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Southeast Asian biodiversity in crisis

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Keynote -4

Southeast Asian biodiversity in crisis

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The biodiversity of Southeast Asia is gravely imperiled by drivers including massive habitat modifications, forest fires and the overexploitation of wildlife. I will present on a comprehensive determination of the current state of Southeast Asia's terrestrial biotas and highlight the primary drivers responsible for the grave threat to the region's unique and rich biodiversity. The looming Southeast Asian biodiversity disaster demands tangible actions. However, such will continue to be constrained by socioeconomic variables (e.g. rampant poverty and lack of infrastructure). Any realistic solution should involve a multi-pronged strategy (e.g. political, socioeconomic and scientific) in which all major stakeholders (e.g. people, governments, and national and international non-government organizations) must partake.

Oral -1

Porcellanidae (Crustacea: Decapoda) of the Philippines based on the material of the Panglao Marine Biodiversity Project

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The crab-shaped anomuran family Porcellanidae (Crustacea: Decapoda) includes approximately 30 genera and 280 species mainly distributed in the temperate to tropical waters of the world. Among them, 18 genera and 125 species are presently known from the Indo-West Pacific. The crabs occur at depths above the continental shelf (< 200 m), but are most abundant in the intertidal region on rocky and coral reefs. Many intertidal species (e.g., the genera *Petrolisthes*, *Pachycheles*) live in narrow spaces between rocks or dead coral blocks, whereas shallow subtidal species (e.g., *Lissoporcellana*, *Polyonyx*) are occasionally found in association with sponges and a variety of alcyonacean octocorals (soft corals). The porcellanids are known to be typically suspension feeders and catch food by using the external mouthparts (third maxillipeds) bearing long plumose setae.

The Panglao Marine Biodiversity Project 2004 (PANGLAO 2004), an international research of coastal fauna mainly on crustaceans and mollusks, was conducted around the island of Panglao located southwest off Bohol, the Philippines. During this research project, abundant material was obtained by trawling, dredging, coral brushing, intertidal sampling, sea bottom suctioning, diving, traps and traditional fishing methods such as tangle nets.

Approximately 660 porcellanid specimens were collected from the intertidal region to 150 m depth through the PANGLAO 2004. They contain at least 25 species of nine genera such as *Aliaporcellana*, *Enesteoides*, *Heteropolyonyx*, *Lissoporcellana*, *Neopetrolisthes*, *Pachycheles*, *Petrolisthes*, *Pisidia*, and *Polyonyx*. *Enesteoides* and *Polyonyx* include some undescribed species, and the latter genus comprises seven species at least and is highest in species number. Individuals of *Petrolisthes militaris* and *P. scabriculus* are abundant in this material. The two species have been frequently recorded from depths of more than 20 m unlike most of other congeners are intertidal dwellers. Although 19 species and ten genera were previously known from the Philippines, the PANGLAO material lacks six species and three genera (*Capilliporcellana*, *Novorostrum*, and *Porcellanella*).

In Indonesian waters adjacent to the Philippines, 11 genera and 33 species have been hitherto reported. From the Ryukyu Islands in the southwestern Japan, nine genera and approximately 40 species have been found and most of them are collected from the intertidal region to 2 m depth. The porcellanid fauna of New Caledonia and the Loyalty Islands, southwestern Pacific, was also recently documented, and it