Notes on the first record of *Tridacna noae* (Röding, 1798) (Cardiidae: Tridacninae) in Palawan, Philippines

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ABSTRACT

The first record of *Tridacna noae* in the province of Palawan, Philippines was documented on June 21, 2018, at Paraiso Resort, Albaguen Island, Port Barton in the municipality of San Vicente. The single specimen measured 4.5 cm in shell length and was partly buried in a massive coral rock. The mantle edge of the species is lined with teardrop-like patches with white margins. This recent finding is an addition to the seven previously reported giant clam species in Palawan and confirms new sighting location in the existing geographic range. The habitat of the species is a semi-protected cove, about 1 m deep at high tide, with massive coral rocks generally covered with the seaweed *Sargassum* spp. Potential threats include the shading effects of macro algae and the constant presence of tourists visiting the resort who might accidentally step on the clams. Buoy demarcation to exclude the area from disturbance may help protect the species and other boring giant clam species. Continued assessment may provide information on the status of *T. noae* in Palawan and in other parts of the country.

Keywords: first record, giant clam, Palawan, Philippines, Port Barton, *Tridacna noae*

The Noah's giant clam, *Tridacna noae* was first described by Röding in 1798 based on the spacing of the scales on the shell, but later, lost its recognition as a distinct species when it was treated as a variant of *Tridacna maxima*. However, the recent use of genetic characterization reaffirmed *T. noae* as a distinct species (Su et al. 2014).

Recent studies show that *T. noae* has a wide geographical distribution range. It extends from the Ryukyu Archipelago in the north to Ningaloo Reef (western Australia) in the south, and from Kiritimati (northern Line Islands) in the east to East Indian Ocean in the west (Borsa et al. 2014; Neo and Low 2017). Its presence in the Philippines has only been alluded by Lizano and Santos (2014) which was later confirmed through published DNA records of specimens from eastern Negros (see Borsa et al. 2014). Viray-Mendoza (2018) recently showed a photo of live *T. noae* from Negros, Philippines and

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mentioned that the species can grow up to 40 cm shell length and 9 kg in weight.

The first record of *T. noae* in the province of Palawan, Philippines was documented on June 21, 2018 at Paraiso Resort (10° 29.839' N; 119° 8.790' E), Albaguen Island – one of the several islands in the sheltered bay of Port Barton, municipality of San Vicente in the north-western side of Palawan. The mantle edge of the single specimen is lined by teardrop-like patches with white margins as also shown in Borsa et al. (2014), Neo et al. (2017) and Viray-Mendoza (2018). The clam measured 4.5 cm shell length and was partly buried in a massive coral rock (Figure 1a). Judging from its size and reported maximum shell length, the species could be in its juvenile stage suggesting the occurrence of breeding populations in nearby reefs within the bay. This finding is an addition to the seven previously reported giant clam species in Palawan (Dolorosa et al. 2015), and confirms new sighting location in the existing geographic range. It also suggests connectivity of corridor for dispersal and recruitment of species to Palawan region.

The habitat of this individual is a semi-protected cove, about 1 m deep at high tide, with massive coral substrate generally covered with the brown seaweed *Sargassum* spp. Potential threats include the constant presence of tourists visiting the resort who might accidentally step on it, and the massive growth of *Sargassum* spp. which may cover and deprive the individual of sunlight. Buoy demarcation to exclude the area from disturbance may help protect the species and other boring giant clam species such as *Tridacna crocea* (Figure 1b) and *T. maxima* (Figure 1c and d). Continued assessment may provide information on the status of *T. noae* in Palawan and in other parts of the country.

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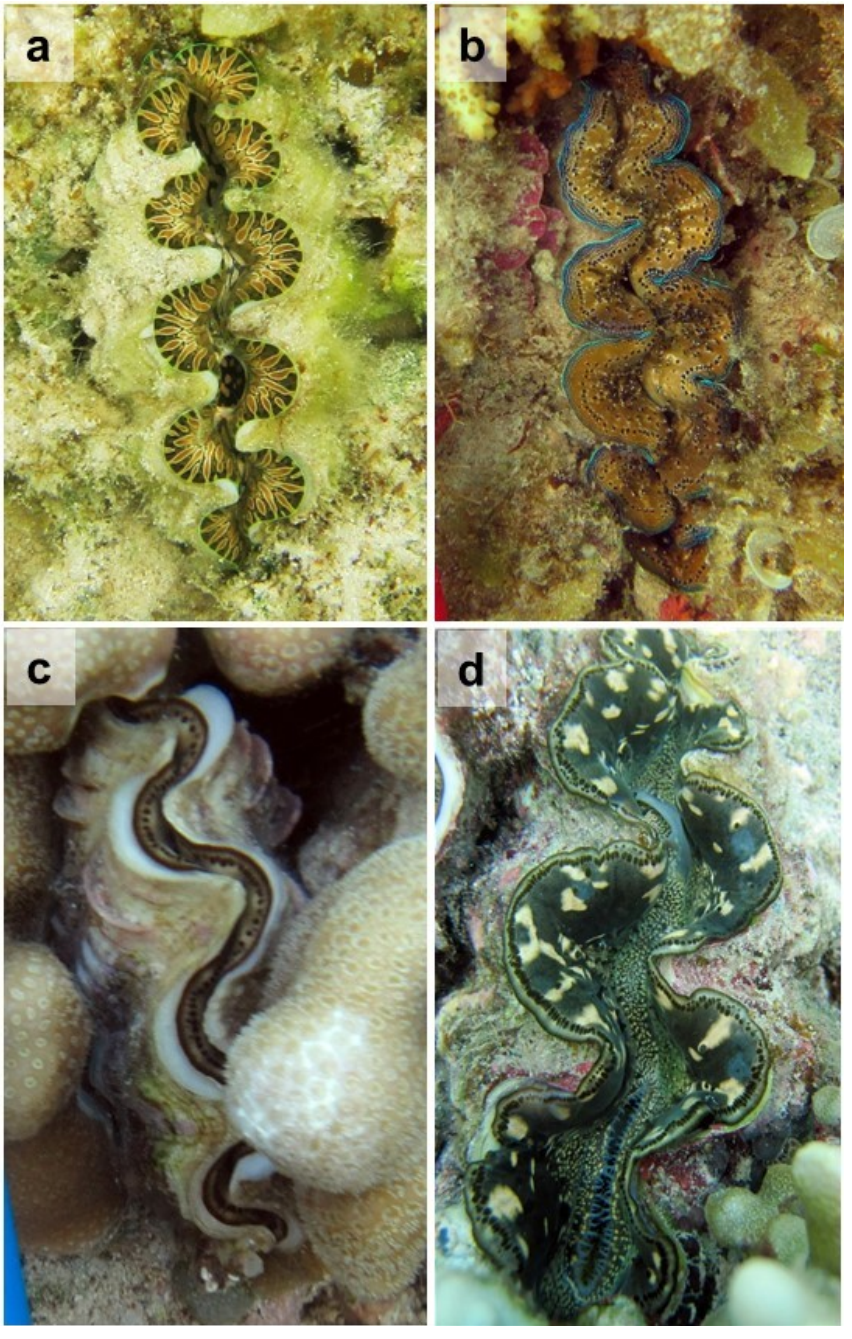

Figure 1. *Tridacna noae*, shell length = 4.5 cm (a), *Tridacna crocea,* shell length = 8.0 cm (b), *Tridacna maxima,* shell length = 4 cm (c) from Albaguen Island, Port Barton, San Vicente, Palawan, Philippines, and *Tridacna maxima*, shell length about 20 cm from Tubbataha Reefs Natural Park, Cagayancillo, Palawan, Philippines (d).

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