



## **Conservation strategies on citrus plantation in eastern Spain. Catch crops, geotextiles and mulches**

Artemi Cerdà (1), Alfons Dominguez (2), and Antonio Giménez Morera ()

(1) University of Valencia, Department of Geography, Valencia, Spain (artemio.cerda@uv.es, +34 96 398 3054), (2) Estació Experimental Agrària de Carcaixent. Institut Valencià de Investigacions Agràries. Partida Barranquet, s/n, 46740-Carcaixent, Valencia, (3) Departamento de Economía y Ciencias Sociales. Universidad Politécnica de Valencia. EPSA Alcoy, Plaza de Ferrándiz y Carbonell, 03801-Alcoy, Alicante

Tillage (6 %), and herbicides (89 %) are the most widespread soil management methods in eastern Spain citrus orchards. The bare soils, the high intensity thunderstorms and the steep slopes result in high erosion rates. Over the last 3 years an experimental station has been developed at Montesa municipality in order to determine the effect of different types of mulch, geotextiles and catch crops. Rainfall simulation experiments on 20 m<sup>2</sup> plots shown that soil losses can be control by catch crops (85 %), chipped pruned branches (89 %), straw mulch (97 %) and geotextiles (99 %). Then, vegetation can contribute to control the soil and water losses on the highly erodible soil of Mediterranean orchards.