Geophysical Research Abstracts Vol. 12, EGU2010-14507, 2010 EGU General Assembly 2010 © Author(s) 2010



## FMECA application to Rainfall Hazard prevention in olive trees growings

F. S. Buendia-Buendía (1), R. Bermudez (2), A. M. Tarquis (3,4), D. Andina (1,4)

(1) ETSII, UPM Madrid, GASC, SSR, Madrid, Spain (fbuebue@yahoo.es), (2) MOPU, Universidad Politécnica de Madrid, Spain, (3) CEIGRAM - ETSI Agronomos, Universidad Politécnica de Madrid, Spain, (4) Grupo de Automatización en Señal y Comunicaciones GASC, UPM, Madrid

The FMECA (Failure Mode Effects and Criticality Analysis) is a broadly extended System Safety tool applied in industries as Aerospace in order to prevent hazards. This methodology studies the different failure modes of a system and try to mitigate them in a systematic procedure. In this paper this tool is applied in order to mitigate economical impact hazards derived from Rainfalls to olive trees growing in Granada (Spain), understanding hazard from the System Safety perspective (Any real or potential condition that can cause injury, illness, or death to personnel; damage to or loss of a system, equipment or property; or damage to the environment). The work includes a brief introduction to the System Safety and FMECA methodologies, applying then these concepts to analyze the Olive trees as a system and identify the hazards during the different stages of the whole life cycle plant production.