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Effects of Nucleotides Supplementation on the Productive Performance of Rabbit

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Abstract

The ban of in feed-antibiotics in animal production has led to increasing interest in alternatives to overcome weaning-associated problems. Among others, dietary nucleotides are one group of bioactive agents which may have the potential to diminish challenges related to weaning, beside of exert positive effects on development animal. The objective of this study was to evaluate the effects of levels of nucleotides (NC) inclusion in diets to weaning rabbit on the productive performance. The experiment was developed at the Cuniculture Sector, Federal Institute of Education, Science and Technology of the South of Minas Gerais - Campus Muzambinho (CEUA - 5532061219). Thirty New Zealand White weaning rabbit with 30 day old and 0.575 kg ($p = 0.32$, $SE = 0.117$) were used, distributed in a randomised block design in four treatments according to the inclusion of nucleotides in the diet plus a witness: 0 (Control), 0.02%; 0.04%; 0.06 % NC inclusion; and 0.004 % commercial coccidiostat. Additives were included in the feed before pelleting. The rabbits were housed in individual cages and fed ad libitum during the 60-day experiment. NU supplementation did not affect the off total feed intake (6,51 kg, $P=0,122$, 37,7 % CV). A quadratic regression ($p < 0.05$) was observed for final weight (2.05, 1.73, 2.29 and 2.15), daily weight gain (23.96, 19.52, 27.28 and 26.42) and food convention (3.04, 6.06, 5.07 and 4.46), with the inclusion of NU in the diet (0, 0.02, 0.04 and 0.06 %). There was no difference ($p > 0.05$) by contrast orthogonal between Coccidiostatic and NC supplementation treatments (0.02, 0.04 and 0.06) for analysed variables. NU supplementation at 0.04 level resulted in a improvement in performance rabbits. Coccidiostatic can be replaced by NC, enabling the same results more safely.

Keywords: Additive, Coccidiostatic, Cuniculture, weight gain