CONTROL OF FUNGI AND THEIR TOXINS IN CORN GRAINS{ZEA MAYES-L}BY USING SOME PLANT EXTRACTS

EL-SHAHAT AHMED EL-SHAHAT ABDEL-FATAH

Corn maize (Zea maize L.) is one of the most important grain crops allover the world. It is used mainly for animal feeding, poultry wealth either as green fodder or a main component of dry feed and human consumption in some developing countries. It is also plays an important role in the diet of millions of African people due to its high yields per hectare, its ease of cultivation and adaptability to different agro-ecological zones, versatile food uses and storage characteristics. It plays an important role in the economy in rotation and in animal feed, alcohol fermentation and direct humanconsumption.The objectives of the current study were:(1)Isolation and identification of different storage fungi associated withcorn grains.(2)Studying the activity of these fungi and their ability for production of mycotoxins.(3)Study the effect of these fungi and their mycotoxins on the chemicalcomposition of corn grain.(4)Study the effect of Aquilegia vulgaris L extract for the inhibition of Aspergillus growth and aflatoxins production and(5)Biological evaluation of effect of Aquilegia vulgaris L extract as a protective against aflatoxicosis in laboratory animals.Corn grain samples (zea mays) were collected from five governoratesin Egypt (i.e Kafr El-Shikh, Gharbia, Sharkia, Qualubia and Bany Swief) during 2006/2007 season. Isolation and identification of associated fungi was carried out on sterilized and un-sterilized of each samples within turn tests (Le. PDA and blotter test). Detectionhow UNI*t