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## Investigation effect of thymus oil on Escherichia coli infection and performance in broiler chicken on in vitro and in vivo condition

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This study was conducted to determine the effect of Thymus oil (Zataria Multiflora) as inhibitor of E.coli infection and determine the effects of this oil on broiler nutrition as natural growth promoting substance instead of antibiotics. For this reason, first Minimum Inhibitory Concentration (MIC) were determined for thymus oil against E.coli infection in in vitro condition in the range of 20% , 10% , 5% , 2.5% , 1% , 0.3% , 0.1% , 0.01% . Data showed that, E.coli was sensitive to these doses, but MIC for thymus oil was 0.3%, And then for determine the effects of oil on broiler performance, 300 day old broiler was divided into groups of 60 birds each and randomly assigned to the five treatment diets. Each treatment has 3 replicates and 0.3% oil was added to diets. Experimental groups were as follow: 1day at week 1 till week 8,2day at week 1till week8,3day at week 1till week8,all days just week4 and week8,control group without oil and antibiotic. All data were computerized using the SPSS for windows10.1, SPSS (1999) statistical package and CRD design . At the end of experiment, there were no significant (P>0.05) differences in Feed intake, Feed conversion ratio and Daily live weight gain. Results showed that in, oils of plant may find use as potential antibacterial and could be considered as a potential growth promoter for poultry.

**Keywords:** Thymus oil, Performance, Broiler, Escherichia coli

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## A rare clinical feature of acute opioid intoxication in dog – Case report and review of literature

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A 2-year old male mixed Spitz dog was referred to the Teaching Hospital of the College of Veterinary Medicine, University of Tehran. The case had a history of incidental exposure to "Crack". In clinical examination restlessness, panting, tachycardia, mydriasis and absence of pupillary light reflex was evident. The animal underwent intravenous fluid therapy. Urine sample was taken and sent to a local laboratory. Using Thin Layer Chromatography (TLC), morphine was detected in urine specimen. Regarding the positive opioid result Naloxane was prescribed. The patient showed full recovery at follow-up visit. Commonly reported clinical signs of opioid toxicosis include CNS depression, respiratory depression, hypotension and death. Some animals especially cats, horses, cattle or swine can show CNS excitation instead of CNS depression. Dogs given toxic doses of morphine exhibit salivation, nausea, emesis, defecation, increased respiration and less commonly, urination early after administration. This is followed by respiratory and CNS depression, ataxia and bronchiolar constriction. Severely intoxicated animals exhibit stupor, coma, seizures and cyanosis with peripheral vasodilatation and hypoperfusion. Miosis is observed initially but mydriasis may ensue if hypoxia is severe. While opioids depress CNS function in dogs, they often cause CNS stimulation in cats. Hypothermia is observed in dogs while hyperthermia may be observed in cats. The clinical manifestations of intoxication following opioid exposure may vary somewhat due to differences in receptor binding of the individual drugs. There have been regular reports of a concentrated or "crack" heroin, which is reportedly more pure than other heroin available in Iran. Because of its intensity, crack heroin is associated with increased emergency visits, and overdose deaths.

**Keywords:** crack, morphine, opioid toxicosis