

Selection of White Spot Virus (WSV) and Monodon Baculo Virus (MBV) free brood stocks of cultured shrimp *Penaeus monodon*, from Sri Lankan coastal sea to produce healthy post larvae

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White Spot Virus (WSV) and Monodon Baculo Virus (MBV) transmit vertically and horizontally. They have been identified as the major pathogenic viruses in cultured shrimp *Penaeus monodon*, both in hatcheries and grow-out farms of Sri Lanka, reducing the production in both sectors. A preliminary survey revealed that brood stocks of the shrimp used for the production of post larvae are collected from eight major sites along the coastal sea depending on monsoon seasons. Present study investigated the prevalence of WSV and MBV in brood stocks of *Penaeus monodon* collected from those sites over two calendar years. Each brood shrimp in each sample of brood stock collected from each site was transported separately to prevent cross contaminations. Tissue samples were used to screen for WSV by PCR technique and fresh fecal matter was observed for MBV occlusion bodies. Almost throughout the year WSV and MBV prevailed in brood stocks collected from Hendala and Negombo seas (prevalence of WSV varied between 14.2% to 92.9% and that of MBV ranged from 29.6% to 94.5%). Prevalence of WSV and MBV in brood shrimp was low from June to July in Beruwala (7.2% to 8.7% for WSV and 6.0% to 8.5% for MBV) and from January to March in Pottuvil sea (11.5% to 23.8% and 13.7% to 22.9% for the two viruses, respectively). It is recommended to collect brood stocks of *Penaeus monodon* from Beruwalasea and Pottuvil sea during the periods of low prevalence of WSV and MBV. After screening, WSV and MBV free brood shrimp should be maintained under strict biosecurity measures and better management practices in order to produce WSV and MBV free post larvae to be stocked in grow-out farms.