



1st International Congress of Veterinary Pharmacology & Pharmaceutical Sciences (1st ICVPS)

October 4 - 5, 2008 Tehran - Iran

Effect of *Rosmarinus officinalis* and *Pimpinella anisum* on improving microbial flora in gastrointestinal tract of broiler chicks

Kiakojouri E, Rezaei Majd Sh

Faculty of Veterinary Medicine, Islamic Azad University, Karaj, Iran (mahyar_1@yahoo.com)

A study was conducted to evaluate the effect of adding *Rosmarinus officinalis* and *Pimpinella anisum* to a standard commercial diet, on the gastrointestinal tract. Fungal count, Total bacterial count, Lactobacilli bacteria and Coliform bacteria, were determined in crop, jejunum and large intestine. Four hundred Ross 308 broiler chicks were divided into groups of 100 birds each and randomly assigned to the five treatment groups. Each treatment had two replications. Groups and medication levels were done as follow: First, control group with no *Pimpinella anisum* and *Rosmarinus officinalis*, and other four groups with two different level of additives, first variable as 0.5% *Pimpinella anisum*, 1% *Pimpinella anisum*, and the second one 0.5% *Rosmarinus officinalis* and 1% *Rosmarinus officinalis*. The results showed that adding of 0.5% *Pimpinella anisum* and 1% *Rosmarinus officinalis* had significant effect on decreasing total bacteria count and Coliform count in crop, jejunum and large intestine ($P < 0.05$). So these additives could be used as antimicrobial substances in gastrointestinal tract of broilers.

Keywords: Broiler chicks, Gastrointestinal tract, *Pimpinella anisum*, *Rosmarinus officinalis*, Total count

Antimicrobial effect of *Humulus lupulus* as a diet supplement in poultry nutrition

Rezaei Majd Sh, Kiakojouri E

Faculty of Veterinary Medicine, Islamic Azad University, Kara, Iran (mahyar_1@yahoo.com)

The aim of this study was to determine the antimicrobial effect of *Humulus lupulus* and to find out its ability in taking part as an antibiotic element. Commercial corn-soybean based broiler diets were formulated as basal diets in starter and grower stages and supplemented with four levels of *Humulus lupulus* (0.05%, 0.10%, 0.15%, 0.20%) and compared to a control group. Chicks in this study were one day Ross 308. The addition of *Humulus lupulus* resulted in significant improvements in feed conversion and feed efficiency in all ages compared to control group and also significantly improved body weight at day 14 as compared to control. At day 42 the body weight of chicks fed in first group was greater ($P = 0.09$) than that of the control chicks. Results of this study suggests that addition of 0.05% *Humulus lupulus* into diets for broiler chickens may improve growth rate and feed utilization and could be a good alternative for the usual commercial antibiotic growth promoters.

Keywords: *Humulus lupulus*, Ross 308, Antibiotic, Feed conversion ratio, Broiler chicks