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RESEARCH OF THE MORPHOPRODUCTIVE AND REPRODUCTIVE PERFORMANCES OF PALAS MILK BREED

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Abstract: The creation of a sheep breed with high milk production was necessary to meet the growing demand for dairy products and derivatives in the national market. Thus, the Research and Development Institute for Sheep and Goats Breeding Palas - Constanta initiated a complex crossbreeding program, carried out for over 20 years, between Palas Merino sheep with rams from specialized breeds, resulting the creation of Palas Milk Breed. Approved in 2010, with a genetic composition consisting of 55% genes of East Friesian breed, 35% genes of Palas Merino breed and 10% genes of Awassi breed, this is the first romanian sheep breed specialized in milk production, being particularly adapted to lowland areas with a dry climate.

Reproductive indices recorded and the average total milk production demonstrate the productive superiority of the Palas Milk Breed, this breed being able to contribute to increasing the incomes of breeders and their interest in raising sheep.



Introduction

Given that the demand on the national and international market for products and by-products from small ruminants is in continuously increasing, it was resorted to the creation of a new romanian sheep breed with a high milk production, well adapted to the environmental conditions of the lowlands.

The Palas Milk breed has a specific dairy sheep conformation, with an elongated trunk, trapezoidal shape with the large base on the upper train, a relatively wide, long, straight rump, a thin and long tail covered with white, thick and short hairs.

The purpose of this work is to demonstrate the stability of the morphoproductive and reproductive characteristics of Palas Milk Breed sheep by comparing it with the data of the breed standards and the works carried out in 2018.



Material and method

For this research were studied 390 Palas Milk Breed ewes existing in 2022 year. To calculate the reproduction indices, the necessary data were extracted from the 2022 mating register and the 2023 calving register of the Palas Milk Breed, the mating being a controlled natural one. The production was recorded based on the results obtained at the Milk Production Performance Control carried out in 2023.

Conclusions

Approved in 2010, the Palas Milk Breed is the first breed created in Romania for improvement productivity lactating sheep.

The research carried out at present demonstrates the stability of the breed, the body dimensions falling within the breed standards.

Reproductive indices calculated (prolificity in primiparous of 140.2% and in multiparous of 155.41%, as well as the birth rate) recorded higher values, thus demonstrating the permanent selection of reproduction ewes and rams within Research and Development Institute for Sheep and Goats Breeding Palas Constanta. The exploitation of this breed is significantly contributing to the increase of milk productivity (an average total milk production between 183.38 kg and 191.8 kg, with a duration of lactation between 195.39 and 203.84 days in dry seasons and much more in places with rich pastures or permanent stabling), bringing significant benefits to breeders. This leads to profitability sheep farming and stimulates the interest of breeders.

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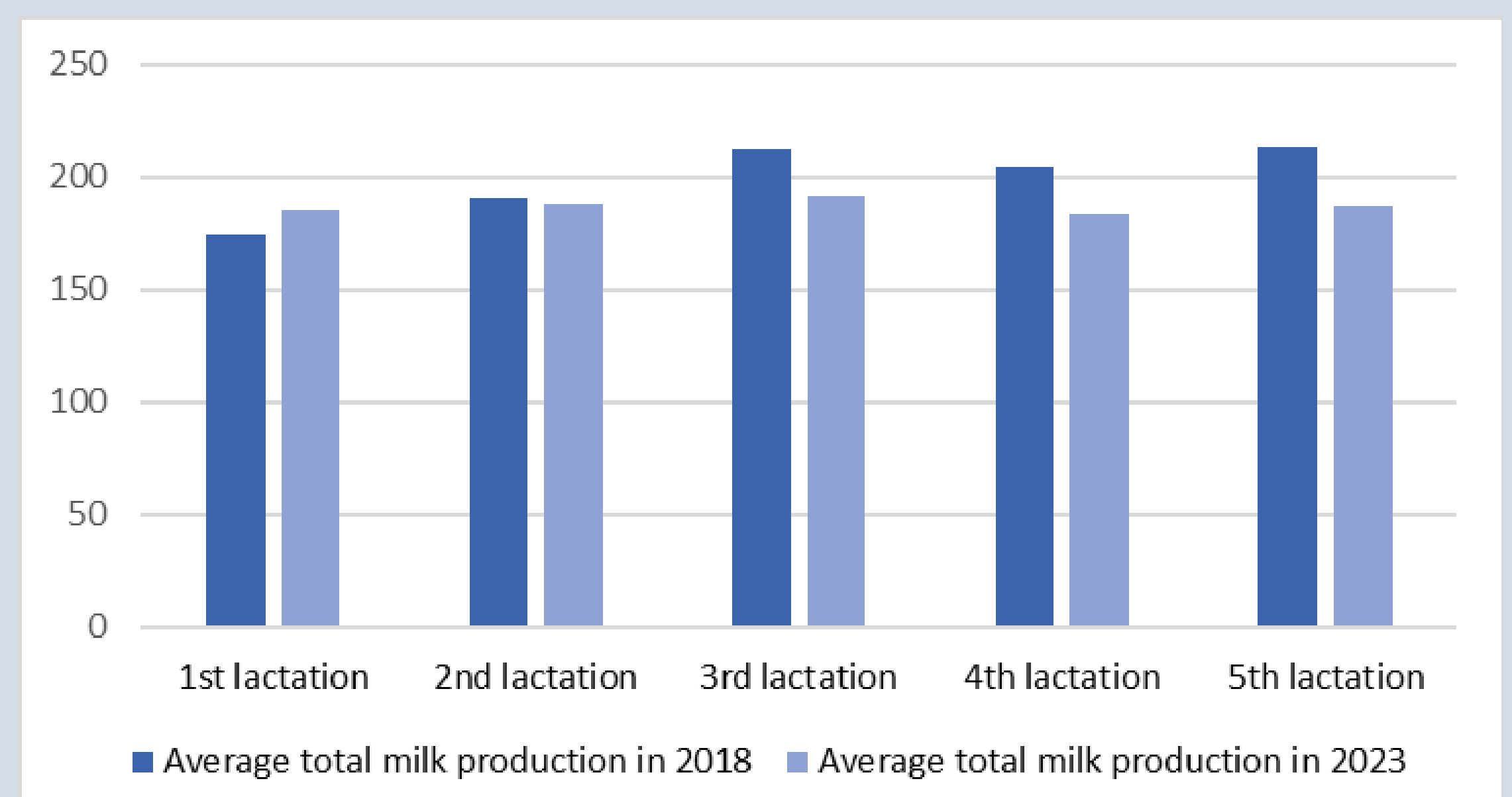
Results and discussions

Specification	Fertility (%)	Prolificacy (%)	Birth rate (%)
Primiparous	93.27	140.20	138.14
Multiparous	89.19	155.41	148.92
Average	91.23	147.80	143.53

Reproductive indices in the Palas Milk Breed ewes - 2023 season

Lactation	Number of sheep	Average total milk (kg)/ewe	Average lactation duration (days)
1 st	69	184.91	200.53
2 nd	37	187.78	201.36
3 rd	55	191.8	203.44
4 th	32	183.38	203.84
5 th	13	187.53	195.39

Milk production and lactation duration – 2023 season



In 2023 were registered an average total milk production and a lower duration of lactation compared to 2018, this fact being determined by the climatic conditions, especially the drought, this being an important factor in the development of the pasture and the level of animal feed. In the case of the first lactation ewes an increase in the average total milk production was found by 6.11% and in the case of those present in the third lactation an increased average duration of 7.24 days was recorded.

