The comparison on reproduction and growth of the giant clams of *Tridacna noae* and *Tridacna maxima* in Taiwan

Hei-Nin Kwong, Bo-Wei Su and Li-Lian Liu
National Sun Yat-sen University, Taiwan

*Tridacna maxima* are a widely distributed giant clam species in the world. Recently, several studies have shown that a cryptic species, i.e. *Tridacna noae* is similar to *T. maxima* based on morphological and molecular sequence evidences. The aim of this study was to compare the reproduction and growth of the two giant clams. Based on field monitoring on eggs, the spawning peak of *T. maxima* was from May to August in Kenting, and March to June in Dongsha. In *T. noae*, it was through May to July in Kenting, and April to June in Dongsha. Artificial fertilization was successfully conducted in *T. maxima* and *T. noae*. By comparison, the growth of juvenile *T. maxima* was faster than that of *T. noae* under cultural conditions. And, the growth of both species was faster at higher temperature (27-29°C) than the lower ones (24°C). Based on the cultural records, the growth ring on shell and hinge plate of the giant clams from cultural and wild populations were also compared and contrasted.

**Biography**

Hei-Nin Kwong works on giant clams especially the growth comparison between field and cultural environments. He had the first attempts to apply alizarin red staining method on giant clam shells which is commonly used in coral studies.

jubilee0326@yahoo.com.hk