

Chapter 6: Conclusion.. 



6. Conclusion

The present study had shown the involvement of *Klebsiella pneumoniae* for infections in fresh water fishes from different districts of West Bengal. The isolates were successfully identified as *Klebsiella pneumoniae* and the standardized methods could be used for the identification of this pathogen. *K. pneumoniae* is zoonotic in nature and since this pathogen was isolated from farmed fishes, which could pose a great threat to human health. The present research work revealed the pathogenic properties of *K. pneumoniae* like hemolysin of the RBCs, production of HMV colonies and also the presence of various virulent genes. The expression profiling of immuno related genes (IL-1 β , IL-6 and C3) was carried out to understand the virulence properties of the pathogen. The information generated from the present research work could be used for the development of therapeutic agents against this emerging zoonotic pathogen.