

Lecturer from Department of Biology Conducts Counselling and Demonstration of Waste Utilisation



The Serving Lecturer Team from the Department of Biology of IPB University succeeded in operating an extension and demonstration plot on the utilization of waste for organic fertilizer in Belitung Regency. This activity was carried out through a community service program in collaboration between the Department of Biology of IPB University and the Environmental Service of Belitung Regency, Bangka Belitung Province.

This activity was chaired by Professor Hamim, an expert at IPB University in the field of Plant Biology. Prof. Hamim explained that the extension activities began with the preparation of organic waste materials and composting activators. Furthermore, counseling and discussions related to organic fertilizer production were carried out before the demonstration plot was carried out which was attended by officers from the Environmental Service and representatives of residents of Parit sub-district, Belitung Regency.

“Implementation of the demonstration plot for the manufacture of organic fertilizer using a simple composter made of plastic. The organic material is in the form of organic waste from the market,” explained Prof. Hamim.

The IPB University lecturer explained that the organic materials collected were in the form of leftover leaves and pieces of vegetables and fruits that were not sold.

In the composting process, he said, an activator is added to help the growth of microbes that will be used in composting. The preparation of the activator is done by making a solution using a starter microorganism and carbon source material for microbes during the composting process. The microorganism starter used is D'Boosterfer liquid fertilizer.

The D'Boosterfer liquid fertilizer was mixed by Dr. Nisa Rachmania with a team from the Microbiology Division, Department of Biology, IPB University. Microorganisms found in D'Boosterfer include phosphate solubilizing bacteria, nitrogen fixers, plant growth promoters, probiotics, and fungi that decompose organic compounds. D'Boosterfer has even been produced commercially by PT Femu Enviro Risorindo.

D'Boosterfer liquid fertilizer was given symbolically to the waste bank coordinator at the Belitung Regency Environmental Service. It is hoped that through this collaboration, it

can trigger awareness of the local community in the use of organic waste.

"Solid organic fertilizers produced after the fermentation process can be used directly by residents or can be sold in packages as has been done by the Waste Bank of the Belitung Regency Environmental Service," said Dr Nisa.

Furthermore, it is hoped that the results of the counseling can be applied by participants from the Parit sub-district and its surroundings. This certainly can support the Environmental Health Sustainable Development Goals (SDG) program in Bangka Belitung.