

Effect of Inhibitor of the Angiotensin Converting Enzyme in the Mediterranean Flour Moth: Structural Parametrs of Cuticule and Ecdysteroid Amounts

Authors : S. Yezli-Touiker, L. Kirane-Amrani, N. Soltani-Mazouni

Abstract : Ephestia kuehniella Zeller Lepidoptera, Pyralidae commonly called Mediterranean flour moth, is serious cosmopolitan pest of stored grain products, particularly flour Month. This species is also a source of allergen that causes asthma and rhinitis. Captopril is an inhibitor of angiotensin converting enzyme (ACE) it was tested in vivo by topical application on development of E. kuehniella. The compound is diluted in acetone and applied topically to newly emerged pupae (10mg/2ml). Report chitin protein of cuticule and ecdysteroid Amounts were determined in vivo. Results show that the captopril does not affect chitin protein of cuticule but traitment with captopril increase the hormonal production, the quantitative analysis reveals the presence of two peaks one at third and another at fifth day.

Keywords : Ephestia kuehniella, cuticule, hormone, captopril

Conference Title : ICCEES 2014 : International Conference on Chemical, Ecological and Environmental Sciences

Conference Location : Istanbul, Türkiye

Conference Dates : November 28-29, 2014