



Tree rings and fire in an Iberian stand of *Pinus nigra* subsp. *salzmannii*

M. Génova (1), D. García-Calvo (1), F.J. Maldonado (2), J.M. Rubiales (2)

(1) E.U.I.T. Forestales, Universidad Politécnica de Madrid, España, (2) E.T.S.I. Montes, Universidad Politécnica de Madrid, España

Fire is a factor of major importance in the evolution of the Mediterranean forests. Given the scarcity of historical records on the incidence and recurrence of fires in the Iberian woods, it is interesting to uphold the information provided by proxy data determining their effect on the vegetation cover. This is the framework on which we present this study: the analysis of anomalies in certain tree rings series of a *Pinus nigra* subsp. *salzmannii* population living in the westernmost boundary of its global distribution (Sierra de Gredos, Avila, Spain).

The local disturbances identified in the region in the middle of the 20th century (many missing rings in some trees and extensive abrupt growth changes in others), have been possibly caused by the effects of fire on survivor trees. Moreover, the analysis of the PGC (percentage of growth change) and the use of GIS techniques allow to delimitate the intensity of the disruption and its superficial and temporal size. This information is intended to be useful in the theoretical models and practice of forest management in Spain. This kind of studies may help to consolidate the use of dendroecological methods in the interpretation of the current state of Iberian forest cover.