



UNIVERSIDAD DE CÓRDOBA



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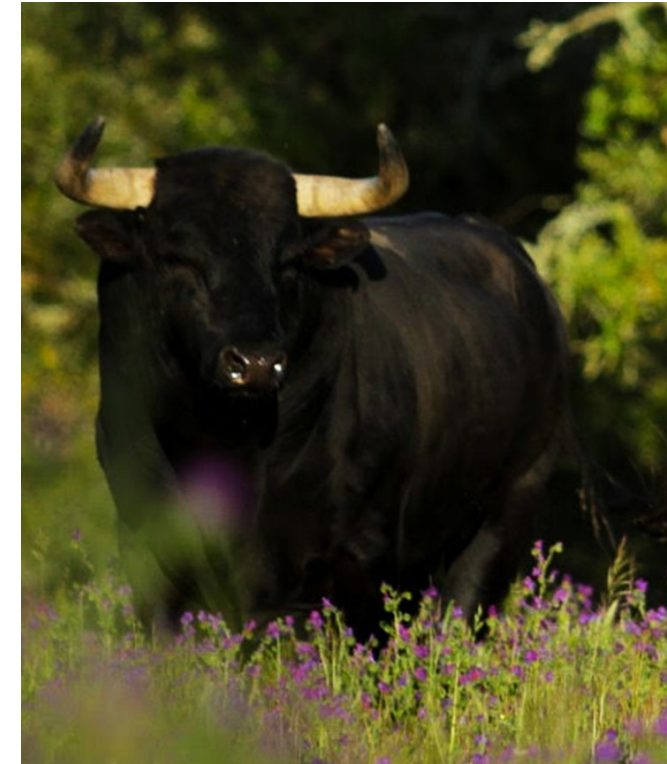


Exploring the meat quality of Lidia breed heifers: preliminary results

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1. Introduction

Extensive systems with local breeds play a crucial role in preserving resources and ecosystems, as well as producing meat with unique characteristics.

These attributes are in line with the current demands of European meat consumer. However, these models face challenges such as lack of profitability or substitution by more productive livestock alternatives.

It is in this context that the study of Lidia breed meat arise.





1. Introduction



Lidia breed is an autochthonous Spanish breed developed in an extensive system linked to the "*dehesa*" ecosystem. The presence of this breed plays a pivotal role in rural development, facing depopulation and generating sustainable employment.

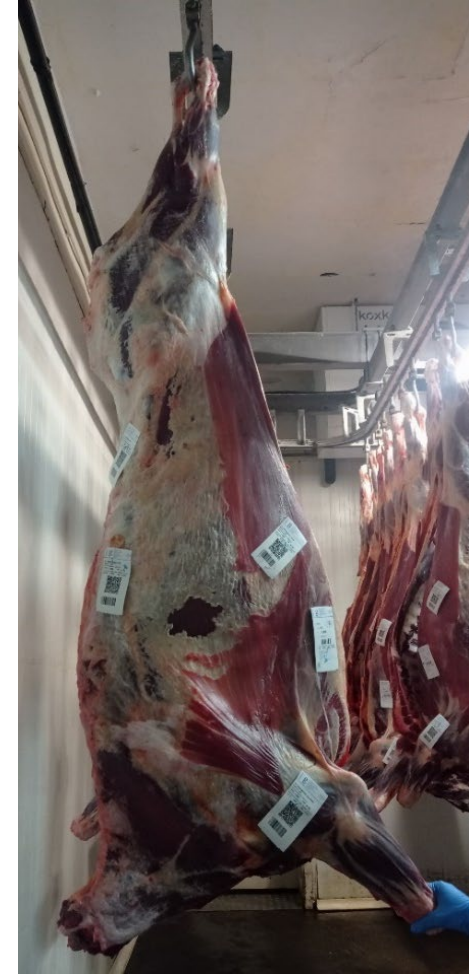
Traditionally reared for bullfighting by emphasizing physical and temperamental traits, the conservation of the Lidia breed faces the need to explore new perspectives for its potential survival.

In a global context where people demand evolution and sustainability, a transition towards high-quality meat production emerges as a strategic direction. In this work we intend to carry out a first analysis of the instrumental quality of the meat of Lidia breed females.



2. Material and Methods

- A total number of 200 Lidia heifers (24-48 months old) from 10 farms (20 animals per farm) were analyzed.
- The animals followed a standard production cycle.
- Samples were obtained by removing the m. Longissimus thoracis between 12-13th thoracis vertebrae.
- Meat samples were vacuum aged under refrigerated conditions for 21 days.





2. Material and Methods



Variables analyzed:

- pH
- Colour in CIELab* space:
L*, a*, b*, C* and Hue angle.
- WHC:
Thawing Loss (TL)
Drip Loss (DL)
Pressure Loss (PL)
Cooking Loss (CL)
- WBSF

Descriptive statistical analysis was applied using XLStat software.



3. Results

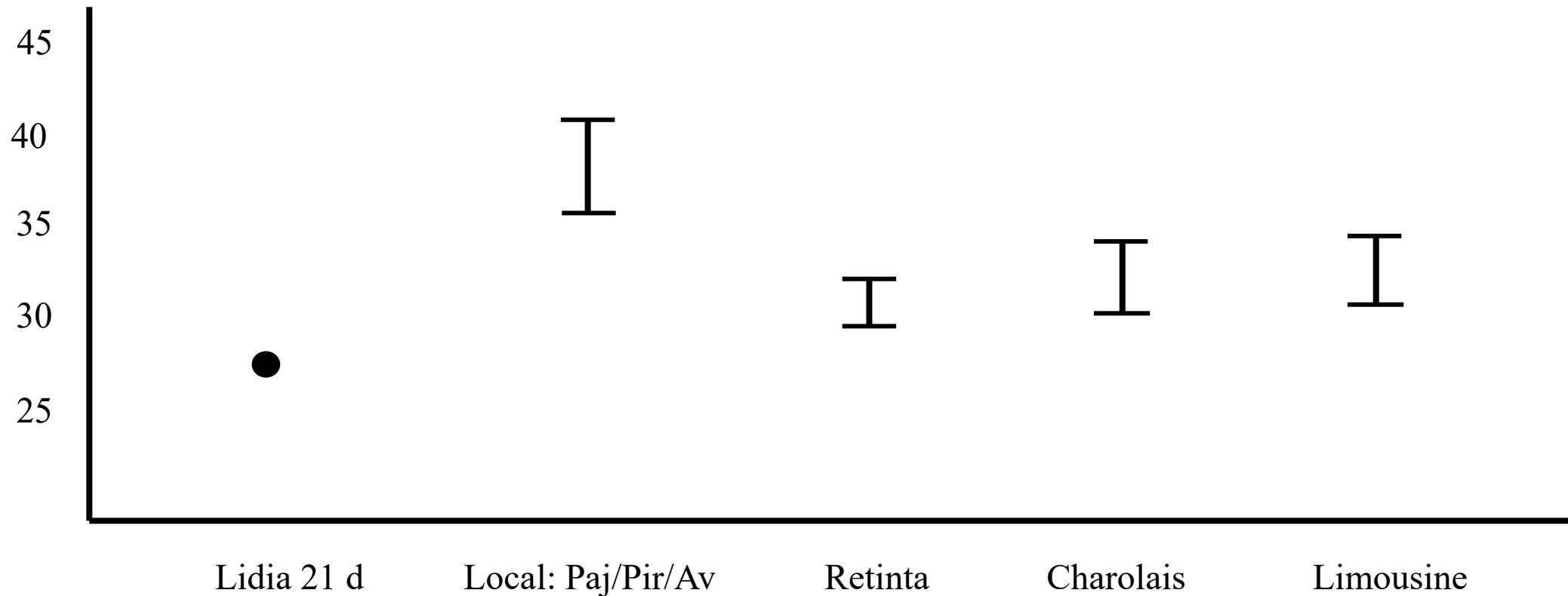
Variables	Mean $\pm$ SE	CV (%)
pH	5.80 $\pm$ 0.24	4.16
L*	26.25 $\pm$ 3.87	14.76
a*	14.68 $\pm$ 2.45	16.72
b*	13.42 $\pm$ 1.80	13.44
C*	20.01 $\pm$ 2.47	12.34
Hue angle	42.52 $\pm$ 4.86	11.43
Thawing Loss (%)	5.39 $\pm$ 1.91	35.56
Drip Loss (%)	1.10 $\pm$ 0.52	47.45
Pressure Loss (%)	9.38 $\pm$ 2.28	24.36
Cooking Loss (%)	22.99 $\pm$ 3.05	13.28
WBSF (kg/cm ²)	4.22 $\pm$ 1.36	32.12

SE = standard error; CV = Coefficient of Variation.



4. Discussion

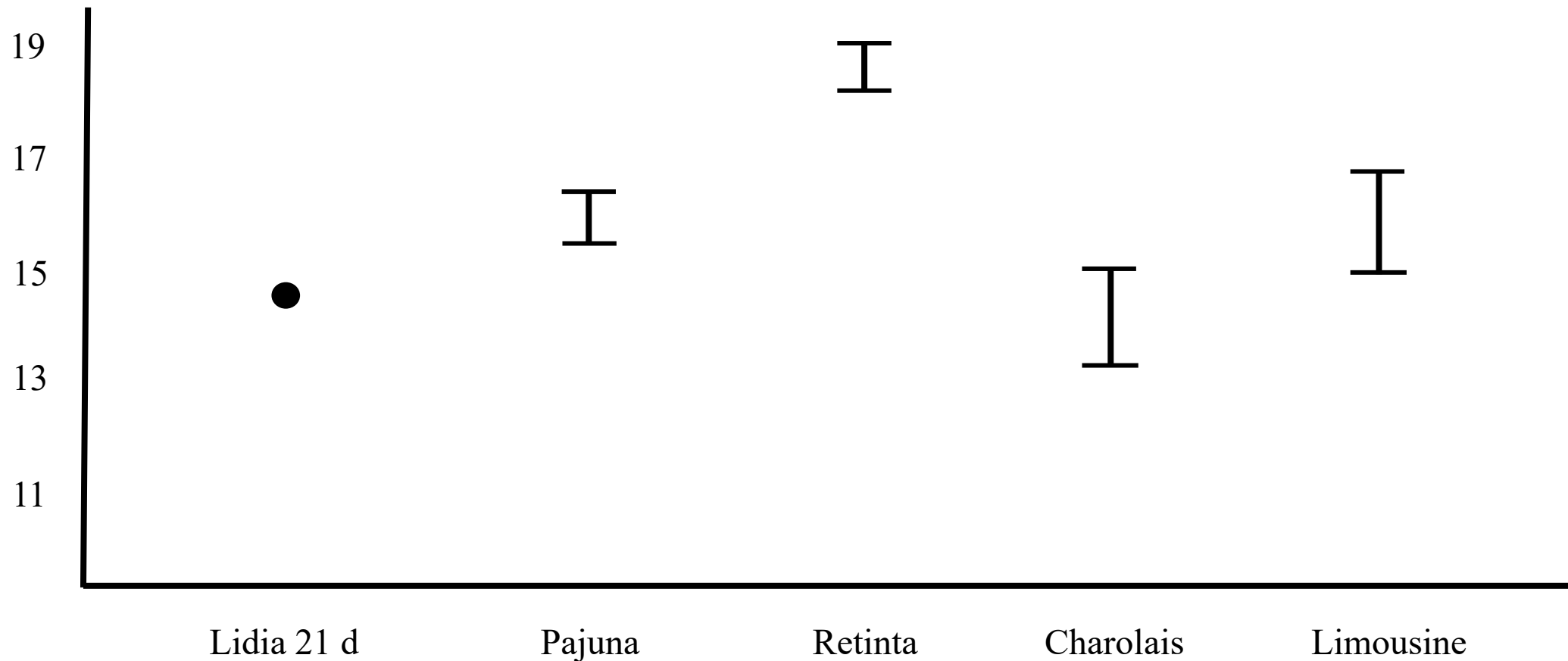
CIELab - L*





4. Discussion

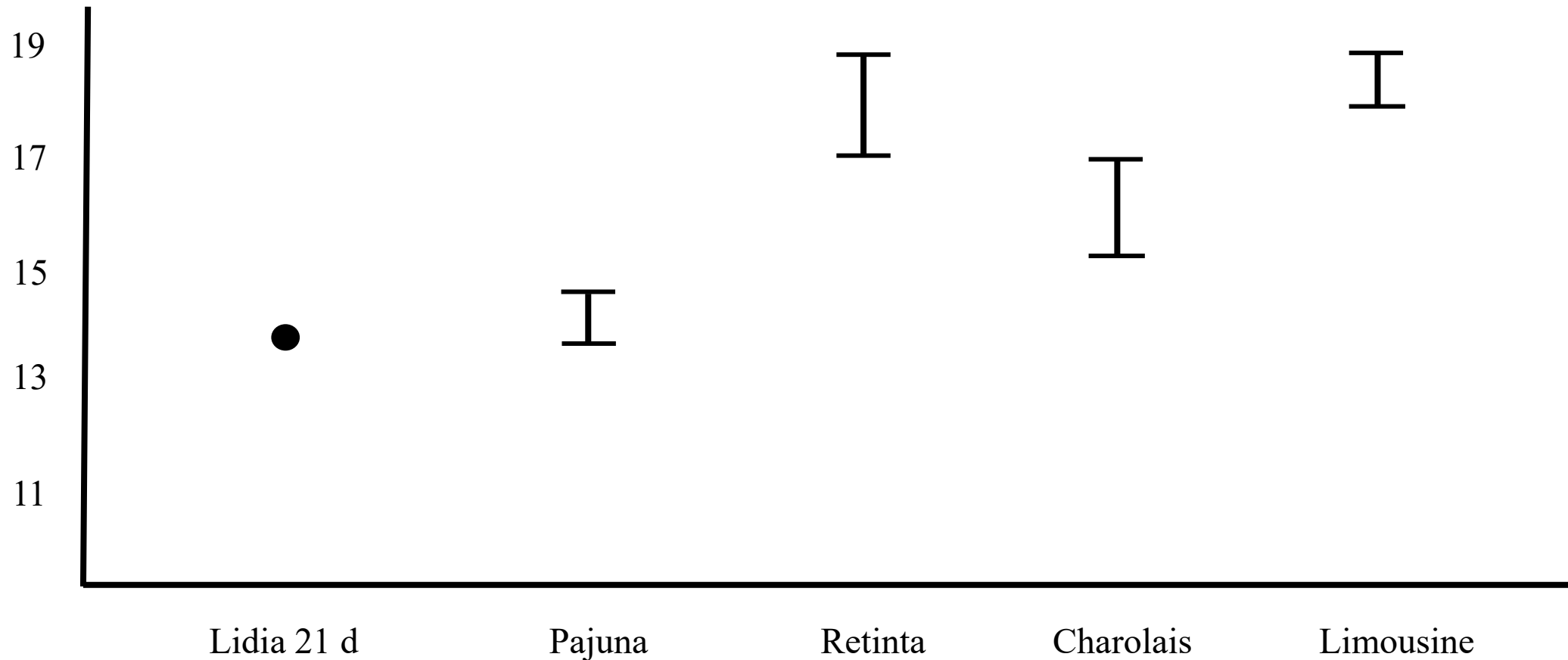
CIELab - a*





4. Discussion

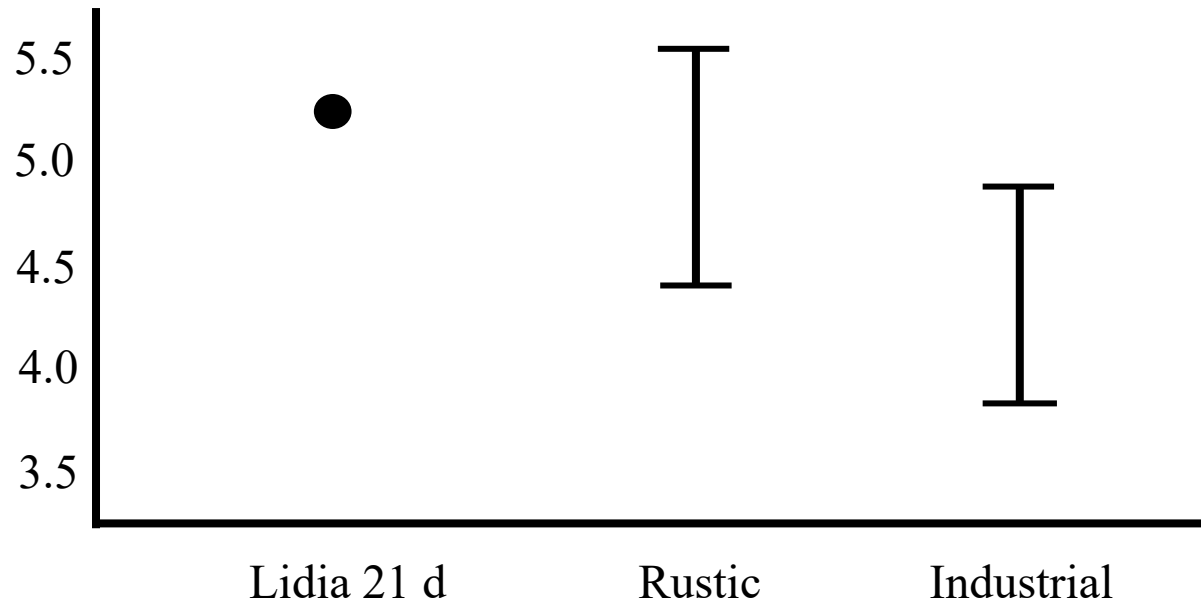
CIELab - b*



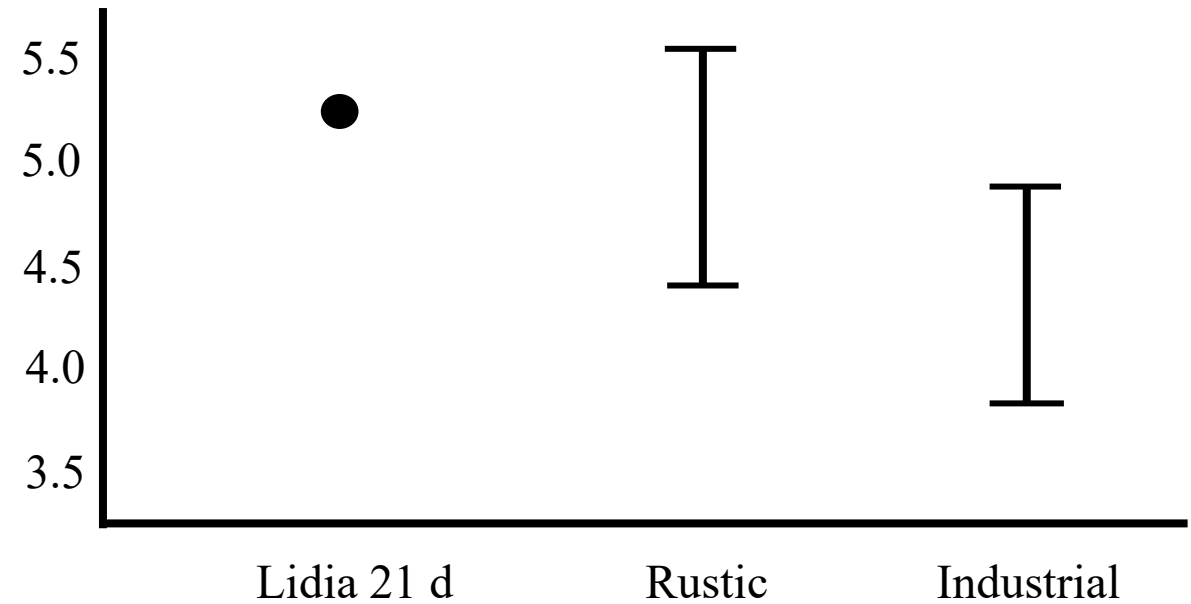


4. Discussion

WHC-TL



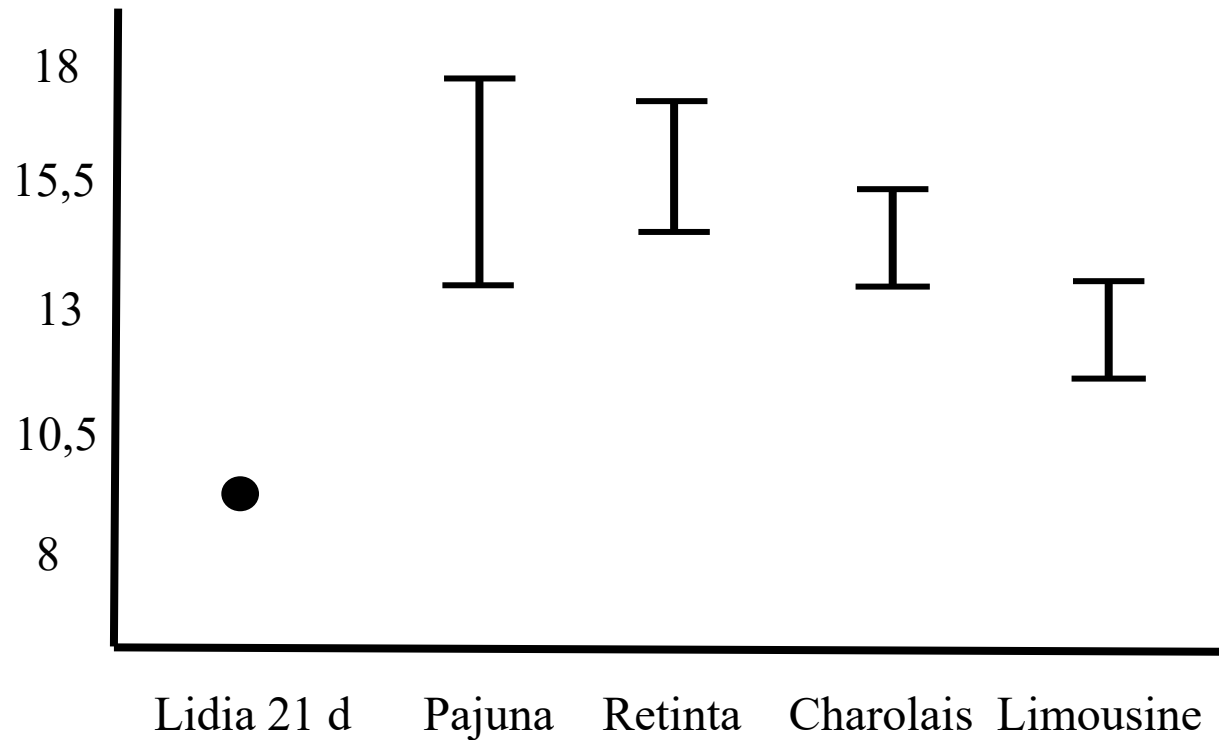
WHC-DL



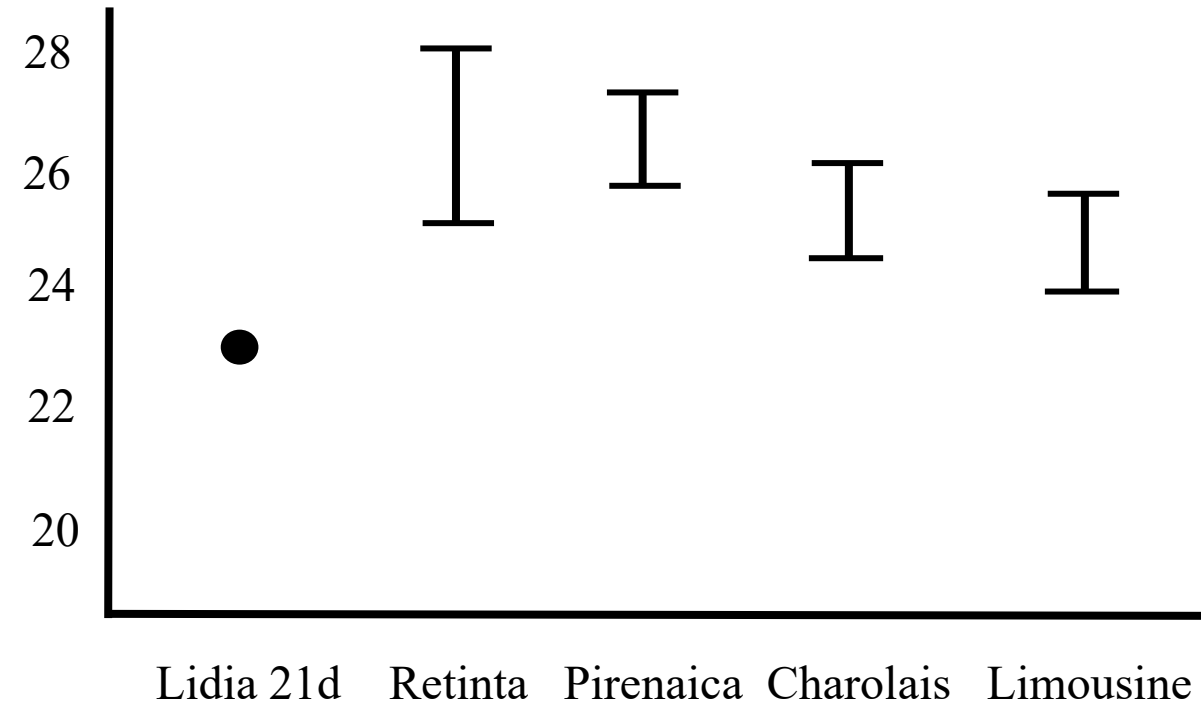


4. Discussion

WHC-PL



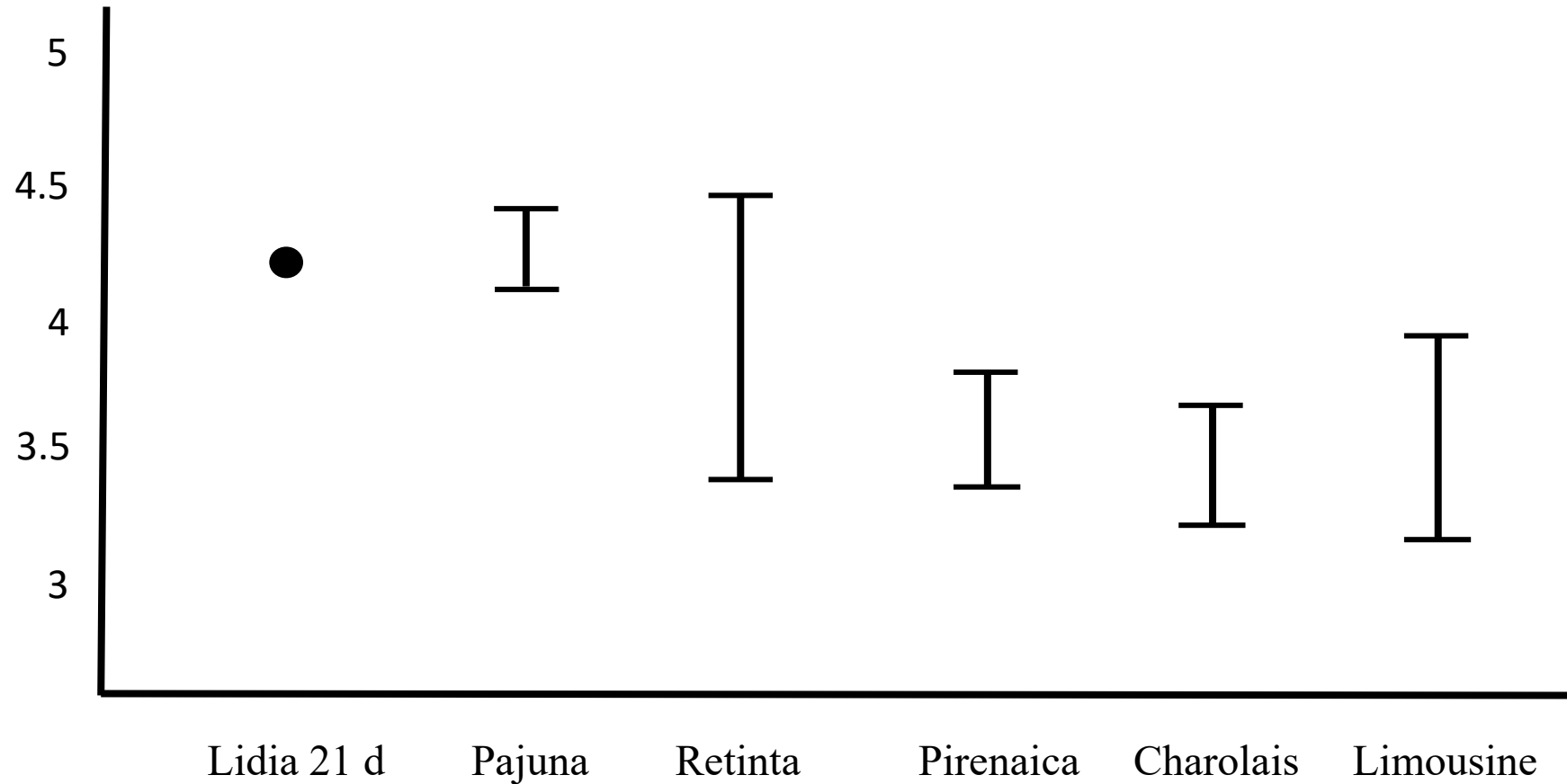
WHC-CL





4. Discussion

WBSF





5. Conclusions

- The results found show that meat from Lidia breed heifers could meet industry and consumer demands.
- It is necessary to deepen the knowledge of consumer preferences and beliefs regarding Lidia breed meat in order to improve its competitiveness in the market.

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