## **Abstract**

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**Title**: Influence of some environmental stressors on response and behaviour of laboratory

rats

## **Abstract**

Three experiments were conducted on the Department of Hygiene, Management and Zoonoses. Faculty of Veterinary Medicine, Beni-Suef Branch, Cairo University; these experiments were carried out during the period from 15<sup>th</sup> June 2003 till the day 21 of March 2004. The first experiment was to verify the effect of acute stressors (repeated handling and immobilization) on the behaviour and response of virgin female rats, the second was to detect the effect of the same stressors on the response and behaviour of parturient female rats and the third was to investigate the effect of seasonal variation on the response and behavior of adult rats, it was found that these stressors induced some behavioural changes in addition to increase cortisol level and neutrophil lymphocyte ratio of virgins while the cortisol level of parturient females are not affected and in contrast, the adult rats showed normal or lower cortisol level in response to seasonal variation stress.

Key words: stress-immoblization -repeated handling-seasonal variation-virgin females-parturient female rats- rats