

Developing an expert database and a reference database in GTTN

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GTTN aims



GTTN aims to be a global initiative with the primary aim of the promotion of the integrated use of innovative technologies such as DNA fingerprinting and stable isotope analysis together with other existing technologies to combat illegal logging and associated trade worldwide.

Building on the results and experiences of the first phase, GTTN II will continue to further develop and expand the network, seek new partnerships, new funding sources and (active) collaboration.

GTTN will contribute to the development of two main services: an **Expert Catalogue** and a **Reference Database**

The past and present



GTTN phase 2, under coordination of EFI, is continuing the work that was started in GTTN phase 1, under coordination of Bioversity.

Several different service prototypes were created by Richard Bruskiewich (then with Bioversity), with the software solution changing over time as the needs of potential users got further elaborated.

WRI asked Richard to simplify the last GTTN prototype, the result of which was the model for the solution that was reimplemented by WRI as the service providers directory (SPD).

WRI is planning to launch the SPD as a tool under its Forest Legality Alliance website http://www.forestlegality.org

GTTN aims - two main services

The Expert Catalogue: interested

- to provide <u>external users</u> (e.g. timber industries, public authorities) with the
- information on which technology (wood anatomy, DNA test, stable isotopes) is appropriate and available to check <u>their</u> <u>specific claim</u> (declared tree species and / or geographic origin) and
- whom to contact to perform the testing along with the contact's expertise (e.g., expertise working on X species)

The Data Repository:

- to provide **internal users** (groups that:
 - have put their data into the data base,
 - signed a data sharing agreement,
 - successfully participated in ring tests for standardisation and
 - are ready to provide the lab services) with
- safe password protected access to a data repository centre on geographic reference data (genetics + isotopes).







The GTTN database should **provide users** along the supply chain **with** information on species identification and the verification of the origin (country, region, concession) of wood and wood products. (Expert database)

Furthermore, it should provide information on available scientific methods and tools (genetics, stable isotopes, spectrometry and wood anatomy), and contact information on certified(/participating?) labs for sample analysis.

An important database aspect is ensuring that the database and the **content** are secure and cannot be misused.

The development of the expert database should be a priority. There is a real need for enforcement authorities to know from where they can get information.

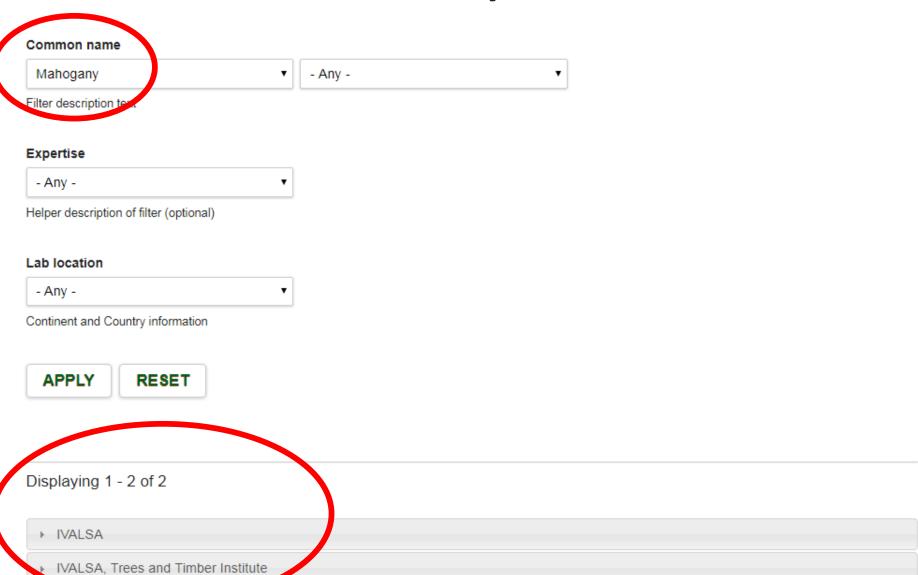
The WRI adaptation of GTTN work: The Service Providers Directory



- The data contained is the TRAFFIC data, appended to by WRI with IAWA data.
- An update of the TRAFFIC dataset (by Traffic) has been under way, which we wish to incorporate
- In the spirit of the GTTN aim to "continue to further develop and expand the network, seek new partnerships, new funding sources and (active) collaboration" WRI and EFI have teamed up to together launch and improve the Service Providers Directory and for GTTN to design the necessary extensions to the inclusion of reference data and an interface for its access.
- the following slides present thew WRI Service Providers Directory as it's development version stands currently (only sample datasets used for slides)



Species Names		
- Any -	•	
Helper description of filter (optional)		
Common name		
- Any -	•	
Filter description text		
Expertise		
- Any -	•	
Helper description of filter (optional)		
Lab location		
Europe	▼ - Any -	,
Continent and Country Information		
APPLY RESET		
A. I. E. KEOET		







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▼ IVALSA
Contact Details
General Details
Microscopic Slides
Samples for Exchange
Sample Availability
Samples Available
Samples Wanted
Sample Catalogue
Samples List
Testing Expertise
Testing Expertise Species
Remarks
Additional Details

Person:

Dr. Nicola Macchioni, Head Of The Wood Anatomy Laboratory At Ivalsa - Cnr, Simona Lazzeri, Laboratory Technician, Dr. Alan Crivellaro, Contract Researcher

Email:

lazzeri@ivalsa.cnr.it, crivellaro@ivalsa.cnr.it

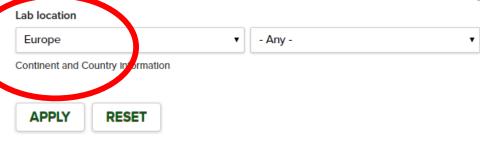
Address:

Istituto per la Valorizzazione del Legno e delle Specie Arboree - Consiglio Nazionale delle Ricerche (Trees and Timber Institute - National Research Council), (FLw), Via Madonna del Piano, 50019 Sesto Fiorentino (Florence). Italy.

City:

Florence

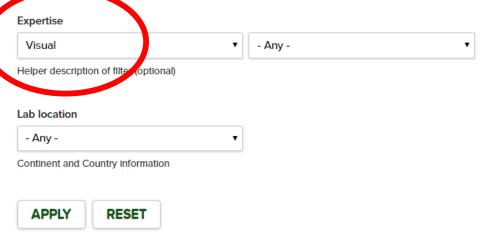
IVALSA, Trees and Timber Institute



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→ Customs Port of Rotterdam and Customs Laboratory ▶ European Plant Science Laboratory (EPSL) → IVALSA ▶ IVALSA, Trees and Timber Institute Laboratory for Wood Biology and Xylarium, Royal Museum for Central Africa Naturalis Biodiversity Center Naturalis Biodiversity Center, Leiden University ▶ Royal Botanic Gardens, Kew Timber collection, National Museum Wales ▶ University of Natural Resources and Life Science Vienna ▶ University of Natural Resources and Life Sciences – BOKU ▶ University of Vienna; Vienna Institute for Archaeological Science (VIAS) ▶ University of Warsaw Botanic Garden





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▶ Commonwealth Scientific and Industrial Research Organization
▶ Commonwealth Scientific and Industrial Research Organization 1
▶ Customs Port of Rotterdam and Customs Laboratory
▶ European Plant Science Laboratory (EPSL)
▶ Facultad de Ciencias Agrarias y Forestales
▶ IVALSA, Trees and Timber Institute
▶ Laboratory for Wood Biology and Xylarium, Royal Museum for Central Africa
▶ Naturalis Biodiversity Center, Leiden University
▶ Queensland Department of Agriculture
▶ Queensland Herbarium



Development steps before launch:



Change direct visibility of contact information to a "request for expertise", sending an email detailing the case needing expertise, so that the questions to the experts are useful and answerable

Need to develop a scheme for data updating by expertise providers themselves

Review and update inventoried expertise data from GTTN phase 1 and IAWA

Displaying 1 - 2 of 2

Contact Details	Person:
General Details	Dr. Nicola Macchioni, Head Of The Wood Anatomy La Tochnician, Dr. Alan Crivellaro, Contract Researcher
icroscopic Slides	Email:
nples for Exchange	lazzeri@ivalsa.cnr.it, crivellaro@ivalsa.cnr.it
	Address:
Availability	Istituto per la Valorizzazione del Legno e delle Specie
es Available	Naber Institute - National Research Council), (FLw), Italy.
oles Wanted	City:
le Catalogue	Florence
nples List	
sting Expertise	
sting Expertise Species	
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Next development steps (2): improving usability - implementing work flows



in the port for emerging issues Observe claimed identification on declaration, consider synonyms and Requirement for, and availability of, common names additional security measures (e.g. locks. Observe form of the timber seals, guards, CCTV) - e.g. Raw or sawn logs, veneer, finished products Availability and location of appropriate * Undertake rapid field identification of the timber storage areas for shipments, both short - Use all tools and support available and long term Take notes, photographs and preserve the scene Requirement for, and availability of, Consider other evidence which could indicate probable origin of shipment suitable equipment and manpower for - e.g. Newspapers in the container from a particular country moving shipments * If insects are found, consider consultation with quarantine experts who may be able to provide location information based on insect identification 3.2 Define forensic questions that require answering to determine if timber is controlled 3.1 Was rapid field identification successful * Points to prove and sufficient to determine -Genus if controlled? -Species -Provenance (origin) -Age or individual 3.5 Document decision making 3.3 ls process further expert forensic identification Proceed according to warranted at this stage and declared species Yes are sufficient funds Consider required available? improvements to facilitate

identification in future

Thank you for your attention!



