

ULTRAVIOLET-ASSISTED PSP TOXIN AND MICROBIAL DEPURATION OF *PERNA VIRIDIS*

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Perna viridis (green mussels) contaminated with *Pyrodinium bahamense* var. *compressum* in the laboratory and in the field during the organism's toxic bloom in a commercial site in Limay, Bataan, Philippines, were depurated using a laboratory scale set-up equipped with an ultraviolet (UV) water disinfection system. The effects of seawater salinities (25, 30 and 35 ppt) and temperatures (25° and 30° C) on the depuration of green mussels from Paralytic Shellfish Poisoning (PSP) toxins and other indicator microorganisms of public health significance were monitored for a period of 72 h continuous purification. The UV depuration protocol applied to the mussels effected significant decreases in total plate, coliform and *Escherichia coli* counts ranging from 84.2-94.6, 85.6-97.4 and 79.8-87.5 % respectively. Percent decrease of PSP toxicity in depurated green mussels, using standard mouse bioassay, ranged from 3.0-38.0 % during the test depuration period. Analysis of relative anatomical distribution of PSP toxin burden in both naturally contaminated and depurated green mussels indicated the following trend: adductor muscle > digestive tissues and gonad > gills and mantle > foot.