

Repeated Dose 28-Day Oral Toxicity Study Offungicides: Propinèbe, Propiconazole, And Their Mixture in Wistar Rats

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Abstract : Until recently, toxicological studies focused on the effects of individual chemicals. However, humans and wildlife are exposed to a complex milieu of chemicals from different sources including food and water, personal care products and the environment. The aim of this study is to detect the toxicity of two fungicides and their mixtures in the fertility and oxidative damage induced in the rat. The male of rats (28) were used, they were divided in four groups (7 rats of each group) and one group was used as control. Rats were dosed orally with Propiconazole 60mg/Kg/day, Propinebe 100mg/Kg/day and their mixture 30mg Propiconazole/kg/day + 50mg Propineb/kg/day for 4 weeks. Animals were observed for clinical toxicity. At the end of treatment period, animals of all groups were scarified, blood was collected for hematological and biochemical's analysis and desired organs were removed and weighted. The results indicated that the fungicide and their mixture were toxic in the treated animals. The semen study showed a decrease in the count and mobility of spermatozoa in all treated group, it was also a decrease in the weight of the testis and epididymis in the treated group as compared with control. Reduced glutathione (GSH), Glutathione peroxidase (GPx) level was decreased in all treated groups.

Keywords : fungicides, mixtures, fertility, oxidative stress

Conference Title : ICCE 2014 : International Conference on Chemical Ecology

Conference Location : London, United Kingdom

Conference Dates : December 22-23, 2014