

# Effect of Dehydration on the Photosynthetic Apparatus of Sun and Shade Leaves of Laurel Forest Trees

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In this work we study the effect of reduction in relative water content (RWC) on the chlorophyll fluorescence induction kinetics as well as on the membrane integrity, measured as electrolyte leakage, in sun and shade leaves of three Canarian laurel forest trees. No differences were found among the species and type of leaves, when the slow fluorescence kinetic parameters and electrolyte leakage were analyzed, values deviated from the normal ones at 70% and 40% RWC respectively. On the contrary, the photochemical efficiency of PSII was affected at higher values of RWC in sun leaves (90% and 52% RWC depending on the species) than in shade ones (40% RWC). These results indicate that the susceptibility of PSII to water deficit is different depending on species and environmental conditions where the leaves develop.