7. INFERENCE AND HIGHLIGHTS

Key enzymes viz., carboxyl esterase and prophenoloxidase were analyzed for their kinetic properties under LPS treatment and the results showed their active role in immunity among thermo tolerant races in comparison to susceptible ones.

Observation of induced isozymes of esterase and Prophenoloxidases in the haemolymph and midgut system of tolerant silkworm races points out the existence of biochemical immunity against biotic stress of LPS.

Antimicrobial peptides induced in the presence of LPS among the tolerant silkworm races clearly documented the importance of their induction against biotic stress as protective defense mechanism.

Higher antigenic and antibody titre values observed among tolerant silkworm races indicate the immunogenetic properties in the vicinity of LPS in the silkworm system.

The above key biomolecules as observed in the present study delineate the important role of these molecules during the biotic stresss for their defense functions and better survival in the challenged environment.