

LECTURERS OF BIOLOGY DEPARTMENT PROVIDES GUIDANCE AND ASSISTANCE TO HORTICULTURAL FARMERS IN BANDUNG



Lecturers from the Division of Plant Physiology and Genetics, Department of Biology, Faculty of Mathematics and Natural Sciences, IPB University, have provided guidance and assistance to horticultural farmers, especially cabbage, leeks, carrots and potatoes in Kertasari District, Bandung Regency on June 25, 2022 in the context of community service. In the activity, the lecturers who attended were Prof. Suharsono, Prof. Miftaudin, Prof. Hamim, Dr. Ence Darmo Jaya Supena, and Dr. Aris Tjahjoleksono.

The service activity began with a visit to Agriharsa Farming's potato and leek gardens. The potato gardens visited were potatoes that were 7 days after planting (days after planting), and those that were 50 days old, most of which were Atlantic varieties, which are the type of potato chips industry. Several new varieties from IPB, namely Jala Ipam (JI), IPB CP1 (Sipiwan), and IPB CP3 (sipitri) varieties were also planted together with Atlantic potatoes as experimental demonstration plots. The planting of new potato varieties from IPB was intended to introduce and test production in Kertasari District.

The direct visit to the garden was intended to explore problems in the production of horticultural crops, especially potatoes, ranging from problems with seeds, cultivation techniques, maintenance in the garden, procurement systems for production facilities, to problems selling production products. Diseases that are a problem in potato cultivation are lodoh disease (blight) caused by the fungus *Phytophthora infestans*, and bacterial wilt disease (bacterial wilt/BW) caused by *Ralstonia solanacearum*. Lodoh disease does not only occur in potatoes but also occurs in tomatoes. In addition to the two dominant diseases, club root caused by the fungus *Plasmodiophora brassicae* is also common in cabbage plants. Several examples of plants suffering from the disease have been taken for further analysis, as a basis for plant maintenance management in the field.

After the visit from the Agriharsa Farming garden, it was followed by lunch with the farmers before a discussion at Nazib Abdullah Zawawi Alrasyid, SSi, MP place as the director of Agriharsa Farming. The farmers who attended came from two sub-districts, namely Kertasari and Pacet Districts. Farmers from the Kertasari sub-district come from the villages of Cibeureum, Cikembang and Tarumajaya. The farmers who attended the

meeting were farmers belonging to large land owners, so the results of the meeting could be directly applied.

In the meeting, farmers were very interested in planting new varieties of potato produced by IPB after receiving an explanation of some of the advantages of these varieties. In addition, farmers want to be able to become G2 and G3 seed breeders so that farmers can be independent in procuring seeds. IPB is expected to be able to provide G0 seeds to be propagated by farmers or farmer groups in Kertasari District so that farmers get healthy and quality seeds at a more economical cost. Currently, 5,000 seeds of G0 potato variety Sipitri have been at Agriharsa Farming to be tested for their yields.

The discussion went very well, and ended with a group photo session.