

## EMB-ERLSD PERSONNEL PARTICIPATE IN MICROALGAE WORKSHOP



Staff members of the Environmental Management Bureau's Environmental Research and Laboratory Services Division (EMB-ERLSD) participated in the Microalgae Workshop spearheaded by the University of the Philippines-Natural Sciences Research Institute (UP-NSRI) on September 25, 2023.

The workshop, which was held at the EMB Central Office Laboratory, was facilitated by the UP-NSRI's Biological Research and Services Laboratory (BRSL), headed by Dr. Pierangeli G. Vital.

In his welcome message, Mr. Roger C. Evangelista, Jr., OIC-Chief of the ERLSD's Environmental Research Section (ERS), mentioned that the workshop is part of the Division's capacity development initiatives, particularly on conducting ecotoxicity tests using other test organisms that would represent different trophic levels in a freshwater ecosystem.

Dr. Vital facilitated the discussions on topics including basic biosafety and laboratory practices, basic concepts on microalgae, sample collection, preservation, and concentration, algae identification through microscopy, isolation and purification, and cell counting using a hemocytometer (also known as a cell counting chamber).

Meanwhile, the participants' abilities to identify, handle, isolate, grow, and count the microalgae, which can be used as a test organism for ecotoxicity tests, were demonstrated during their hands-on activities. Subsequent observation and cell counting were also done by the participants.

ERLSD officials and staff members will continue coordinating with the BRSL regarding updates on the cultured microalgae and improvements in the Division's Ecotoxicity Laboratory Unit. The knowledge gained by the ERLSD staff is also expected to be used in its efforts to conduct ecotoxicity tests using microalgae collected from various environments sustainably.

An ecotoxicity test is a type of experiment or study conducted to determine the toxicity or harmful effects of certain substances on living organisms within an ecosystem. These tests are designed to assess the potential risks posed by different chemicals, pollutants, or environmental factors to the health and well-being of organisms and ecosystems. This kind of test can also aid in the study of identifying environmental hazards, environmental impact assessment, chemical safety assessment, and water quality monitoring and assessment.###