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Article title

Isolation and Identification of Some Bacteria Causing Infections in Silkworm

Abstract

The silkworm, *Bombyx mori* L. (Lepidoptera: Bombycidae), is a domestic economic insect for many people in the different countries all over the world. So, it is very sensitive to different infection with many pathogens especially bacteria which accounts considerable loss of 10-15% to silk production. The goal of this investigation was to isolate and identify bacteria found in natural infection associated with external and internal fourth and fifth larval instars of *Bombyx mori*. These larvae were subjected to external and internal standard microbiological procedures of isolation. While identification of isolates was done using cultural, morphological, physiological and biochemical characteristics. A total of 14 isolates were successfully isolated from the outer body surface and nine isolates from the intestine of fourth and fifth instars silkworm larvae. The bacterial strains isolated from the infected larvae in this study were identified as follow: *Aeromonas sp*., *Paenibacillus macerans*(*Bacillus macerans*), *Bacillus megaterium*, *Bacillus licheniformis* and *Bacillus circulans*. The details of isolation and identification techniques are described in this paper