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Namentlich gekennzeichnete Beiträge geben ausschließlich die Meinung der jeweiligen Autoren wider.

Bildnachweis: Bei Photos angegeben, wenn nicht - Photo Kiessling (alle unentgeltlich beigelegt).

Determining origin of Norway spruce (*Picea abies* (L.) Karst.) wood.

For ages spruce wood was used in construction and to create musical instruments. That's why it is interesting to determine exact dates and origin of historical spruce wood. In the Middle Ages, a lot of wood was imported into Europe from the territory of modern Baltic States, Belarus, Ukraine and Russia. That's why we investigated, whether the origin site of spruce wood can be determined. We analyzed 51 tree ring chronologies of living trees (over 1000 samples), located in Lithuania, Belarus and Ukraine. Maximum distance between sites is over 750 km, and they are located on territory from Baltic Sea coast to the border of the forest-steppe zone. Chronologies are up to 160 years long. The research was conducted in the dominating spruce forest types *Piceetum vaccinio-myrttilosum* and *Piceetum hepatico-oxalidosum*.

The farther from the Sea, the more continental climate becomes, and therefore tree reaction on climate changes, and this influences the radial increment of trees. However, similarity was noticed even between trees located 500 km from each other in Lithuania and Belarus. The study found clear correlation between distance and chronologies similarity.

For chronologies located at distance less than 35 km from each other, t-values is ≥ 10.3 , at distance up to 140 km t-value is ≥ 8.6 , up to 250 km is ≥ 7.8 and up to 410 km ≥ 5.1 . At the same time, some chronologies located near each other can have very low correlation, usually due to the specific conditions of the site.

In some cases, it is not possible to create a chronology as there are only few samples of wood available, and it is necessary to work with single samples. In this case, when t-value between the sample and a chronology is ≥ 8.6 , we can say that the sample is from the same site as the chronology. Similarity decreases sharply with the distance: 7.4 up to 20 km, 5.1 up to 340 km.

Results of the study can be used to determine the origin of spruce wood from south and south-west parts of boreal habitat of Norway spruce.

Poster: **Maxim Yermokhin** (1), Adomas Vitas (2)

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A dendrochronological question: was the imported Baltic timber always timber from the Baltic?

In Western and Central European publications relating to the subject of dendroprovenancing, reference is frequently made to so-called 'Baltic timber'. This is the term generally used to refer to timber exported to the western part of Europe from the port towns of Poland or the present-day Baltic States. In the 14th and 15th century, Gdansk (formerly Danzig, in Poland) was still a very important port for timber exports to Europe, but from the 16th century, and particularly in the 17th century, there was a great increase in the volume of timber exports through Riga, Königsberg, St Petersburg and other ports along the eastern shore of the Baltic. In contrast to Central and Western Europe, the countries east of the Baltic Sea still had comparatively large areas of forest in the 16th - 18th century, but the forests along the rivers used for floating timber were gradually being felled.