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Sensory Evaluation of Young Goat Meat submitted to diets with Licury [*Syagrus coronata* (Martius) Beccari] oil levels

CNPq
Conselho Nacional de Desenvolvimento Científico e Tecnológico

fapesb
Fundação de Amparo à Pesquisa do Estado da Bahia

Introduction

Brazilian raising goat

10 million goats

93 % Brazilian Northeast

IBGE (2006)

Introduction

Goat meat

Sensorial characteristics

Introduction

Nutrition X meat quality

Alves et al. (2003)

Dias et al. (2008)

Marinova et al. (2001)

Energy level

Introduction

Licury

[*Syagrus coronata* (Martius) Beccari]

Objective

The aim of this study was to determine the best level of licury oil supplementation in diets fed to young goats based on sensorial characteristics of the meat

Material and methods

Experimental Station

Material and methods

Experimental Station

Material and methods

Animals

Initial age → 90 days

Material and methods

Animals

Initial BW → 10.8 kg

Material and methods

Diets

50% tifton-85 hay

+

50% concentrate

- 0.0 % (without oil)
- 1.5 %
- 3.0 %
- 4.5 %

} licury oil

Material and methods

Diets

Material and methods

Chemical composition of diets

Parameter	Licury oil% (DM)			
	0.00	1.50	3.00	4.50
Dry matter(%)	89.52	89.68	89.84	90.01
Ash (% DM)	7.54	7.53	7.53	7.53
Crude Protein (% DM)	10.79	10.81	10.87	10.86
Ether extract (% DM)	3.37	4.78	6.20	7.61
NDF (% DM)	43.29	43.10	42.92	42.74
NFC (% DM)	35.03	33.77	32.48	31.47
TDN (% DM)	67.40	69.30	75.30	80.60

Material and methods

✓ After 60 days

Slaughter

Carcass chilled at 4 °C (24h)

Material and methods

- ✓Leg was collected for sensorial evaluation

Material and methods

Sensorial evaluation

- Appearance
- Aroma
- Flavor
- Juiciness
- Tenderness

- 51 panelists using a 9-points scale being 1 denoting the least favorable condition and 9 the most favorable.

Material and methods

Material and methods

- ✓Data were analyzed as a completely randomized design and the results were subjected to variance and regression analysis

Results and discussion

Sensorial evaluation

Parameter	Licury oil level% (DM)				VC (%)	Regression Equations
	0.00	1.50	3.00	4.50		
Appearance	6.47	7.00	6.67	7.00	23.92	$\hat{Y}$= 6.78
Aroma	6.65	6.43	6.39	6.37	23.16	$\hat{Y}$= 6.46
Flavor	6.88	6.73	6.73	6.62	27.33	$\hat{Y}$= 6.74
Tenderness	7.78	7.67	7.63	7.44	17.82	$\hat{Y}$= 7.63
Juiciness	6.25	6.65	6.49	6.76	24.02	$\hat{Y}$= 6.54

Results and discussion

✓ Tenderness

- Higher than other studies that evaluated goat meat.
- It is probably justified by the early slaughter of the animals.

  - Slaughter age → 150 days

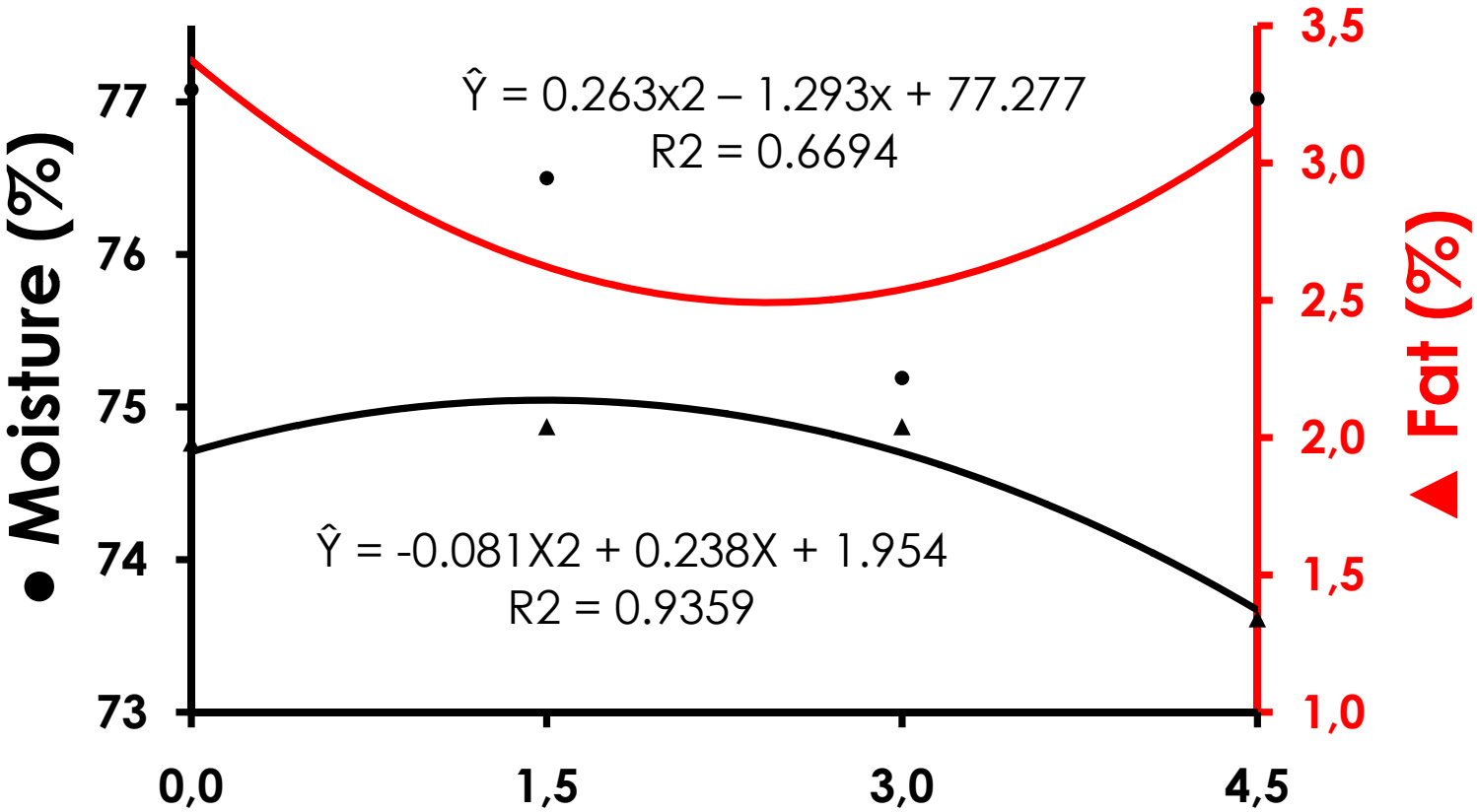
Results and discussion

✓ **Tenderness**

- **Older animals have a higher collagen stability caused by the presence of cross-bridges among these molecules**

Results and discussion

✓ **Juiciness X Moisture**



Licury oil level (% DM)

Conclusion

Licury oil can be added to diet fed to young ¾ Boer goat up to 4.5% without causing any changes on the sensorial characteristics of the meat.

Thank you !