

The Effect of Light on the Aflatoxin Production Carcinogenic of *Aspergillus Parasiticus*

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Abstract

Aflatoxin is the most important fungal toxin which contaminated the food and fodder. And enters the human body during the food chain and potentially able to cause many cancers including liver of cancer. There *Aspergillus parasiticus* is one of the most producer this toxin which is able to produce aflatoxin Light is among the factors influencing this fungi. In this study, was investigated the impact of environmental factors on the growth of this fungi. Initially, the desired fungi was pure on PDA, WA And then were cultured on the Medium corn. Which was applied Treatments 12 hours of light and 12 hours of darkness and 24 hours of darkness and 24 hours of light In 4 Repeat. After 7 days, Extracts of fungi were extracted and were analyzed using two HPLC and TLC. And was determined, this fungi has highest amount of toxin in the complete darkness, with an average 2.26 ppm Production of toxins. And the lighting conditions become more, the toxin is reduced So that the least amount of toxin in the full light with average 1.56 Considering the importance of light in living organisms and fungus Can By using role of this factor The growth and toxin production along with other environmental factors such as moisture and temperature, The growth and toxin production this pathogens prevented on food and environments laboratory Until prevent the harmful effects Especially carcinogenic on human beings and this issue should be considered which is one of the most important factors in causing cancer is food for human consumption And pollution caused by their.

Keywords: Aflatoxin, *Aspergillus*, Light, Environment, Cancer

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