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Effects of alfalfa on reproductive hormones in male rats

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Abstract

Alfalfa is one of the most important phytoestrogenic plants which contains epigenine, comsterol and coumarin and it has a variety of effects on reproduction in domestic animals. Some of the studies have shown alfalfa has negative effects on the fertility of domestic animals. Given that reproductive hormones play major role in fertility, "in this study, the effects of alfalfa were investigated on reproductive hormones in male adult rats". For this purpose, 30 rats were divided in two groups of treatment and control. Treatment groups received alfalfa during 30, 45 and 60 days. Based on the results, level of Blood plasma FSH in the first treatment group (30 days) was significantly higher than the control group, but in the second (45 days) and third (60 days) treatment groups, insignificantly increased. Rate of Blood plasma LH in first and second groups were insignificantly increased, but in the third treatment group significantly increased. Testosterone level of blood plasma in the first treatment group showed a significant decrease and in the second treatment group insignificantly decreased, but in the third treatment group were significantly increased. The levels of estradiol in all treatment groups increased. Conclusion: the results of this study showed that use of alfalfa for up to 60 days did not have negative effects on reproductive hormones in male rats.

Key words: Alfalfa, reproductive hormones, phytoestrogen

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