



**Virtual training on
"Collecting and managing information and data on coconut germplasm,"
organized by the Land Resources Division of the Pacific Community, Suva, Fiji.
(2024, August 20–21)**

**Rapid characterization of coconut varieties in farmer's field during a survey
[Virtual training presentation] by Dr Roland Bourdeix and Julius Maot**

This online training module, led by Dr. Roland Bourdeix and Julius Maot, introduces practical methodologies for the **rapid characterization of coconut varieties** in farmers' fields. Designed for use during surveys across wide territories, the course focuses on balancing breadth and depth of data collection—prioritizing the identification of rare and valuable coconut types over exhaustive measurements of only a few specimens. The training emphasizes the use of **standardized geolocated photographs**, which are considered more effective than numerical data in capturing the identity of coconut varieties. These images should include the full palm, fruit clusters, inflorescences, and coconuts in various forms, ideally with a person present for scale and ethnological value. Ethnobotanical context, such as cultural migration patterns that influence varietal distribution (e.g., the Tuvaluan community on Kioa Island, Fiji), is also integrated into the characterization process.

Participants are taught to perform **basic phenotypic evaluations** using accessible field equipment, including harvest sickles, small ladders, and drones. Procedures include weighing fresh coconuts, measuring sugar content of coconut water using a refractometer, and tasting for qualitative traits. For dry coconuts, the course details how to label, weigh, and dissect fruits using simple workshop tools like a reciprocating saw, allowing analysis of kernel and shell characteristics. The module also covers measurements of the **stem (trunk)**—such as height and internode spacing—and of **leaf traits**, including leaflet width and number on standardized leaf #14. Observations of pests, diseases, and yield indicators are encouraged. Students are advised to collect plant tissue samples for potential DNA analysis.

The course ultimately promotes the creation of **national coconut varietal catalogues**, based on these rapid survey techniques, to support in situ conservation and broader farmer awareness of local coconut diversity.----

APA reference: Bourdeix, R., & Maot, J. (2024, August 20–21). Rapid characterization of coconut varieties in farmer's field during a survey [Virtual training presentation]. Virtual training on "Collecting and managing information and data on coconut germplasm," organized by the Land Resources Division of the Pacific Community, Suva, Fiji. <https://youtu.be/-X4yTPtPkOs>