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Evapo-transpiration as an accelerating tool for seasoning – A case study

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One bunch of more than one hundred poplar trees freshly harvested during winter season (dormancy) was piled in an open storage site for the seasoning. Trees were purposely harvested in dormancy, at least two weeks before expected spring start and budding initiation. As the aim of the study was to determine the effect of foliage (evapo-transpiration) on the seasoning process, only one mixed sample from an individual tree was collected every week to determine moisture content, until the point of budding initiation. Each week, starting from May 6th 2013, when the first buds appeared, five poplar trees were randomly selected from bunch for detailed moisture content determination. Also the dimensions of the selected trees were recorded (height and dbh). In order to quantify more accurately the impact of new foliage on the drying process, the raw material had to be distinguished in three classes: branches, foliage and tree-top with a diameter of up to 2 cm, the part of the tree with a diameter ranging from 2-4 cm and the thicker parts of the tree stem with a diameter larger than 4 cm, respectively. Each proportion was weighted and samples were evaluated with respect to moisture content. According to the analyses of seasoning process could be stated that evapo-transpiration accelerated twice the process of seasoning and positively decreased moisture content in thicker parts, which are more resistant of draying.