pathogenic bacteria that causes gastroenteritis in humans and has also been reported as a pathogen inhabiting aquatic environments. It has been isolated from freshwater, brackish water, estuaries, rivers, lakes in tropical and temperate regions. The present study reports isolation, characterization of *Vibrio mimicus* in samples collected from different landing centers, retail fish markets and aquaculture farms. A total of 42 samples which includes finfish, shellfish, mollusks, dry fish, soil sediment and farm water were screened for this bacterium. Presumptive colonies were confirmed as *Vibrio mimicus* based on colonial morphology on TCBS agar, Grams' reaction and other biochemical tests. Further it was confirmed with Polymerase Chain Reaction (PCR) specific for haemolysin gene (*vmh*). The study revealed prevalence of *Vibrio mimicus* in 4.7% aquaculture samples whereas water and sediment samples didn't harbour this bacterium. Out of 37 samples screened from retail market and landing centers 16% harboured *Vibrio mimicus*. *Vibrio mimicus* is disseminated in the aquatic environment through fish and may transfer to water birds that consume them. Thus fish are reservoirs of *Vibrio mimicus* and may play an important role in its global spread. Reports indicate gastrointestinal disorders caused by the contamination of raw and improper cooked *Vibrio mimicus* contaminated fish. This study asks for preventive measures to avoid health hazards caused by *Vibrio mimicus*.

AH PO 18

Phenol oxidase producing bacteria from shrimp

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Phenol oxidases are the group of enzymes with multifunctional abilities. The presence of bacteria with the extracellular phenol oxidase production in the melanised appendages of *Litopenaeus vannamei* was studied. Market drawn samples of *Litopenaeus vannamei* with melanisation were checked for possible intervention of bacteria with phenol oxidase production. Positive and negative screening with tyrosine yielded four types of bacteria with maximum phenol oxidase production. The bacteria were purified and named as TMA7, TMA9, TMA10 and TMA12. The sequencing of 16s rRNA fragment of the isolates revealed that TMA7 as *Bacillus niabensis*, TMA9 as *Acinetobacter* spp., TMA10 as *Bacillus megaterium* and TMA 12 as *Providencia rustigans*. Tyrosinase positive cultures were inoculated in the liquid medium and incubated at 37^0C for 72 h at 170 rpm. After three days, the crude supernatant samples served as a source of enzyme for tyrosinase activity. The tyrosinase activity analyzed with dynamic reader in the presence of L-DOPA, L tyrosine for Diphenolase and mono phenolase respectively. TMA12 has shown 3.36 units of enzyme production in 3 days. TMA 10 has shown 2.99 units of enzyme production in 3 days. This study asks for further investigations on role of tyrosinase producing bacteria in shrimp

AH PO 19

Sea lice (Copepoda: *Caligidae*) infestation and histopathological changes in the brood stock of silver pompano (*Trachinotus blochii*) and control measures