

## The 6th Summer Course on Biology Department Wraps Up Successfully



The Department of Biology at IPB University successfully hosted the 6<sup>th</sup> Summer Course on Biology from August 1-5, 2024, focusing on the theme of "Tropical Biodiversity of Marine and Forest Ecosystems." This event featured a combination of academic and field experiences, beginning with a series of lectures on August 1-2, 2024, held at the Department of Biology, IPB University. The program continued with hands-on field activities in the Seribu Islands from August 3-5, 2024. The course attracted 21 students from a diverse array of universities, including Universiti Sains Malaysia, Universiti Putra Malaysia, Gyeongsang University in South Korea, University of Tsukuba in Japan, and IPB University.

On the first day, the event commenced with an opening speech by Dr. Akhmad Faqih,

Vice Dean of the Faculty of Mathematics and Sciences, followed by remarks from Dr. Ivan Permana Putra, the Coordinator of the 6<sup>th</sup> Summer Course. The lecture sessions began with a lecture on Forest Pathology by Dr. Razak Bin Terhem from Universiti Putra Malaysia. The program then continued with a presentation on Macrofungi Diversity in the Tropics by Dr. Atik Retnowati, a fungal taxonomist from BRIN. The final lecture of the day was delivered by Dr. Ivan Permana Putra of IPB University, who explored the Ethnobiology of Wild Edible Mushrooms. The day concluded with a gala dinner at DSawah Café, offering participants a chance to unwind and connect.

The second day of the program was packed with insightful lectures from esteemed professors. The day began with Prof. Tri Atmowidi from IPB University, who delivered a lecture on the Bioecology of Exotic Tropical Invertebrates. This was followed by Prof. Miftahudin from IPB University's Department of Biology, who presented an anthropological approach to biology with a session on the Science of Culture. After that, Prof. Antonius Suwanto discussed Sustainable Tourism and Biodiversity, highlighting its connection to the microbiome. Dr. Shiho Kariyazono, joining via Zoom, provided an in-depth look into Marine Biology, focusing specifically on coral physiology.

On the third day, all participants and the organizing committee traveled together by boat to Pramuka Island in the Seribu Islands. Upon arrival, they were warmly welcomed by the Green Literacy Foundation, which kicked off the activities with an introduction about the Turtle Sanctuary, the use of plants for natural dyes, and the operation of pyrolysis machines that convert waste into energy (fuel). Participants had the unique opportunity to interact with rehabilitating turtles, destined for release into the open sea. Then, we learned the Shibori Technique, a traditional batik-making process using stones, marbles, chopsticks, ropes, and rubber to create intricate patterns. Uniquely, the dyes were sourced from local plants such as acacia stems, noni leaves and roots, and mangrove roots, all native to Pramuka Island. The day concluded with a demonstration of the pyrolysis machine, showcasing its ability to transform plastic waste into diesel, gas, and residue usable as a planting medium. In the evening, participants gathered for a communal barbecue, enjoying locally sourced gegebel and tengkel fish while engaging with the local community in games and activities.

On the fourth day, the group participated in field activities, starting with the planting of 100 *Rhizophora stylosa* mangrove seedlings. The local community, which has been cultivating mangroves for decades, shared their experience, highlighting the effectiveness of the distanced clump method (metode rumpun berjarak) in withstanding strong waves, allowing the mangroves to thrive. Following this, participants received an introduction to coral transplantation and were given the opportunity to practice it firsthand. In the afternoon, Dr. Razak Terhem and Dr. Ivan led an exploration of the local forest, pointing out the symptoms of plants affected by pathogens. Later, participants prepared infographic posters summarizing their learnings and presented them during the final presentation session in the evening.

Last day, participants were equipped with lifejackets and swimming goggles in preparation for snorkeling. Before heading to the snorkeling site, the group visited Water Island (Pulau Air) to capture footage. Snorkeling brought joy to everyone as they encountered a variety of marine life, including coral, fish, sea urchins, and even birds near the site. After a fulfilling snorkeling experience, the group returned to the resort on Pramuka Island to prepare for the journey back to home. Although the Summer Course 2024 journey concluded here, the memories and experiences gained will be cherished for years to come.