

Application of DNA Markers in Identifying Tree Species

11 April 2023

Live in Zoom | 1400 - 1600 (GMT+8) Kuala Lumpur

Each species of tree possesses a unique genetic code that can be identified using DNA markers present in wood samples. With the help of DNA markers, wood can be identified even if it has been processed, making it almost impossible to identify through traditional methods. This application of DNA markers is particularly useful in cases where illegal logging or trade in protected wood species is suspected.

In addition, DNA markers can be used to verify the origin of wood, as the genetic code of a tree is influenced by various environmental factors, such as soil type and climate. This can be particularly useful for wood certification in which DNA markers can provide assurance that the wood has been sourced responsibly. The application of DNA markers in tree species identification offers a promising alternative to combat illegal logging and promote sustainable forestry practices.

The objective of the workshop is to establish a network for the exchange of information among scientists within APAFRI member institutions who are involved in the application of DNA markers for wood identification, genetics, and breeding.

- ✓ Open to all the scientists from APAFRI member institutions
- ✓ Free of charge
- ✓ Certificate of Attendance will be issued to participants who have successfully attended all the sessions.
- ✓ Please register with the Google Form at: <https://forms.gle/Bv7K1pgFam5PEaPu8>
- ✓ Registration deadline: **4 April 2023**

Time (GMT +8)

Activity

1400-1410	Brief Opening Remark by APAFRI representative
1410-1440	Presentation: Application of DNA markers for tree species identification- a case study in <i>Cinnamum kanehiare</i> Dr. Chia-Chen Wu , Taiwan Forestry Research Institute (TFRI), Taiwan
1440-1510	Presentation: A DNA barcode reference library for the native woody seed plants of Japan Dr. Suzuki Setsuko , Forestry and Forest Products Research Institute (FFPRI), Japan
1510-1600	Q&A - Open Discussion

In the discussion session, participants are encouraged to:

- ❖ discuss the tree species that they are focusing on for illegal wood tracking using DNA markers.
- ❖ share regulations, laws, and policies related to controlling the trade of wood in their respective countries.
- ❖ share experiences on how they have applied DNA markers for specific topics such as population genetics, breeding, or other related areas

About the Instructors:



Dr. Chia-Chen Wu is an associated research at Taiwan Forestry Research Institute (TFRI) in Taiwan. His research area is to develop the molecular markers for plant identification and try further to focus on genomic selection in tree species



Dr. Suzuki Setsuko is a senior researcher of the Forestry and Forest Products Research Institute (FFPRI) in Japan. She is conducting research on the development of a DNA barcode database for Japanese trees, as well as investigating the evolution of plants on oceanic islands.

For more information, please contact

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