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INFORMATION ON AN ONGOING PROJECT CONTRIBUTION AGREEMENT

Securing Canadian Timber by Identifying Wood Samples

The lack of accurate timber identification systems poses a significant risk for illegal logging and trade, undermining sustainable forestry practises and threatening the health of Canada's forests.

PROJECT TITLE
WOOD-DB: A Database of Wood Metabolites for Species-Level Identification of Economically Important Timber

ORGANIZATION
University of Alberta
ualberta.ca/en/renewable-resources/research/forest-ecology-and-management

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START DATE
December 1st, 2023

END DATE
March 31st, 2026

This project builds on the successful Wood ID Project to create a complete system for identifying Canadian timber types, focusing specifically on spruce, pine, and fir. The main goal is to provide lumber inspectors with effective tools for distinguishing between different spruce varieties, especially Norway spruce. Researchers plan to use a method called metabolomics to create a database of chemical profiles for these types of wood. They aim to develop user-friendly computer tools that can quickly identify unknown wood samples. The project also aims to speed up laboratory methods for fast wood identification and to design a portable instrument for use in the field.

This work is very important for lumber grading, forensic investigations, and preventing the illegal trade of forest products. By equipping inspectors with efficient tools, the project seeks to improve the accuracy of wood species identification, which can enhance the traceability of wood products, reduce illegal trading, and support sustainable forestry practises. Scientifically, this project is significant because it innovatively applies metabolomics to provide practical solutions in the forestry industry, representing a step forward in effective and accessible wood species identification.

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