

# Feed Consumption, Carcass Evaluation and Growth performance of Broilers Rabbits Fed Different Levels and Processing Methods of Milk Thistle (*Silybum marianum*) Supplement

Akhir Pebriansyah<sup>1</sup>, Petra Silberová<sup>2</sup>, Daniela Lukesova<sup>1</sup>, Adéla Dokoupilová<sup>3</sup>, Karel Janda<sup>3</sup>

<sup>1</sup>Department of Animal Science and Food Processing, Faculty of Tropical AgriSciences, Czech University of Life Sciences Prague, Czech Republic

<sup>2</sup>VELAZ, s.r.o., Czech Republic

<sup>3</sup>Department of Husbandry and Ethology of Animals, Faculty of Agrobiological Sciences, Food and Natural Resources, Czech University of Life Sciences Prague, Czech Republic

## ABSTRACT

Milk thistle (*Silybum marianum*) belongs to the family Asteraceae which are widely spread in arid and semi-arid areas of Mediterranean regions. An annual plant contains silymarin-flavolignans with hepatoprotective and canceroprotective properties which shows the positive results to improve health and performance of animals. The study aimed to investigate the effect of different level and processing methods of milk thistle (*Silybum marianum*) on feed consumption, carcass evaluation and growth performance of broiler rabbits. A total of 180 HYLA broiler rabbits, 42 days old, were fed with different concentrations of milk thistle supplement - group III (0.5 % of fermented milk thistle) and group II (1% non-fermented milk thistle) in comparison with control group I (standard feed ration without any supplementation). Feed and water were available ad libitum. Each experiment started at 42 days of rabbit age and finished by slaughter when rabbits achieved 2.6 kg of live weight. The weight of the body parts, carcass weight, carcass yield, and growth performance were recorded and calculated. Carcass weight and carcass yield in rabbits fed with 0.5 % fermented milk thistle were significantly higher ( $P<0.05$ ) than in rabbits of other groups. However, there were no significant differences ( $P>0.05$ ) between control and experimental groups in the growth performance. Furthermore, daily feed consumption was higher in the treatment group II and group III compared to

29 Control I ( $P < 0.05$ ). The results of this experiment therefore indicated that 1% non-fermented milk  
30 thistle extract supplemented in the feed ration for broiler rabbits could not be a suitable supplement for  
31 improvement of the broiler rabbits' performance. However, 0.5% fermented milk thistle could be used  
32 to improve the carcass performance.

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34 **Keywords:** milk thistle, broiler rabbits, fermented feed, performance.