



#### **KEY WORDS**

- ✓ Saanen
- √ fertility
- ✓ environment

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# DETERMINATION FERTILITY TRAITS AND THEIR RELATIONSHIPS WITH ENVIRONMENTAL FACTORS OF SAANEN GOATS IN THE REGION OF BURSA

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**GRADUATION DATE: 28-06-2024** 

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## THESIS ABSTRACT

This research was carried out to determine the fertility characteristics of Sagnen agosts raised in Bursa Region and their relationship with environmental factors. Insemination, pregnancy and birth data (2018-2022) of goats raised at Bursa Uludağ University Faculty of Veterinary Medicine, Animal Health, Animal Production, Research and Application Center were recorded for 5 years. In the morning and evening, the oestrus was followed with the search goats, and the goats showing heat were inseminated by hand with the breeding goats in a compartment by the adjective method. Insemination records, insemination date and inseminated goat number were recorded. Although pregnancies varied according to the years, they were checked with the help of ultrasound or young billy goats in other cycles. Birth records were taken during the birth period. These records are the kid's number, mother and father number, gender, type of birth and birth weight. The data were evaluated using the General Linear Model (GLM) in the SPSS statistical program. In this study, birth weight was found to be 3,259.34±64,53 g in single-born kids and 3,011.97 ±25,75 g in multiple-born kids. In addition, birth weights in different years of the study; It was 3,176.17±60,04 g in Year I, 2,813.85 ±44,39 g in Year II, and 3,353.40±50,02 g in Year III. In the IV and V years of the study, 3,050.00±53,98 g and 2,971.34±51,52 g were detected, respectively. In this study, the birth weight of male goats was 3,130.12 ±36,18 g, while females were 2,988.51±32,95 g. In general, the mean birth weight was found to be 3,063.01±24,82 g in Saanen kids. Overall, the single birth rate, multiple birth rate, viability, mortality rate, and the number of offspring in a womb were 39%, 61%, 72%, 28%, and 1,7, respectively. In terms of fertility and birth weight characteristics of Saanen goats, compared to the fertility characteristics of this breed in the breeding regions and other countries; It can be said that the breed shows similar performance in the Bursa region.

# **APPLICATION AREAS OF THE THESIS RESULTS**

In this study, which was carried out on Saanen goats bred in Bursa Uludağ University Faculty of Veterinary Medicine Research and Application Center and evaluated their fertility characteristics; Single birth rate, multiple birth rate, viability, mortality rate and number of offspring in a womb were found to be consistent with the general literature. Birth weight and the number of offspring in a womb are among the breed-specific values. Although the vitality values were low in the first years, they approached normal values in the following years. However, depending on the conditions of care and feeding, it is necessary to reduce the high level of mortality, which we consider.