# Czech Academy of Agricultural Sciences



## Table of Contents

VETMED 2008
VETMED 2007
VETMED 2006
VETMED 2005
VETMED 2004
VETMED 2003
VETMED 2002
VETMED 2001
VETMED Home

Editorial Board

For Authors

- Authors Declaration
- Instruction to Authors
- Guide for

Veterinarni Medicina

**Changes in serum concentration of 17 beta-estradiol in female rats during estrous cycle after treatment with atrazine and zearalenone**

Mitak M., Gojmerac T., Mandić B., Cvetnić Ž.

Veterinarni Medicina, 46 (2001): 145-148

[ fulltext ]

A daily dose of 14 mg atrazine and 2.5 mg zearalenone, given *p.o*. during 5 days of estrous cycle to female rats, changed their estrous cycle in comparison with control animals. On day –1 of expected estrus, a significantly lower ($p < 0.05$) concentration of 17b-estradiol compared with the control group was recorded in all experimental groups of animals. In the group of animals administered zearalenone, the concentration of 17b-estradiol on the day of expected estrus was significantly higher ($p < 0.05$). In the group administered a combination of atrazine and zearalenone, the concentration of 17b-estradiol on the day after expected estrus was significantly

higher ($p < 0.05$) than in the control group. In the group of animals receiving atrazine, complete absence of the onset of estrous cycle was recorded, whereas in the group given zearalenone the onset of estrous cycle was delayed by 24 hours. The combination of atrazine and zearalenone induced similar effects as atrazine, however, with the onset of estrous cycle being delayed by 48 hours. Neither of these two groups of animals reached the level of 17b-estradiol recorded in the control group.

**Keywords:**
atrazine; zearalenone; estrous cycle; 17b-estradiol; serum; rat

[ fulltext ]