Mancozeb impaired male fertility in rabbits with trials of glutathione detoxification

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Abstract:

The study aims to evaluate the potential reproductive toxicity induced by mancozeb fungicide in male rabbits and to examine the ameliorative effect of glutathione (GSH), a non-enzymatic antioxidant, against mancozeb reproductive toxicity. Mancozeb is a member of the dithiocarbamates group currently in use in the management of fungal diseases of plants. To achieve these aims, mature male White New-Zealand rabbits of 4±5 months old were randomly assigned to four groups of 9 animals each: control, mancozeb only, mancozeb and GSH, and GSH only. This study discovered a significant reduction in serum FSH, LH, testosterone and testicular LDH, ACP, and ALP levels in the groups of mancozeb-treated rabbits compared with control. The mancozeb-treated groups also showed significant losses in sperm viability, along with a significant increase in the number of abnormal sperms. Finally, an upregulation in

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