

Investigating gorgonian diversity in Lengguru's waters

by Yosephine Tuti

I had never been to West Papua before. This is why when I first heard about the *Lengguru 2014* expedition, I was excited to join. I was glad when I was offered the opportunity to participate, so that I could fulfill my curiosity and explore gorgonian diversity in the coastal waters of Papuan karsts.

During the expedition, I dived 22 times, down to 30 meters depth, and collected over 150 specimens. About 60 additional specimens were collected by other members of the marine team diving with close circuit rebreathing (CCR) down to 70 meters. Even though I focus on gorgonians (Subclass Octocorallia; formerly order Gorgonacea, now included within the order Alcyonacea), I observed and collected a few specimens of Antipatharians (black corals) and other Alcyonarians (soft corals). I was able to identify 8 families of gorgonians. It is not possible to specify the number of species so far, because species identification will require detailed observation of the specimens in the lab under a powerful microscope, as well as molecular analyses.

Unlike what I had the opportunity to observe before, most of the gorgonians were attached to the substrate by some biota (mainly crinoids) and dirt. Surprisingly, some gorgonians that are easily found throughout Indonesian waters seem not to be common here, while usually uncommon species are relatively easily found.



Gorgonian of the family Ellisellidae © Yosephine Tuti



Euplexaura sp., family Plexauridae © Yosephine Tuti



Muricella sp., family Acanthogorgiidae © Yosephine Tuti