The 1st International Conference on New Ideas in Agriculture
Islamic Azad University Khorasgan Branch
26-27 Jan. 2014, Isfahan, Iran

THE EFFECT OF YUCCA EXTRACT SUPPLEMENTATION ON MILK PRODUCTION AND REPRODUCTIVE PERFORMANCE OF TRANSITION HOLSTEIN DAIRY COWS

Maryam Boshehri, Amir Davar Forouzandeh Shahraki
Department of Animal Science, Khorasgan Branch (Isfahan), Islamic Azad University, Isfahan, Iran
Corresponding Author E-mail: setareiesorbi67@gmail.com

INTRODUCTION

Transition period is one of the most susceptible times affecting reproductive performance. So, nutrients requirements especially protein has been increased resulting in an increase in uterus urea concentration. This adversely influences fertility and pregnancy rate. On the other hands, Yucca caused a reduction in blood ammoniac nitrogen due to its ability to bind with ammoniac. Thereby, the present study was undertaken to evaluate the effect of dietary Yucca extracts on milk production and reproductive performance of transition Holstein dairy cows.

MATERIALS AND METHODS

Forty primiparous Holstein dairy cows with 35 month of age were randomly selected and attributed into 4 treatments with 10 cows each. Experimental treatments consisted of control, 2, 4 and 8 gr Yucca/ d. total periods of experiment included 2 weeks before parturition until 8 weeks after it. Yucca extracts was administered as pill at morning and afternoon of every day. Daily Milk production was measured at parturition, weeks 4 and 8 after parturition as three times of each day. Additionally, Reproductive parameters were evaluated until 90 d after parturition.

RESULTS AND DISCUSSION

results of this study showed that inclusion of Yucca in particular 4 and 8 gr/d led to a significant ($P<0.05$) increase in milk production at parturition. However, milk production was uninfluenced by Yucca pill consumption at weeks 4 and 8 after parturition. In addition, Yucca pill supplementation especially 4 gr/d significantly increased ($P<0.05$) milk production in total periods of trial. This might be associated with an improvement in fermentation process, nutrient digestibility and microbial efficiency in rumen (Lovett et al., 2006). Furthermore, inclusion of Yucca pill had no significant effect on parturition time till the first semination or pregnancy.

Keywords: Yucca, milk production, reproductive performance, transition cows

REFERENCES

Lovett DK, Stack L, Lovell S, Callan J, Flynn B, Hawkins M, O'Mara FP. 2006. Effect of feeding Yucca schidigeraextract on performance of lactating dairy cows and ruminal fermentation parameters in steers. Livestock Science, 102: 23–32.