تهتم الدراسة الحالية بدراسة التاثير السام للمبيد الفسفو عضوي "لهوستاثيون والمبيد البيروثرويدي " ديكاموثرين" علي نشاط بعض الانزيمات في بعض مناطق المخ والحبل الشوكي وذلك بجرعتين مقدار الاولي ١/٤ و ١/١٠ من نصف الجرعة المميتةلوحظ من النتائج حدوث اختلاف واضح في التاثير علي مستويات النشاط الانزيمي لكل من المبيدين قيد الدراسة في جميع ناطق الجهاز العصبي التي تمت دراستها

Abstract: The present investigation show the effect of hostathion (organophosphorus) and decamothrin (pyrethroid) on gluatamine synthetase, glutamine transferase and glutamic dehydrogenase activities in .different brain and spinal cord areas

The dose level 1/4 LD50 of hostathion induced a significant decrease in the levels of glutamine synthetase and glutamine transferase in all the brain and spinal cord areas while decamothrin at the same dose level caused a significant increase in the levels of both enzymes

A significant increase in the levels of glutamine synthetase and glutamine transferase was recorded in all the studied areas as a result of the injection of 1/100 of both hostathion and decamothrin

At the tested dose levels, the recorded values of glutamic dehydrogenase activities showed a significant decrease in the spinal cord areas and a significant increase in the brain areas. The daily injection of

decamothrin caused a significant increase in the activity of glutamic dehydrogenase in all the studied areas

It can be concluded that the effect of hostathion on glutamine synthetase ang glutamine transferase activities is an essential process to force an excess amount of glutamine