

Learn DNA Barcoding in the Department of Biology



Department of Biology, Faculty of Mathematics and Natural Sciences, Bogor Agricultural Institute (IPB) through the Business and Industrial Services Unit (UJI Unit): Biofuture held a "Workshop on the Utilization of Molecular Marking and DNA Barcoding for Analysis of Indonesian Biodiversity". This open workshop is part of the community service activities in the field of biotechnology and conservation genetics.

The workshop which was held on November 15-16 2018 was attended by some participants from IPB, Gajah Mada University (UGM), as well as government agencies such as the Center for Diagnostic of Agricultural Quarantine (BBUSKP), Ministry of Agriculture. This time, [Dr. Ir. Miftahudin M.Si.](#), [Dr. Ir. Rika Raffiudin M.Si.](#), and [Dr. Rika Indri Astuti S.Si. M.Si.](#), were the presenters who each introduced the participants to the use of molecular marking and DNA barcoding techniques to analyze the biodiversity of Plants, Animals, and Microbiology.

In the workshop, the participants get the opportunity to independently try these techniques in a guided work for 2 x 6 hours at the Genetic Laboratory, Department of Biology. They studied several molecular techniques such as DNA extraction, DNA concentration calculations, Polymerase Chain Reaction (PCR), electrophoresis, and DNA amplicon visualization. In addition, the participants learned various software used in bioinformatics analysis, such as access to DNA and protein databases.

This knowledge will make the researchers or other users easy to identify some types of disease or contamination due to bacteria and fungi, characterize a species in the term of a conservation plan, or species identification in mix origin products such as clothing, food, and shelter.

One participant, Dr. Dede Aulia Rahman, said that this activity added his knowledge of molecular genetics. One of them was his first experience using a DNA pipette.

"This workshop is expected to be able to reach the wider community who want to know more about the current molecular procedures or techniques. In the future, the Biology Department, through UJI Unit: Biofuture, will hold a similar workshop or provided other biology themes ", said Dr. Puji Rianti, chair of the workshop committee. "This workshop or training information can be accessed at www.biologi.ipb.ac.id", she continued.