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# Abstracts



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shrimps were collected from culture ponds of East and West Godavari districts of Andhra Pradesh, India and were subjected to histopathological and microbiological studies. Four species of *Vibrio* were isolated from the diseased shrimp and were identified as *V. harveyi*, *V. alginolyticus*, *V. metschnikovii* and *Vibrio fluvialis* based on morphological and biochemical characterization tests. Histopathological studies revealed the presence of occlusion and inclusion bodies of Monodon Baculovirus, Hepatopancreatic Parvo-like virus, Infectious Hepatopancreatic Parvovirus and Reo-like virus in the sections of Hepatopancreatic and gill tissues. All the diseased shrimps collected during the present study were found infected with *V. harveyi* infection but the infections of other *Vibrio* species were observed in 40% of infected shrimp. Prevalence of Infection with WSSV, MBV and HPV was comparatively lesser than the *Vibrio* infections. Granuloma formation was observed in the affected tissues due to bacterial infections. Multiple viral infections in association with *Vibrio* sp. were also observed in 2% of LSS affected shrimps.

#### NH-O 53

### Antibacterial activity in the extracts of accessory nidamental gland of the Palk bay squid, *Sepioteuthis lessoniana* Lesson

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The present study illustrates the antibacterial activity in the extracts of accessory nidamental gland of *Sepioteuthis lessoniana*. Different maturity stages (immature, maturing, ripe and spent) of accessory nidamental gland (ANG) were extracted using different solvents viz., acetone, ethanol, butanol and methanol. The antibacterial activity was evaluated in all the extracts by disc-diffusion and four

pathogenic strains of bacteria (*Escherichia coli*, *Aeromonas hydrophila*, *Staphylococcus aureus* and *Bacillus megaterium*) were used. The extracts of different maturity stages (immature, maturing, ripe and spent) showed antibacterial activity against the tested bacterial strains except in *B. megaterium*. The extracts from immature stage ANG did not exhibit any antimicrobial activity but in mature stage (ANG), pronounced activity was found. Among the four extracts, butanol extract showed the maximum antibacterial activity followed by methanol extract, except immature stage. Maximum antibacterial activity was found in ripe stage especially in butanol extract against *E. coli* (10.1 mm) and minimum inhibition was found in ethanol extract against *A. hydrophila* (3 mm) in maturing stage. The present study revealed that the ANG extracts of *S. lessoniana* exhibited antibacterial activity in all maturity stages except immature stage.

#### NH-O 54

### Screening of Actinobacteria with potential antagonistic activities against aquaculture pathogens from marine and mangrove sediments of the Southwest coast of India

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In view of emergence of multidrug resistant pathogens, it is imperative to explore novel sources of microorganisms as a viable alternative for use in aquaculture. Microorganisms including Actinobacteria harboring marine environment are known to be highly resistant against several species of deleterious microorganisms and are therefore novel sources to isolate antibacterial secondary metabolites. Approximately two third of thousands of naturally occurring antibiotics have been isolated from Actinobacterial species. The objective of the present study was, therefore, to isolate and identify Actinobacterial population from mangrove and marine habitats of south-

