

Goat milk technological parameters evolution through transition from colostrum to milk

Sánchez-Macías, D.[†], Castro, N.[†] Moreno-Indias, I.[†],
Capote, J.[§], Argüello, A.[†]

[†]Department of Animal Science, Las Palmas de Gran Canaria University, Arucas 35413, Spain; [§]Canary Agronomic Science Institute, La Laguna, Tenerife, Spain

Introduction

Colostrum is the initial secretion secreted by mammals during parturition and the first few days after birth. Its composition and physical properties depend on various factors including the age of the animal, number of lactation, breed, diet, and diseases. The colostrum is important because it provides protection to the immune system of newborns and provides passive immunity against pathogens. Because colostrum exhibits some extreme physical properties, contamination of raw milk with colostrum could be an important issue for the dairy industry because it could affect milk processability.

Materials and Methods

30 Majorera goats at partum



Samples at days 0, 1, 2, 3, 4, 5, 15, 30, 60 and 90

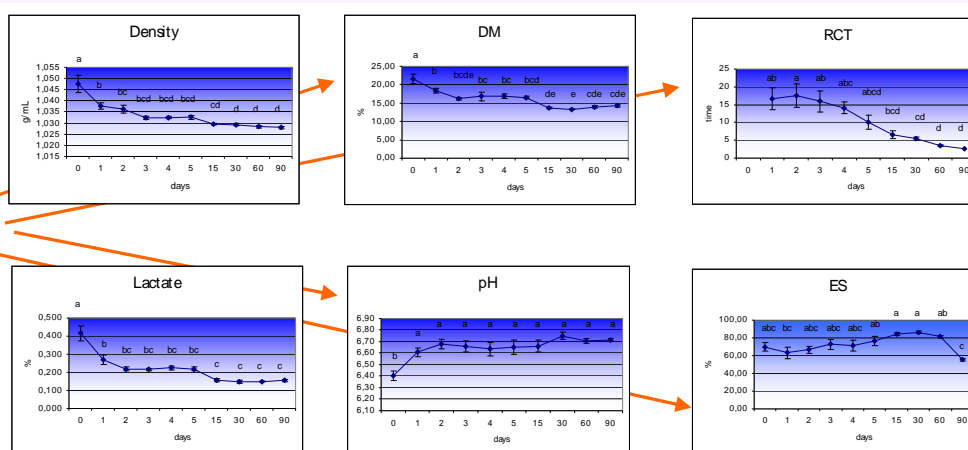


-Density
-pH
-Dry matter (DM)
-Lactic acid (LA)
-Ethanol stability (ES)
-Rennet clotting time (RCT)

Results

Goat milk density, DM, TA and RCT significantly dropped during the experimental time. pH and ES significantly increased during the experimental time. Density, DM, lactate and ES stabilized at day 15 after partum, with values 1.030, 13.70%, 1.5mL and 84%, respectively. The pH was stabilized at day 2 and the RCT dropped during all the experimental period. ES at day 90 dropped sharply.

Results



Conclusion

Technological parameters on Majorera goat milk spent more than 15 days to become stable, and this is important when the milk is used for processed dairy products.