The Turkish Journal of Occupational / Environmental Medicine and Safety

Vol:2, No:1 (1), 2017 Web: http://www.turjoem.com ISSN : 2149-4711

P84. HISTOPATHOLOGICAL AND IMMUNOHISTOCHEMICAL EFFECTS OF MYRICETIN ON LIVER, KIDNEY AND ENDOCRINE GLANDS OF MALE RATS AT PREPUBERTAL PERIOD

Nurhayat BARLAS, Gözde KARABULUT, Burcu ÖZTAŞCI

Hacettepe University, Science Faculty, Department of Biology, 06800, Beytepe Campus

Myricetin, a natural flavonol with hydroxyl groups at 3, 5, 7, 3′, 4′ and 5′ positions, is commonly ingested through human diets such as fruits, vegetables, tea, berries and red wine. In this study, the effects of myricetin exposure to rats from postnatal day (PND) 23 to 53 at various doses were investigated.

The male rats were divided into five groups and each group consisted of six animals. Group of rats were treated with myricetin 25 and 50 mg/kg body weight /day in a suspension of corn oil. Positive control males were gavage orally with 17α-ethinyl estradiol 0.7 and 7 µg/kg body weight/day and control males were received corn oil only. End of the study, weights of liver, kidney, spleen, pancreas, thymus and adrenal gland were measured. Organ/body weight ratios were calculated and tissue sections were examined histologically. In liver, the TUNEL method was applied and evaluated.

This study demonstrated that orally gavages myricetin caused adverse effects on male liver, kidney and endocrine glands, during peripubertal period to pubertal period.

* gozdekarabulut6@gmail.com