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Assessment of the litter size, birth weight and serum sex hormonal profile of rats orally exposed to crude oil

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Litter size, tail length, birth weight, and serum sex hormonal profile of rats orally exposed to crude oil was assessed in this study. The results of this study showed a significant ($p < 0.05$) decrease in litter size delivered by rats treated with crude oil, compared to the litter size delivered by rats in the control group. The mean tail length of the litters delivered by rats treated with crude oil, after one week of delivery, and sixth week of delivery, were insignificantly ($p > 0.05$) lower, compared respectively, to the mean tail length of the litters delivered by rats in the control group, after one week of delivery, and sixth week of delivery. Also, the mean total body weight of the litters delivered by rats treated with crude oil, after one week of delivery was insignificantly lower, compared to the mean total body weight of the litters delivered by rats in the control group. However, the mean total body weight of the litters in the group treated with crude oil, after the sixth week of delivery, was significantly ($p < 0.05$) lower, compared to the litters from rats in the control group. The percentage growth rate of the litters delivered by rats treated with crude oil, over six weeks of weaning, was therefore significantly lower ($p < 0.05$), compared to the percentage growth rate of the litters delivered by control rats, over six weeks of weaning. Also, the levels of serum FSH, LH, and progesterone recorded for rats treated with crude oil were significantly ($p < 0.05$) lower, compared respectively with the levels recorded for the control group.

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