Service Charges

Timber	Charges per wood samples (in Rupee)				GST	Total
forensics services	DNA extraction	PCR amplification	Sanger sequencing	Total	(18%)	(Rs.)
DNA	300/-	800/-	400/-	1500/-	270/-	1770/-
barcoding	200	000/	100/	1200/	2707	1770
DNA	300/-	800/-	200/-	1300/-	234/-	1534/-
fingerprinting						

* Charges tend to vary for extremely difficult wood samples.

MODE OF PAYMENT

DD/Direct transfer in favour of Director/Registrar, Account Number 10554112507, IFSC Code SBIN0002255, State Bank of India, Peechi, Kannara, Thrissur.

Training/Internship programs

The facility is designed and equipped with enough resources to provide hands on workshops, short term training programs, internship programs with both theoretical and practical classes, for Post-graduates/Research Scholars and forensic personnel. The programs will provide practical knowledge on the various facets of timber forensics and its implication in proper forest management and conservation of valuable resources.

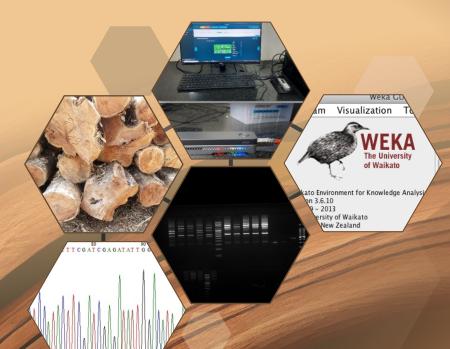
- 1. Short-term Training programs (15 days) in DNA Barcoding & DNA Fingerprinting
 - For academic and forensic personnel
 - Hands-on training will be provided
- 2. Internship programs in DNA Barcoding & DNA Fingerprinting
 - Theory and hands-on training on DNA Fingerprinting and DNA Barcoding techniques



Centre for DNA Barcoding and Timber Forensics KSCSTE -Kerala Forest Research Institute Email:ctfr@kfri.res.in Phone: 0487 2690 100, 2690 191



CENTRE FOR DNA BARCODING AND TIMBER FORENSICS





KSCSTE -KERALA FOREST RESEARCH INSTITUTE An Institution of Kerala State Council for Science, Technology and Environment Peechi-680 653 | Thrissur | Kerala www.kfri.res.in



KSCSTE-KERALA FOREST RESEARCH INSTITUTE

Kerala Forest Research Institute (KFRI) is a multidisciplinary team of experts conducting research on tropical forestry. The Institute has contributed significantly to tropical forestry research and biodiversity conservation over the past four decades since its existence. Founded in 1975, Institute is envisioned as a Centre of Excellence in Tropical Forestry to provide scientific support related to decision making on matters related to forestry, with particular emphasis on conservation, sustainable utilization and scientific management of natural resources. With the formation of KSCSTE in 2002, the Institute was brought under council along with other research and development institutions of the State. KFRI has a long standing history in the development of scientific acumen in the State of Kerala through its continuous involvement in the society oriented programmes and extension activities. Many of our research findings were leading lights to society in nature conservation and environmental vigilance.

CENTRE FOR DNA BARCODING AND TIMBER FORENSICS

The Centre for DNA barcoding and Timber Forensics at KSCSTE-KFRI utilizes molecular markers with good forensic parameters to generate DNA based evidences for tracking the origin of timbers and chain of custody validation of traded timbers. KFRI offers technical expertise to trace the origin of illegally felled timber by comparing DNA fingerprints of the seized wood with that of the original stump and provides tamper-proof evidence to the judiciary to deal with illegal felling cases. This is the first of its kind of facility in the country which provides DNA evidences to the honorable Court so as to tackle the scourge of illegal felling, more quickly and effectively. The ability to track and authenticate forest resources of economic value is crucial for effective management of natural resources and appropriate regulation of trade.

DNA barcoding is another promising molecular tool for authentication of wood and non-wood forest produce and thereby to curb market adulteration. Through development of institutional capability for DNA barcoding of life forms, KFRI has demonstrated the potentialities of DNA barcodes in biological species identification, solving taxonomic complexities, certification of planting materials in bamboos, authentication of Ayurvedic raw drugs, and species confirmation of timber logs/products, for various stakeholders. KFRI has developed a DNA barcode database for commercial timber tree species which can be used as a tamper proof and credible tool to distinguish adulterant wood species for voluntary wood certification agencies. Currently, DNA barcoding facility caters to the requirements of various researchers in the field and undertakes consultancy services from various State Forest Departments and other agencies.

The Institute has the scientific expertise to offer hands-on training programme that helps the trainees to develop know-how on the various molecular marker techniques/DNA testing/ barcoding/ sequence data analysis and will be useful for the researchers to understand its applications in the conservation and sustainable management of forest genetic resources.

Vision

The Centre is envisioned to be state-of-the-art-facility in timber forensics to deal with illegal felling cases and market adulteration of wood/non-wood products employing DNA evidence.

Mission

- DNA barcoding for species confirmation in wood and non-wood products/any kind of plant samples
- DNA fingerprinting (SSR/ISSR based) for tracking the origin of timber logs for judiciary and various Govt. agencies/ for distinguishing varieties & hybrids
- To conduct training and internship programs on DNA testing

Services offered

1.*DNA fingerprinting of plant species using Microsatellite (SSRs)/Inter Simple Sequence Repeats (ISSR) markers

For species/population/varietal discrimination

Genetic fidelity testing

DNA match testing of seized (logs) and evidence wood (stump)

2. <u>DNA barcoding of timber/plant species using rbcL, matK and trnH-psbA barcode</u> regions

Species authentication/identification

- Check for Adulteration
- Resolve taxonomic complexities

*For DNA testing related to Crime cases - Wood specimens in sealed packets are accepted only from Court of Law and Government Departments along with a duly filled forwarding note form the concerned authorities.