

Oak vulnerability in Wallonia Region: impacts of growth conditions on stand's vitality and forestry options

An important work hypothesis is that water stress is the main trigger factor to the oak decline observed in Belgium. In order to test this hypothesis, I want to relate annual tree growth with the water balance at stand level. A model developed by INRA will enable me to model the water balance at a daily scale (Biljou©). But in order to use this model I need the soils physical and hydraulic properties. After sampling kopeckis in each horizon for the different stands studied, I measured the water content at different pF levels but in the end, the soil's available water content is very high (over 200mm for the profile). I would like to compare my results with other measurements on similar soils.