

**The Effects of a Juvenile Hormone Analog, Admiral<sup>®</sup>, Application on Protein Metabolism of Silkworm, *Bombyx mori* (Lep.: Bombycidae)**

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**Abstract**

An experiment was carried out to evaluate the effect of juvenile hormone analog (JHA) (Admiral<sup>®</sup>) application on silkworm protein metabolism. The mulberry leaves smeared with 0, 1, 10, 75, 150 and 500 ppm concentrations of Admiral were fed to silkworm larvae in the first day after 4<sup>th</sup> molting. Some biochemical traits of haemolymph related to protein metabolism such as total protein, urea, uric acid, alanine aminotransferase and aspartate aminotransferase were measured. The results showed that the amount of some biochemical compounds except urea significantly decreased in most concentration of admiral. Therefore, utilizing this JHA with above concentrations not only has irreversible effects on protein metabolism of 5<sup>th</sup> instar larvae but also induce a non-spinning syndrome in all groups of treated larva.

**Keyword:** Silkworm, Juvenile Hormone Analog, Admiral, Protein Metabolism

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