

THE WEIGHT PATTERNS IN KIDS

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Short Communication

ABSTRACT

The aim of this study was to determine the weight evolution in goat's kids raised in Tiaret, Algeria. Our study was conducted between 2016 and 2017. For this study, goat's kids were weighted from birth until one-year-old. In this work, birth mean weight for males was about $3,16 \pm 0,58$ Kg significantly ($p < 0,05$) higher than $2,88 \pm 0,50$ for females, the mean weights at birth for all kids was $3,06 \pm 0,57$ Kg. in this work, the kid's sex influenced significantly the weight at birth in kids.

Keywords: Goat; kids; age; growth; weight.

INTRODUCTION

Goat's breeds are raised, mostly, under traditional ways [1]. Goat meat production systems around the world are extremely diverse and breeds range in mature body weight from small tropical goat breeds (9-13 kg) to large European dairy breeds and Boer goats, which can exceed 100 kg [2]. Carcass attributes, meat production and sale value at the end of their productive life [3]. Birth weight and the growth of kids until weaning, together with reproduction characteristics, dressing percentage, meat quality, certain tissue share and others, are reliable indicators of the breed efficiency in the production of meat. It is known that birth weight and the growth of kids are mostly under the influence of breed [4,5], then feeding [6], type of birth [7], sex [8] and season [9]. The aim of this study was to determine the influence of sex in goat's kids weight.

MATERIALS AND METHODS

Our study was conducted in the livestock technical institute of Ksar-Chellala in the Tiaret region between 2016 and 2017. The region is characterized by a semi-arid climate. Eighty-one kids were weighted monthly since birth until 360 days old their number variation is due to mortality or reform of the animals. The kids are identified at birth using two ear loops with a specific numbered code. Weaning is performed at 5 months old for all kids, after what all kids are fed a standard ration according to their age. Data were collected and the influence of sex on the weight was analyzed statically using IBM SPSS© V.20 and one-way ANOVA test.

RESULTS AND DISCUSSION

In this work, birth mean weight for males was about $3,16 \pm 0,58$ Kg significantly ($p < 0,05$) higher than $2,88 \pm 0,50$ for females, the same observations were reported by

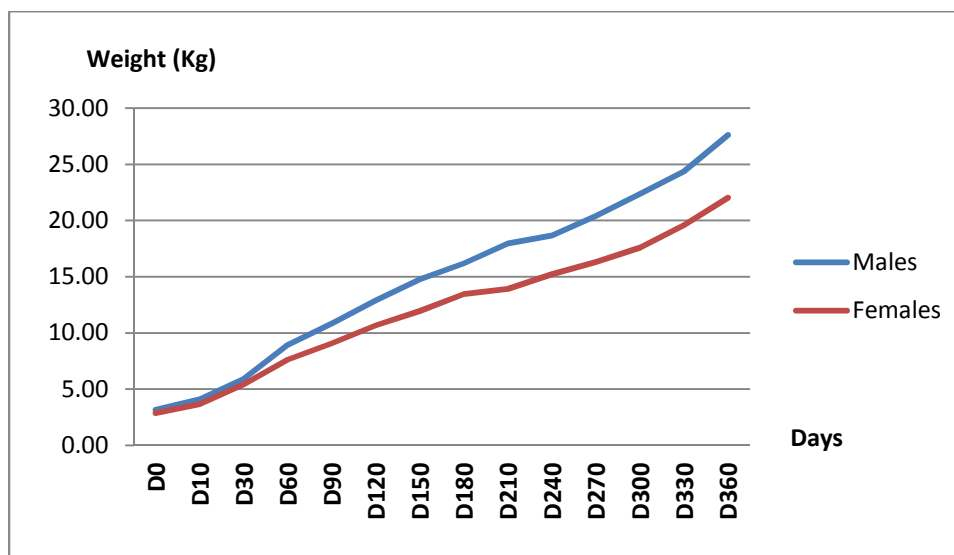


Fig. 1. Graphical representation showing male and female weight variation with days

authors [10,11]. According to Matthews [12] birth weight for dairy goats was 4,5 Kg for males and 3 Kg for females, for butcher goats was 4,5 kg for males and 3,5 kg for females while Angora goats birth weight for males and females was respectively 3,3 kg and 2,5 kg which is similar to our results.

CONCLUSION

In our study, the mean weights at birth for all kids was $3,06 \pm 0,57$ Kg. The gap then narrows to 9% on average around 3 months. Thus at 2 months a small single male weigh on average 15,1 kg against 13,1 kg for twins, however, a single young female will weigh 13,1 kg against 12,4 kg for twin female. In this work kids sex influenced significantly the weight at birth and the growth weight.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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