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#### **SDI Review Form 1.6**

Journal Name:	Journal of Pharmaceutical Research International
Manuscript Number:	Ms_JPRI_61413
Title of the Manuscript:	Teratogenic Effect of Chlorpyrifos and Glyphosate on Pregnant Rats: Biochemical and Morphological Evaluations
Type of the Article	Original Research Article

#### **General guideline for Peer Review process:**

This journal's peer review policy states that <u>NO</u> manuscript should be rejected only on the basis of '<u>lack of Novelty'</u>, 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/journal/10/editorial-policy)

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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)
<u>Compulsory</u> REVISION comments		
Minor REVISION comments		
	Authors have examined the teratogenic effects of pesticides chlorpyrifos and glyphosate on the pregnant	
	rats and their offspring during gestation and lactation period respectively. Analysing dangerous effects of	
	pesticides in animals is an extremely important topic and the same model may be used in human studies.	
	1. To confirm the actuality of the presented study, some information would be beneficial about the	
	usage volume of chlorpyrifos and glyphosate in routine agricultural and household practices. The	
	authors have administered 10 mg/kg oral dose to the pregnant rats during gestation period for 21	
	days but the actual interval between successive dosages is not mentioned whether it was on	
	12hrs bases, 24hrs or else.	
	2. Originality of the presented study needs to be highlighted clearly. The changes in biochemical and morphometric parameters should be clearly explained whether they were absolutely because	
	of the two tested pesticides or there may be some other confounding factors (genetic, age, food,	
	climate etc.) involved for such changes.	
	3. Statistical evaluation is not correct but without extended statistical processing, authors could only	
	define some presumptions. Among the results, correlation analyses have been mentioned but	
	applied approach needs to be displayed in the Materials and Methods section and the findings	
	may be tabulated in the results section in detail.	
	4. Mean values calculated for the comparisons should be presented in the tables and then compared statistically.	
	5. Authors have concluded that this study correlated the association of environmental pollutants with	
	the increased risk of birth defects but no correlation coefficient for any of the tested parameters	
	has been calculated. Authors should calculate the correlation coefficient of the two tested	
	pesticides with the observed biochemical and morphometric abnormalities and then confirm the	
	"r" values statistically.	
	6. Authors claim that a significant alteration in the blood glucose level, triglycerides, total cholesterol,	
	SGOT, and SGPT levels were observed in pesticide exposed groups. The body weight, crown-	
	rump length, eye length, eye width, hind limb, and forelimb size of rat neonates were significantly	
	found to be lower in the pesticide exposed group when compared with the control animals. The levels of significance with p-values should be given in such cases where significant differences	
	have been observed.	
	7. Figure 1 and Figure 2 are taken from previous published sources. Authors need to cite the	
	original source from where the images are taken.	
	8. By carrying out the recommended changes, the manuscript can be improved and should be	
	considered for publication.	
Optional/General comments		

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## PART 2:

		<b>Author's comment</b> (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?	(If yes, Kindly please write down the ethical issues here in details)	

## **Reviewer Details:**

Name:	Mohammad Attaullah
Department, University & Country	University of Malakand, Pakistan

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