CONCLUSION

In the present study, the bacterial and fungal disease and their impact on the sericulture activity was treated. In the Tirunelveli district of Tamil Nadu, Sericulture was given good attention earlier days. Now the interests of the farmers to do sericulture work are decreasing because of the frequent disease outbreak. The causative bacteria and fungi must be properly removed from sericulture operations. To take steps in this regard bacterial load and types of bacterial species inflicting the diseases were analysed. The total heterotrophic count in the different parts of gut, haemolymph and skin were estimated. Nearly 55 species of bacterial pathogens were isolated and identified. The farmers were advised to take necessary steps to prevent the spread of the bacterial agents.

The sensitivity of the bacteria to different drugs was tested. The antibiogram showed were tested. The antibiogram showed the development of drug resistance in *B. mori* to many antibiotics.

Similar to the bacteria the silk worm (*B. mori*) was also affected by fungal genus. The fungi cause muscardine disease. In the present study four fungal pathogens were isolated from infected worms.

To overcome disease attack and to promote the health and disease resistance, the effect of selected nutraceuticals were tested. Amway
nutraceutical supplemented B. mori was less prone to bacterial and fungal diseases. Also the nutraceutical worms showed an efficient energy budget. Because of the supplementation of Nutraceuticals and probiotics, the commercial characteristics of the silk worm improved and the protein profile changed.

The study concludes that the farmers can be advised to use the tested supplements—Amway protein, Jeewamirtha, Saccharomyces and Bifidobacterium to protect their silk worm from disease attack and to enhance yield.