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Tangle net fishing in the Panglao and Balicasag Islands, a Filipino innovation

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comprises 11 genera and 36 species including three new species. A new species, *Polyonyx spina*, was described on the basis of the material of the Loyalty Islands and the PANGLAO 2004. The species recorded from the Philippines are generally found in those from Indonesia and the southwestern and northwestern Pacific islands. However, the numbers of *Petrolisthes* species are much fewer in the Philippine material than those of other three areas. This is probably due to limited sampling efforts in the intertidal region through the PANGLAO 2004. Further research may eventually reveal existences of more intertidal species as well as shallow subtidal species hiding in crevices of coral reefs.

The porcellanids occurring in the tropical and subtropical waters are generally known to have wide distributions in the western Pacific or Indo-West Pacific, although their occurrence records are frequently scattered and taxonomy of some species seems to remain unclear. Mud and fine sand substrata in the estuaries and mangroves are generally regarded as unusual habitat for porcellanids. However, some species of *Petrolisthes* can be obtained from hard objects on such soft substrata, and some *Polyonyx* and *Raphidopus* species are also known to be associated with tube-dwelling polychaetes as infaunal burrows. Further special effort to obtain estuarine species will have to be made for understanding of the true fauna of porcellanids in Southeast Asia since many estuaries, mangrove swamps, and similar environments exist there.

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Tangle net fishing in the Panglao and Balicasag Islands, a Filipino innovation

Jose Christopher E. Mendoza

*Department of Biological Science, National University of Singapore, 14, Science Drive 4,
Singapore 117543, Republic of Singapore*

Tangle nets have been in use by the fishermen of Panglao and Balicasag Islands in the central Philippines for decades. This indigenous fishing method is primarily designed for catching benthic marine life, particularly mollusks and crustaceans, for food and the collectors' trade. The nets are made of light synthetic netting material, with a mesh size of about 1 inch square, and suspended on 5-mm thick nylon ropes on both edges. The dimensions of a single, rectangular net are usually 1-1.5 m in width and between 100-200 m in length. Small lead weights are attached on the lower edge of the net. The effective depths at which these nets are used range from 30-200 m. To deploy the net, one end is weighed down by rocks, which serve as a makeshift anchor, tied to the nylon rope. The rest of the net is lowered using a spool-like mechanism as the fisherman's boat moves along a line projected by the fisherman. The other end (usually found in shallower depths) is tied to a large buoy, which marks the position of the net and aids in the location and retrieval of the net. The net then settles on the seabed and is left there overnight or for about 24-48 hours. As crustaceans and mollusks crawl over it they get entangled and caught in the meshwork. The fisherman then retrieves the net by diving into the water to get the end attached to the buoy, and fitting this end into the spool. The fisherman then commences to pull the net up by means of the spool, sometimes doing some skillful maneuvering to untangle the net if it gets snagged in the irregular underwater terrain. Any specimens caught in the net are then carefully disentangled, such that most of the time they are in better condition than specimens brought up by trawl or dredge. In recent years, tangle net fishing has yielded astounding and rare biological finds, including several new taxa. Tangle net fishing has also been shown to efficiently collect specimens from areas that cannot be sampled using traditional methods such as trawls and dredges.