

Effect of parity and number of kids on yield and milk composition in Sarda goat

G.M. Vacca, V. Carcangiu, M.C. Mura, M.L. Dettori and P.P. Bini

Dipartimento di Biologia Animale, Università degli Studi di Sassari, via Vienna 2 - 07100 Sassari, Italia

1. Introduction

Sarda goat is the most numerous Italian breed goat. Very rustic, it is reared on natural pasture and is characterized by good longevity and production of milk with a high fat and protein content.

2. Message

The aim is to assess the influence of parity and number of kids born on yield and milk composition in Sarda goats.

3. Methods

This research was carried out on 500 goats, aged between 1 and 14 years, belonging to 20 herds from the Central Sardinia.

- On milk samples, collected in the middle of lactation, were determined:
 - ✓ fat, protein, lactose and urea content and SCC (infrared method);
 - ✓ cryoscopic index (cryoscope);
 - ✓ pH value;
 - ✓ TMC (flow cytometer).
- The data were submitted to ANOVA.



4. Results

Mean values related to parity

Parity	1	2	3	4	5	6	>6
n.	(25)	(51)	(90)	(90)	(92)	(59)	(93)
Yield (g/day)	614.1 ^a	801.3 ^b	744.7 ^b	896.9 ^b	826.7 ^b	897.6 ^b	787.6 ^b
Fat (%)	5.30	4.80	5.27	5.16	5.97	5.12	5.14
Protein (%)	4.30	4.13	4.23	4.25	4.31	4.19	4.40
Lactose (%)	5.09 ^B	4.89 ^A	4.87 ^A	4.85 ^A	4.85 ^A	4.91 ^A	4.78 ^A
Urea (mg/dL)	33.76	35.29	32.80	33.96	35.15	35.33	32.48
Cryoscopic index (°H)	-0.568	-0.566	-0.567	-0.568	-0.569	-0.568	-0.569
pH	6.74	6.73	6.72	6.73	6.71	6.72	6.71
Log SCC	2.44 ^A	2.62 ^{AB}	2.81 ^B	2.85 ^B	2.86 ^B	2.95 ^{BC}	3.16 ^C
Log TMC	0.80 ^a	1.16 ^{ab}	1.11 ^{ab}	1.18 ^b	1.26 ^{bc}	1.35 ^c	1.31 ^c

Mean values related to number of kids

Kind of birth	single	multiple
n.	(286)	(214)
Yield (g/day)	774.8 ^A	873.5 ^B
Fat (%)	5.34 ^B	4.82 ^A
Protein (%)	4.33	4.11
Lactose (%)	4.90 ^B	4.82 ^A
Urea (mg/dL)	30.94 ^A	35.67 ^B
Cryoscopic index (°H)	-0.568	-0.568
pH	6.72	6.73
Log SCC	2.75 ^a	2.89 ^b
Log TMC	1.21	1.21

5. Conclusions

These results, besides confirming the influence of the kind of birth, single or multiple, on yields, shows how the high longevity of Sarda goats goes with good quanti-qualitative productions.