



**SDI Review Form 1.6**

Journal Name:	<a href="#">Asian Journal of Research in Medical and Pharmaceutical Sciences</a>
Manuscript Number:	<b>Ms_AJRIMPS_46030</b>
Title of the Manuscript:	<b>Toxicological effects and Histopathological Alterations of Diazinon and Alpha Cypermethrin on Male Albino Rats</b>
Type of the Article	<b>Original Research Article</b>

**General guideline for Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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**PART 1: Review Comments**

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b>Compulsory</b> REVISION comments	<p>1) What are the difference between this research with other research (Amirkabirian et al. 2007; El-Mazoudy et al. 2010)?</p> <p>2) Please send your article to English reviewer as I found a lot of grammatical errors.</p> <p>3) Please include methodology in abstract</p> <p>4) Please re-write the Introduction part as there are no research gap, the reason why did the author choose Diazinon and alpha cypermethrin, and the reason why the author choose liver and brain.</p>	<p>1) The difference between this research and</p> <p>Amirkabirianet al. 2007 studied the total anti-oxidant capacity andone parameter oxidative stress lipidperoxidatiation in liver and mussels by dose 60 mg DIZ but in our study we use 1/10 LD50 sub-lethal dose and five parameters oxidative stress in liver and brain.</p> <p>El-Mazoudyet al. 2010 Evaluation of developmental toxicity induced by anticholinesterase insecticide, diazinon in female rats, Birth Defects.but in our study we use 1/10 LD50 sub-acute toxicity DIZ and CYP In liver and brain.</p> <p>2) Donefriendly</p> <p>3) Done In paper</p> <p>4) Diazinon is still an active product approved for many agricultural applications, although its residential uses were banned in the U.S in 2004. Diazinon residue has been detected in watersheds and drinking water wells (Aggarwal et al., 2013). According to the CDC Fourth Report on Human Exposure to Environmental Chemicals, diazinon metabolites in urine have been detected in the U.S. population, which raises the public health concern.</p>



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	<p>5) Please include in the methodology the reason why the author choose 1/10 LD50 for the doses?</p> <p>6) Did the author monitor the signs and symptoms of toxicity as well as the activity of acetylcholinesterase enzyme?</p> <p>7) The author gave 5 ml of the solutions (tap water/ DZN/ CYP) to the rats. Is the volume is too much to be given to the rats which may exceed the rat's stomach.</p> <p>8) Please re-write the oxidative stress biomarkers for both brain and liver as the control and treated rats are different animals.</p>	<p><b>Diazinon</b> exposure leads to various deleterious outcomes, not only limited to acetylcholinesterase inhibition (Yen et al., 2011), but also oxidative stress (Boussabbeh et al., 2016), DNA damage (Kashanian et al., 2008), and genotoxic effects (Jones et al., 2015).</p> <p><b>Diazinon</b> is commonly used in agriculture and households to control pest insects in soil, plants, fruit, and vegetable crops.</p> <p>S. S., Kopruc'u, K. Kopruc'u, M. S., Ural, U. Ispir, and M. Pala, ) ( 2006 "Acute toxicity of organophosphorous pesticide diazinon and its effects on behavior and some hematological parameters of fingerling European catfish (Silurus glanis L.)," Pesticide Biochemistry and Physiology, vol. 86, no. 2, pp. 99–105, 2006.</p> <p>In our previous study, we demonstrated the impact of diazinon and it is of great interest to understand the interplay between oxidative stress to refer the significance of diazinon toxicity adverse effects to human health and widespread use .</p> <p>1/10 LD50 It's a parameter like ADI, LOWEL , NOWEL a value of LD50</p> <p>1/10 As Bhushan B, et al. ( 2013) EFFECTS OF CYPERMETHRIN AND BETA-CYFLUTHRIN ON RAT LIVER Arh Hig Rada Toksikol 2013;64:57-67</p> <p>1/10 As El-bendary H. M. , et al. ( 2014) Histopathological Changes Associated with Exposure of Male Mice to Profenofos and Chlorpyrifos Annual Research &amp; Review in Biology 4(5): 766-777, 2014</p>
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	<p>9) What do you mean by MAR and ACETA in the title of each table?</p> <p>10) Figure 3 the author mention about necrotic cell? Which one is the necrotic cell?</p> <p>11) Figure 5 can only observed the inflammatory cells. So where is the hydrophobic degeneration?</p> <p>12) Please include the conclusion</p>	<p>6) the author did not monitor the signs and symptoms</p> <p>7) The author gave 5 ml /kg per kg of rat weight not stable volume that means modified as rat weight.</p> <p>8) Done</p> <p>9) Means DIZ and CYP in the title of each table?</p> <p>10) Done in paper</p> <p>11) Done in paper</p> <p>Done in paper</p>
<b>Minor</b> REVISION comments		
<b>Optional/General</b> comments		

**PART 2:**

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	<p><u>(If yes, Kindly please write down the ethical issues here in details)</u></p> <p>In this article there is no animal ethics number. Please provide.</p>	<p>Experiments were carried out in compliance with the guidelines of the Ethical Principles in Animal Research adopted by Ethics of animal use in research committee (EAURC), Vet. Med. College, Cairo University, Egypt.</p>

