

- Document Type** : Thesis
- Document Title** : Effect of the two insecticides dursban and sumicidin on germination, growth and some physiological activities of *Triticum aestivum* L. and *Cucumis Sativus* Crop
تأثير مبيد الحشرات الدورسيان والسوميديسين على الانبات والنمو وبعض الأنشطة الفسيولوجية لمحصولي القمح والخيار
- Document Language** : Arabic
- Abstract** : This research was conducted to study the effects of some different concentrations of two insecticides: Dursban(of the organophosphorus, compounds) and Sumicidin (of the chlorinated hydro carbons) on gennination, growth and some physiological activities of two crop plants, namely Triticum wheat (Monocotyledanous) and Cucumber sativus (Dicotyledanous). The different insecticide concentrations of Dursban used in this study were as follows: [1/2 dose ,(lcnf /liter), recommended dose (2cJ /liter), double dose(4crJ Aiter)], Whereas those of Sumicidin were [1/2dose(O.Sc /liter), recommended dose(cnflliter), double dose (2cnf/liter)]. The control sample was treated by distilled water. Number of plant growth parameters was selected for the study such as gennination percentage, roof length, plant height, number of branches per plant, leaf area, number of leaves, fresh and dry weight, relative moister, yield weight and photosynthetic pigments. This study gave the following results: Different concentrations of the two insecticides lead to a significant reduction in gennination percentage, root length, plant height, leaf area, fresh and dry weight, relative moisture content, yield weight and photosynthesis piFents. However, the number of branches per plant and number of leaves plant did not change significantly. It has also been noticed in two plants that there was deformative brownish colour of roots, discolour of leaves, plants dwarfism which caused the rosette shape of cucumber plants as well as the chlorosis, leafcurler, exoascus of leaves, disappearance and deformation of the top of cucumber leaves (cuspidate) with the existence of the burned area on the surface of cucumber leaves. Comparing the effects of the two insecticides on both plants suggest that, the wheat plants were considered to be more resistant to the two insecticides used than the cucumber plants, and Sumicidin was found to be less harmful than Dursban insecticide. The present result are in accordance with the result of Previous similar studies. In this respect in that the plants vary in their tolerance and resistance to the different concentrations of insecticides, partly due to differences in the chemical structure of the insecticides; and partly due to differences in the-growth nature of the monocotyledonous plants (wheat) and the dicotyledonous plants (cucumber), which lead to different direct and indirect effects on most biological functions.
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