

SEMINARS ON TECHNOLOGICAL ADVANCES AND
INNOVATION

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LABORATORY FOR THE CONSERVATION OF ENDANGERED
SPECIES (LaCONES)
CSIR-CENTRE FOR CELLULAR & MOLECULAR BIOLOGY
(CCMB), HYDERABAD

Poaching and Illegal Trade

- Species Identification
- Individual Identification
- Relatedness
- Sex Identification
- Geographic origin

Wildlife
Forensics

Biological Samples



DNA Analysis

June

26th

2025

TIFRR Auditorium 16:00 Hrs

Tea/Coffee 15:45 Hrs

SEMINARS ON TECHNOLOGICAL ADVANCES AND
INNOVATION**WILDLIFE FORENSICS – CONNECTING GENETICS WITH
LAW ENFORCEMENT IN FIGHT
AGAINST WILDLIFE CRIMES IN INDIA**

Wildlife forensics has emerged as a major tool in keeping a check over crimes related to wildlife. Today, wildlife forensics employs modern molecular genetic techniques to resolve wildlife crimes based on the fact that DNA is present in all life-forms from viruses to the biggest of the mammals. Further, DNA is species-specific, unique to an individual of a species, identical in all cells of an individual and related to its parents and siblings. Thus, DNA is the basis of modern wildlife forensics and has the power not only to establish the identity of a species but also to establish genetic relationships between individuals.

The Centre for Cellular and Molecular Biology (CCMB) is playing a crucial role in DNA-based forensic investigation over the last two decades, providing scientific evidences for species identification, individual identification and tracing geographic origins of smuggled consignments. The “Universal Primer” technology developed by CCMB allows identification of a biological specimen of unknown origin and delineates its utility to the level of family, genus and species. In last two decades, CCMB has received more than 3600 wildlife crime cases forwarded by various enforcement departments, which includes variety of biological samples such as meat, cooked meat, bones, faeces, skins, ivory, hair, nails, blood stains, horns, saliva swabs etc. This effort of CCMB has also significantly helped in increasing awareness amongst forest departments, police departments and judiciary and in inculcating a sense of fear amongst poachers.

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