

**First report of plant fungal pathogen *Zasmidium musae* associated with moribund eggs of ornate spiny lobster (*Panulirus ornatus*) in Sabah**

**ABSTRACT**

Fungal infections have been reported as one of the main hindrances for successful crustacean seed production. In a shrimp hatchery of Universiti Malaysia Sabah, abnormal sponge development of the ornate spiny lobster *Panulirus ornatus* was observed and it was suspected as fungal infection due to a change in sponge colour. Fungus was isolated from egg samples of *P. ornatus* and transferred to Peptone-Yeast-Glucose-Seawater (PYGS) agar to identify and to reveal its morphological characteristics. Interestingly, the isolate in PYGS broth transferred into sterilized seawater did not show any characteristic feature of any asexual reproduction of Oomycete infection on crustacean. Consequently, slide culture was performed for a more detailed examination, where the fungus isolate showed septate hyphae and vesicle-like fruiting body only upon staining via Iodine-Glycerol stain. Based on the morphological characteristic features, the present isolate was determined as a non-oomycete organism and designated as IPMB LE01 strain. According to the ITS nucleotide sequence analyses of IPMB LE01, it has matched to *Zasmidium musae*. This species was mainly reported in plant fungal infection and rarely observed in aquatic animals. Hence, it is considered as the first report of fungus-associated on the moribund eggs of ornate spiny lobster in Sabah.