

**ISOLATION AND IDENTIFICATION OF *Vibrio* spp FROM PACIFIC BEAN
DONAX (*Donax faba*) IN TERENGGANU, MALAYSIA.**

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ABSTRACT

Pacific Bean Donax, *Donax faba* is commonly found in coastal zone, especially in East Coast of Peninsular Malaysia. It can be obtained in monsoon seasons within August to December every year. This species is not cultured commercially, but people from coastal inhabitants of Malaysia traditionally consume Pacific Bean Donax harvested from wild stock. In the present study, Pacific Bean Donax was collected at Pantai Penarik, Terengganu. The samples were collected by using benthic dredge and brought to laboratory to be examined. During the transportation, samples were kept in the aerated aquarium containing water from the natural habitat. At the laboratory, the muscle and intra fluid were collected in sterile plastic bags containing Physiological saline were added to plastic bags. The samples were homogenized vigorously prior to ten fold serial dilution (10^{-1} , 10^{-2} , 10^{-3} , 10^{-4} and 10^{-5}). Then, the 100 μ l aliquots of each dilution were spread plated onto TCBS agar (Merck, Germany) for bacterial isolation. The plates were incubated for 24 to 48 hours at 37°C. The green and yellow colonies were selected and maintained on TSA (2% NaCl) (Merck, Germany). Sixteen isolates of *Vibrio* spp. were successfully isolated and identified using series of morphological, biochemical, and physiological tests. Similarity between strains was computed by using the Dice coefficient (SD). Strains were clustered by Unweighted Pair Group Method with Arithmetic Mean (UPGMA). Results showed that five species of *Vibrio* obtained in sixteen isolates of Pacific Bean Donax, *Donax faba* which were *Plesiomonas shigelloides*, *Vibrio mimicus*, *Vibrio metschnikovii*, *Vibrio anguillarum-like* and *Vibrio costicola*.