

A STUDY ON THE COLOSTRUM QUALITY OF THE EWES FROM THE UAB FARM

Berta Escarré Molero

Final degree project - june 2022

INTRODUCTION

Colostrum is the first mammary gland secretion after parturition, it contains nutrients and antibodies for the newborn. Lambs are born without immunity, so colostrum may provide enough IgG to insure their supervivation. Several factors vary immunoglobulines levels, such as breed, management, diseases and others, so it is important to know if the colostrum gived to lambs has a good quality.

OBJECTIVES

- Evaluate the colostrum quality from the UAB farm ewes considering the fat, protein and the influence of number of lactations, prolificity and breed to these values.
- Compare total protein values obtained with the refractometer and the laboratory (Biuret method), to demonstrate that the refractometer is useful on the farm.

MATERIAL AND METHODS

N=45 samples of ewe colostrum

Period: September 2021- March 2022

Methods: clinical refractometer and Biuret method

Table 1. Frequency of the prolificity of the ewes used i the study

Prolificity	Frequency
1	18
2	22
3	5

Table 3. Frequency of the number of lactations of the ewes used i the study

Nº lactations	Frequency
1	8
2	12
3	10
4	7
5	4
6	3
7	0
8	1

Table 2. Breeds frequency of the ewes used in the study

Breed	Frequency
Ripollesa	8
Manchega	17
Lacaune	20

RESULTS AND DISCUSSION

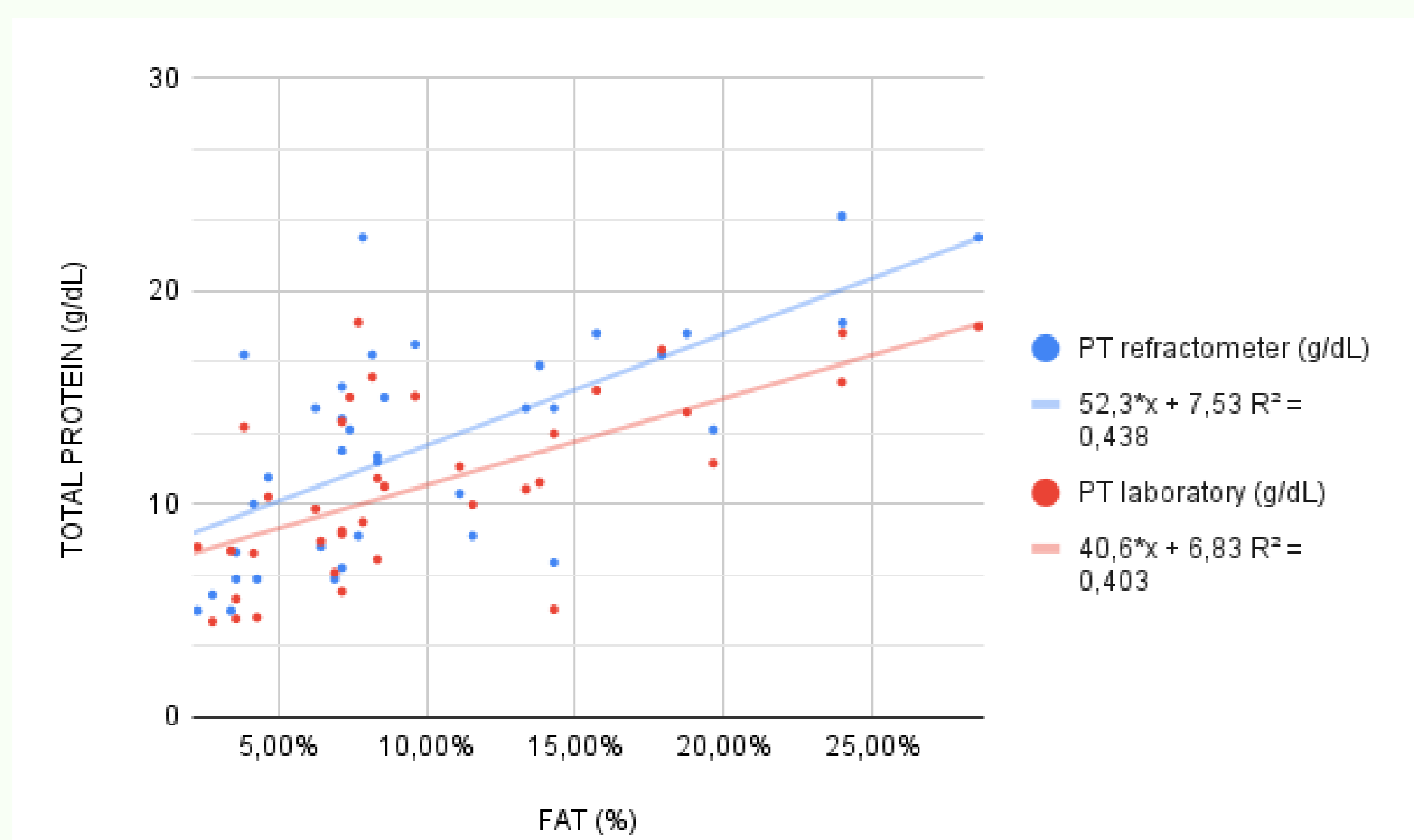


Figure 1. Variation of colostrums protein depending on the fat.

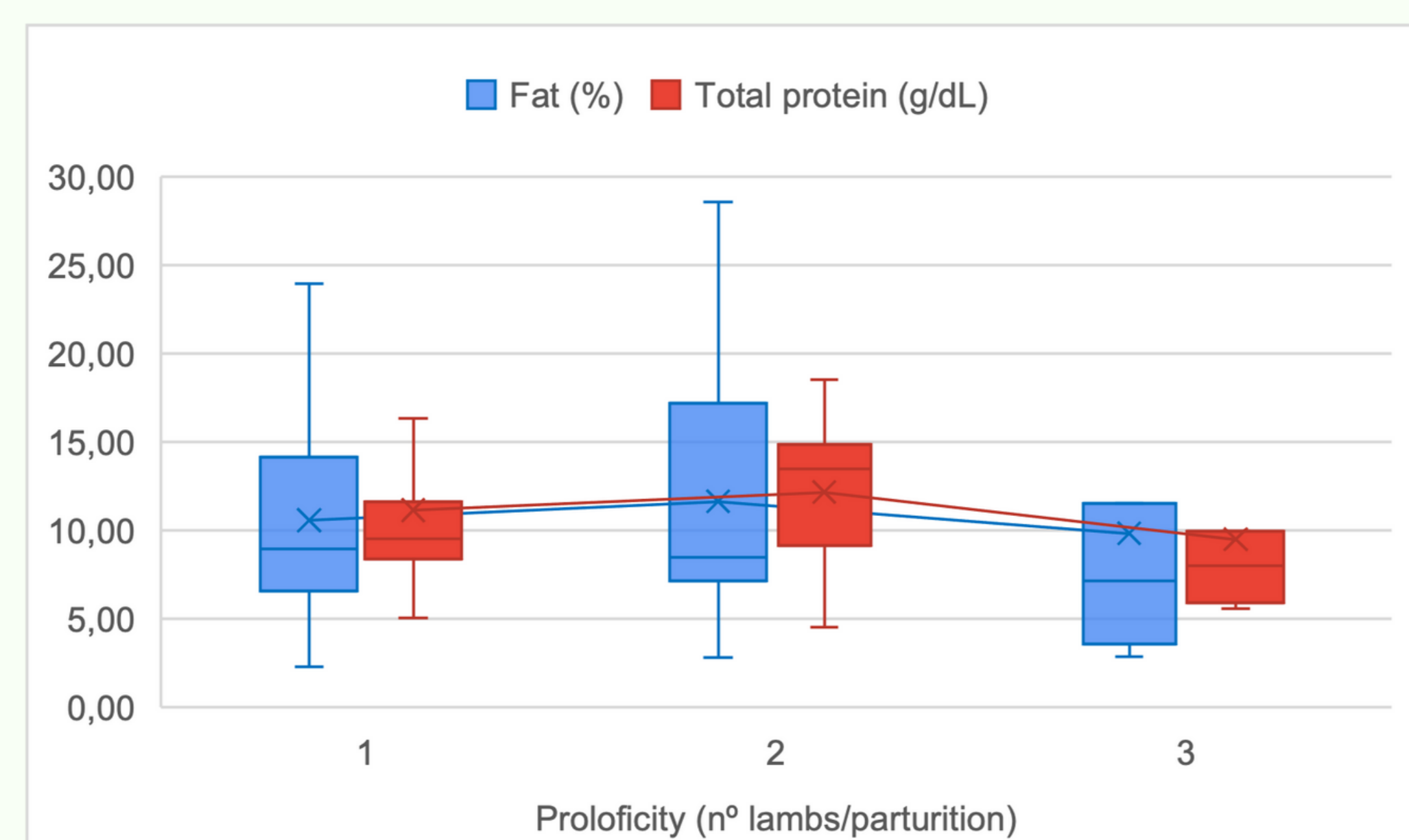


Figure 2. Variation of colostrums fat and protein depending on the prolificity. Protein values are from the laboratory.

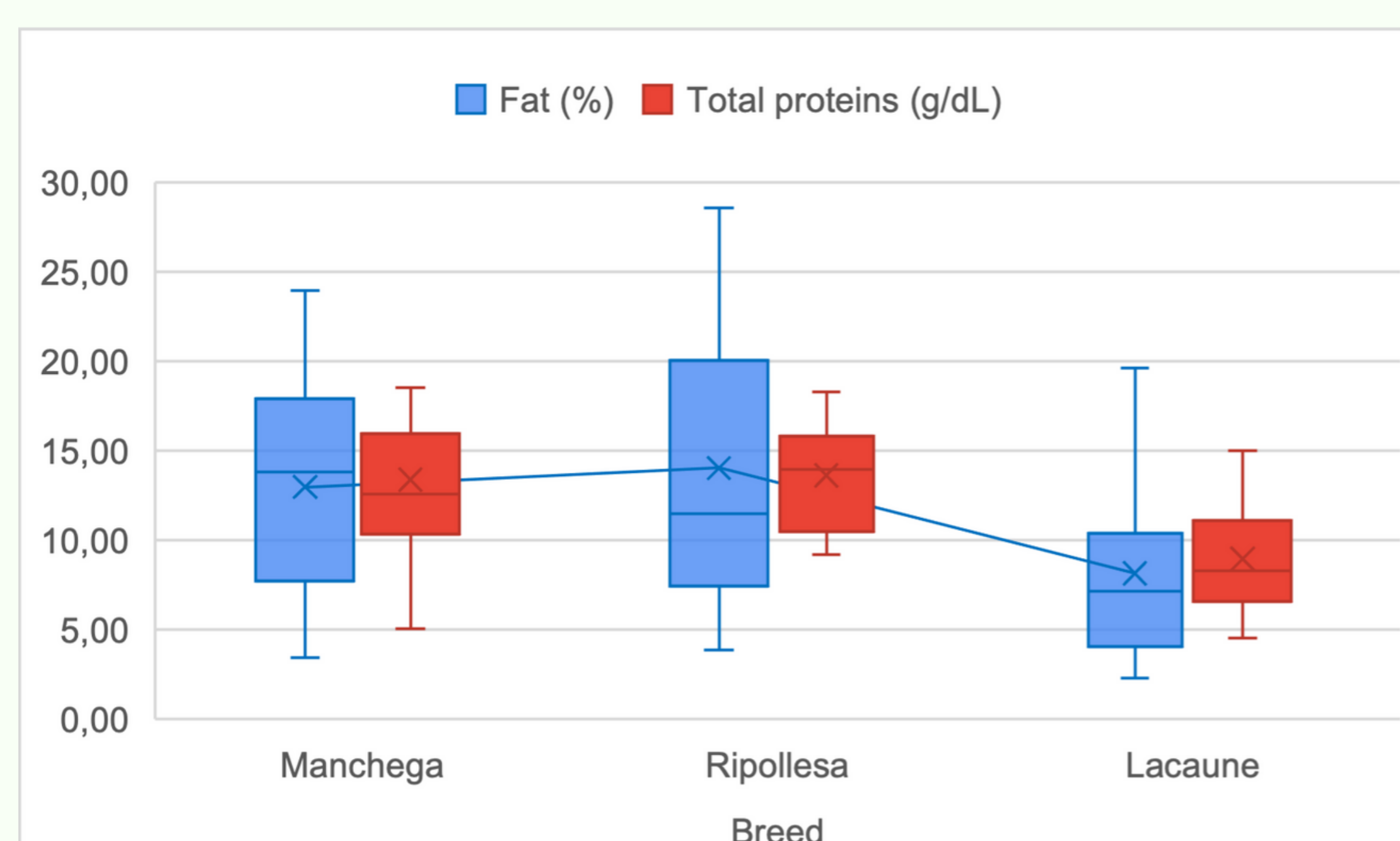


Figure 3. Variation of colostrums fat and protein depending on the breed. Protein values are from the laboratory.

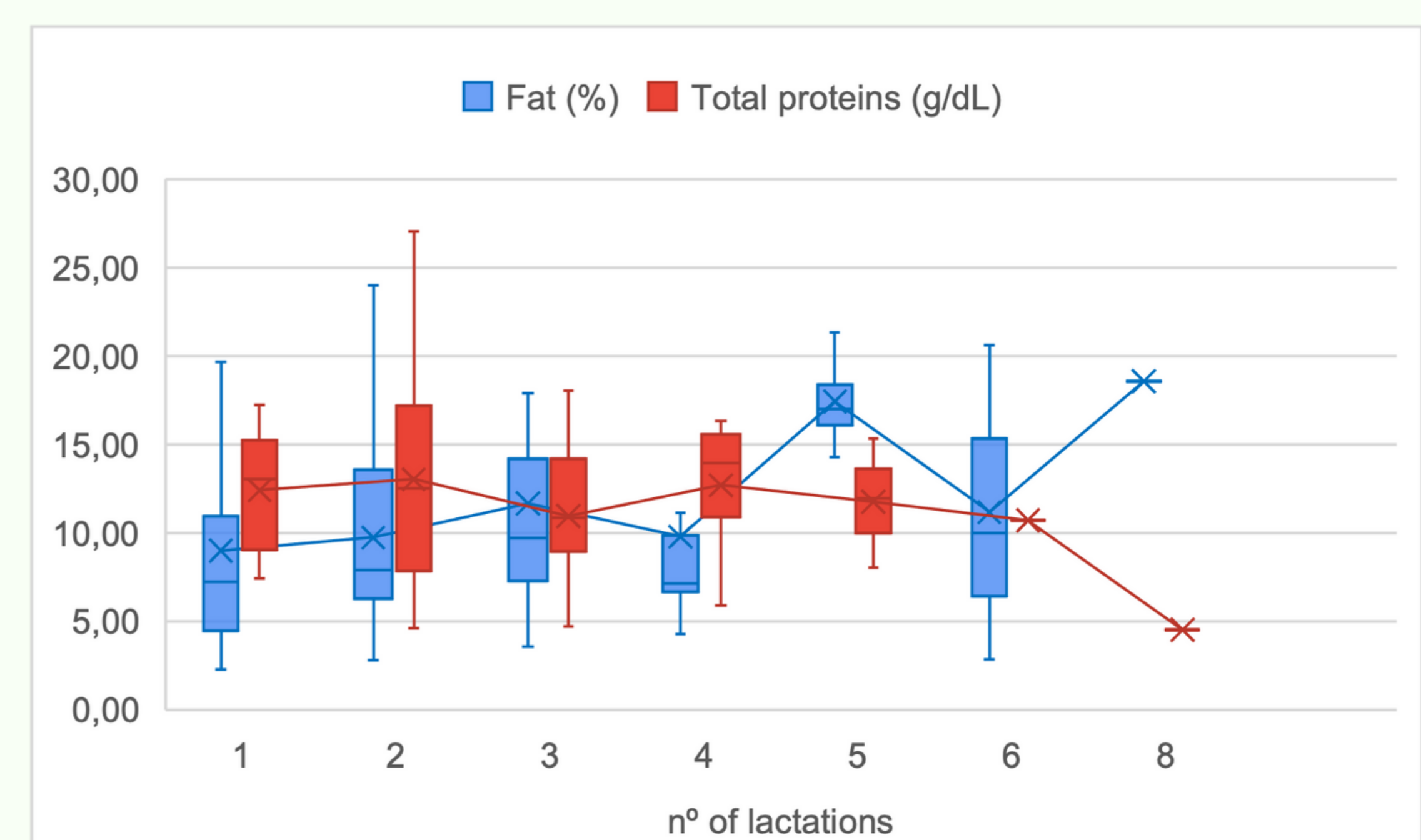


Figure 4. Variation of colostrums fat and protein depending on the number of lactations. Protein values are from the laboratory.

CONCLUSIONS

- Similar values of total protein are obtained with the refractometer and the laboratory → useful in the farm.
- Direct and significative proporcionality between fat and total protein in colostrum.
- The Ripollesa breed (meat target) has better quality than the lactic target breeds and of these, Manchega breed is better than Lacaune.
- The best colostrum quality is obtained with a prolificity of 1-2 lambs per parturition.