Reproductive and productive performance of rabbit does submitted to an oral glucose supplementation

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Abstract:

In order to investigate the effect of different levels of oral glucose supplementation and/or reproductive method on productive and reproductive performance of New Zealand White (NZW) doe rabbits in the tropic, 36 bucks and 120 doe NZW rabbits were equally divided among four treatment groups (n 59 bucks 130 does). The treatments consisted of supplementing drinking water with 0 (control), 2.5, 5 and 10 g glucose/l, respectively. To study the effect of reproduction method (natural v. artificial), each group was divided into two sub-groups (naturally mated and artificially inseminated) with the same bucks of the same treatment group. Glucose supplementation at 5 or 10 g/l of water increased (P < 0.01) litter weight at birth and at weaning, and litter weight gain during the 4 weeks. However, glucose supplementation at 2.5 or 5.0 g/l water decreased (P < 0.01) feed consumption from 7 to 14 days after delivery. Glucose supplementation at 2.5 g/l water did not affect productive and reproductive performance of rabbits. Artificially inseminated does had higher daily litter weight gain between 21 and 28 days post partum. Artificially inseminated group had better milk conversion during the 1st and 4th week as compared to naturally mated groups. Compared with the control group, the economic efficiency and performance index of NZW rabbits was significantly improved by 5 g glucose supplementation under tropic condition.

Keywords:

rabbit, glucose, reproductive performance, growth, milk yield

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