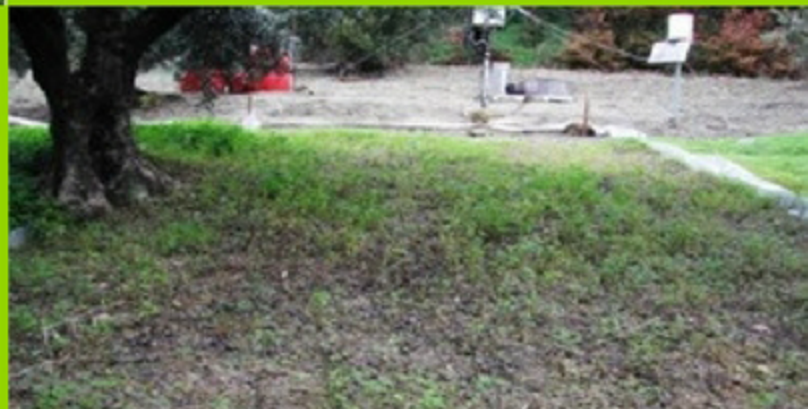
Loss of soil organic matter content

Three Land Management Practices (LMPs) are applied in the olive groves of Crete: (A) no tillage – no herbicide application, (B) no tillage – herbicide application, and (C) tillage perpendicular to the contour lines using a disc harrow at a depth of 20 cm once per year



LMP C showed the following effects compared to A and B:
Higher surface rain water runoff and sediment loss
Lower amount of water stored into the soil
Lower organic matter in the soil surface

LMP A showed the following effects compared to B and C:
Lower surface rain water runoff
Nil soil sediment loss
Higher amount of water stored into the soil
Higher organic matter content in surface horizon



LMP B showed the following effects compared to C:
Lower surface rain water runoff.
Intermediate soil sediment loss
Comparable amounts of water stored into the soil
Higher amount of organic matter content



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