

**COMPARISON OF THE EFFICIENCY OF METHODS FOR ENUMERATING *Vibrio parahaemolyticus* IN BLACK TIGER SHRIMPS**

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*Vibrio parahaemolyticus* merupakan patogen bawaan makanan utama yang menyebabkan penolakan eksport udang di pasaran. Kultur *V. parahaemolyticus* diinokulat ke dalam udang harimau (*Penaeus monodon*) dan

*Vibrio parahaemolyticus* is a major food-borne pathogen that causes rejection of consignments of shrimps at the export market. *V. parahaemolyticus* was artificially inoculated into black tiger shrimps (*Penaeus monodon*)



pengenalpastian semula dinilai dengan menggunakan 6 kaedah piawaian yang merangkumi kaedah Bilangan Paling Mungkin (MPN) dan pencoretan terus. Langkah pengkayaan di dalam air pepton bergaram alkali (ASPW) dan pencoretan terus ke atas agar *Thiosulfate citrate bile salts sucrose* (TCBS) telah memberikan kadar pengenalpastian *V. parahaemolyticus* yang tinggi (86.6%) di dalam udang dan diikuti dengan langkah pengkayaan pertama dan kedua di dalam air pepton alkali (APW) menggunakan kaedah MPN (71.7 %). Pengkayaan di dalam kaldu garam polymyxin dan pencoretan terus ke atas agar TCBS menghasilkan 70.9 % pengenalpastian semula. Kaedah MPN 3 tiub menggunakan media pengkayaan ASPW and APW memberikan pengenalpastian semula hampir 64.2 % dan 55.8 % masing-masing. Pengkayaan di dalam kaldu *Teepol* bergaram glukosa (GSTB) menggunakan kaedah MPN memberikan keputusan pengenalpastian semula hampir 57.9 %.

*and recovery was evaluated by using six standard procedures incorporating most probable number (MPN) method and direct plating. The enrichment step in alkaline salt peptone water (ASPW) and direct plating on thiosulfate citrate bile salts sucrose (TCBS) agar gave the highest recovery (86.6%) of V. parahaemolyticus in shrimps and it was followed by primary and secondary enrichment steps in alkaline peptone water (APW) using MPN method (71.7%). The enrichment in salt polymyxin broth (SPB) and direct plating on TCBS agar resulted in 70.9% recovery. Three tube MPN method using enrichment media ASPW and APW gave recoveries of 64.2% and 55.8% respectively. The enrichment in glucose salt teepol broth (GSTB) using MPN method resulted in 57.9% recovery.*