

Research focus

Joint project on the material utilisation and storage of spruce calamity wood



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aufgrund eines Beschlusses
des Deutschen Bundestages

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“NuKaFi – Material utilisation possibilities for standing stored calamity wood of the tree species spruce depending on damage progress and wood quality”

Background and objective

The bark beetle has caused massive damage to spruce (*Picea abies* (L.) Karst.) over large areas in recent years. Enormous quantities of calamitous wood are the result, which cannot always be removed from the forest in a timely manner due to a lack of storage, processing or treatment capacities. Together with four other research partners (figure on the right) as well as supporting industrial companies, associations and forestry stakeholders, the Fraunhofer WKI is investigating the question of whether and for how long the dead spruce trees can remain upright in the forest or lying in dry storage as dry stands in the FNR research network “NuKaFi”.

Systematic investigations in the Harz and Sauerland regions are intended to show how the wood quality of spruce trees that have died due to bark beetle infestation changes depending on the storage time and the respective location and which value-adding material

utilisation of the wood is still possible depending on this. With a view to optimising the material utilisation of the calamitous wood, a guideline for forest owners and wood recyclers is also to be developed, from which recommendations for action for product-specific final standing sorting are to emerge.

Research network

The joint project is made up of five subprojects (TV), each of which is managed by one of the partners:

- TV 1: Fraunhofer WKI (network coordination)
- TV 2: Institute for Wood Technology Dresden, non-profit limited liability company (IHD)
- TV 3: German Sawmill and Wood Industry Association (DeSH)
- TV 4: Forest and Wood NRW, Center for Forestry and Wood Industry (FB V)
- TV 5: Georg August University of Göttingen, Department of Wood Biology and Wood Products

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