Abstract

The objective of this study was to model the dynamics of annual evaporation (E) during radial growth of Pinus cooperi Blanco, which is economically and ecologically important for northern México. Dendrochronological data were used to identify a model that would, with instrumental records, relate E for the period 1964 to 2010. The correlation and regression analyses showed that E negatively affects growth during the months previous to the growth season and during the summer of the growth year (June and July). E is a significant variable that can explain water stress and that can have implications for management of P. cooperi in the face of climatic variation.

Keywords

Dendro-chronology, radial increase, climate-tree relationships.