Geophysical Research Abstracts
Vol. 14, EGU2012-726-1, 2012
EGU General Assembly 2012

Impact of climatic factors on the growth rings width of Taxodium from Backa Palanka area (Taxodium distichum (L.)Rich.)

V. Popovic (1), D. Jokanovic (2), M. Sijacic-Nikolic (2), T. Cirkovic-Mitrovic (1), and V. Babic (2)
(1) Institut of forestry, Belgrade, Serbia (insazasum@eunet.rs), (2) Faculty of forestry, Belgrade, Serbia (office@sf.bg.ac.rs)

This work presents analyzed changes of growth rings width of the trees and the most important climatic factors in a seed plantation of Taxodium near Backa Palanka (Republic of Serbia) area for a period from 1981 till 2010. This plantation was established in 1941 and it's located outside the influence of the flood waters. Samples for a growth rings width measurement were taken from 20 percent widest trees.
There is a close connection between quantity of rainfalls during a year, quantity of it during a vegetative period and climatic index that's calculated with Thornthwaite method on one side and size of a growth rings width on the other side. That was concluded by using a comparative analyze.
Bigger quantity of rainfalls annually, especially during a vegetative period means that growth rings width is becoming increased and it exists in the opposite way, as well – with lower quantity of rainfalls, the growth rings width is becoming decreased. Based on this we can conclude that Taxodium as a tree that grows on some wet soils reacts a lot on changeable conditions of humidity.