

REPORT ON 'BIOPROSPECTING OF FOREST RESOURCES'

20.02.2023

10.30 a.m. - 12.30 p.m.

SCHOOL OF BIOSCIENCES

DEPARTMENT OF ZOOLOGY

**HON'BLE CHIEF GUEST: Prof. N Senthil Kumar, Scientist-F, Head
IFGTB, Coimbatore, Tamil Nadu, India.**

A lecture was organized by the Department of Zoology, Avinashilingam Institute for Home Science and Higher Education for Women, on 20th February 2023. It was conducted with regards from Dr. A Vijayalakshmi, Dean, School of Biosciences and Dr. K Manimegalai, Professor and Head, Department of Zoology. The resource person was Prof. N Senthil Kumar, Scientist-F head in Institute of Forest Genetics and Tree Breeding, a regional Institute of Indian council of Forestry Research and Education (ICFRE), who delivered a lecture on the topic, 'Bioprospecting of Forest Resources'. It was organized by Dr. P Chitra, Assistant Professor, Department of Zoology.



The lecture gave an insight into the topic of Bioprospecting and value addition to the natural resources that can bring about novel but highly useful products. Prof. Dr. N Senthil Kumar elaborated on his research work and his interests which included focus on bioprospecting of forest resources with special reference to biopesticides, bio-boosters, natural colourants, biofuel and Phyto products and also explained why the food crops are not essentially used for bioprospecting but trees and forest resources are preferred. He put forth the several works and products, that served as great examples, helping the students understand the core concept of bioprospecting. He also highlighted the need and importance of bioprospecting in India, which is a country with rich natural resources.



The source of the medically important compounds, such as statins, Taxol and several others were also elaborated to the students. Some of the examples stated in the lecture include,



- Magainin, a pigment extracted from the frog's skin which has anti-bacterial properties and used for treatment of dog bites.
- To treat the prominent issue of male baldness, leech therapy is being practiced by the doctors in Europe. In India, this has started to contribute to GDP as leeches are exported.
- Streptomycin is used to treat tuberculosis and statins are used as cholesterol lowering medicines, while Taxol is used as an anti-cancer agent. Thus, the students were able to get an insight into the topic of Bioprospecting, its uses, the need and the different ways in which the same can be done.

