Soil health assessment: Biofunctool® training at UNJA under the RUBIS project

A training on soil health measurements with the Biofunctool® methods was held at the University of Jambi (UNJA) between 5 to 7 March 2024. This training was part of the RUBIS project and co-founded by L'Oréal project. The training was organized by Dr Alexis Thoumazeau (Cirad) and Dr Phantip Panklang (Land Development Department, Thailand), with the local support of Dr Turinah and Suzelle Vérant (Cirad, Jambi). It gathered 13 participants from various institutes of Indonesia: 3 persons from the Indonesian Rubber Research Institute of Sembawa (IRRI), 2 lecturers from the University of Gadjah Mada (UGM), 2 staffs of BRIN Jambi (Badan Riset dan Inovasi Nasional) and 6 lecturers from the University of Jambi (UNJA).

During the first day, the training received a warm opening from UNJA rector. Then, Alexis Thoumazeau and Phantip Panklang exposed the theoretical concept of Biofunctool® that aims at assessing soil biological functioning through the use of 9 indicators (see www.biofunctool.com). The experimental principal of the tools and their relevance were also exposed. The afternoon was dedicated to the preparation of the material needed for the field assessments in the laboratory of the university.

The second day was organized in the field, in demo plots of UNJA. The protocols of the different Biofunctool® indicators were presented to the participants that were divided in small groups. All the participants could thus understand the implementation of the 9 indicators in the field with intense interactions with the trainers.

The last day of the training focused on a summary of the implementation of the indicators, and a presentation of the different steps to analyses the results collected from Biofunctool®. The participants could analyze part of their own results from the last day. Then, discussion on the strength and limitations of the indicators were implemented. Alexis Thoumazeau also presented a large panel of results collected with the Biofunctool® methods in various area and experiments, but also with more recent results from an experiment in Jambi province (Thoumazeau et al., 2024).

On the 8th of March, a specific meeting was organized between Cirad and IRRI team to discuss about the implementation of Biofunctool® indicators in their station of Sembawa. The team plan to implement the indicators to better understand the spatial heterogeneity of an agroforestry system based on rubber and oil palm intercropping. The material was shared with the IRRI team and the measurements may be implemented in next April/May with the support of the Biofunctool® platform built in UNJA.