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INSECT IMMUNE SYSTEM IN DEFENSE OF ORGANISM INTEGRITY

Summary

Insects populate all ecological land niches. Their evolutionary successes have been achieved thanks to well-functioning defense mechanisms. The immune system of this group of animals is based only on innate immunity mechanisms. It consists of humoral and cellular reactions that complement each other in the fight against infection. The paper briefly summarizes the state of the art of insect immune system and highlights its role in maintaining homeostasis of the organism. In addition, the modulation of immune response by changes in ambient temperature is described taking an example of a greater wax moth *Galleria mellonella*. Additionally, the current information concerning priming of insect immune system is presented with special emphasis on the greater wax moth.

Key words: *Galleria mellonella*, immune priming, insect immunity, temperature stress