

Technological attempts at producing cheese from donkey milk

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SUPPLEMENTARY FILE

Table S1

Results of the coagulation trials on milks (modal values) by applicaiton of different technological parameters.

D: donkey milk, M1 and M2: mixtures of donkey and goat milk 85/15 and 70/30 vv respectively

Amount of calf rennet used was 1ml/l, coagulation temperature was 40°C.

Coagulum consistency was expressed empirically from = (incomplete) to 4 (very firm)

	pH	CaCl ₂ (g L ⁻¹)	Coagulum consistency		
			D	M1	M2
Set1a	6.90	0.1	0	1	2
Set1b	6.90	0.2	0	1	2
Set1c	6.90	0.3	0	1	3
Set2a	6.70	0.1	0	1	3
Set2b	6.70	0.2	1	2	3
Set2c	6.70	0.3	1	2	3
Set3a	6.50	0.1	1	2	3
Set3b	6.50	0.2	1	2	4
Set3c	6.50	0.3	2	3	4

Table S2

Gross composition, pH, somatic cell count (SCC), total microbial count (TMC) and pathogenic microorganisms detected in donkey and goat milk used for cheesemaking (mean \pm SD).

	Donkey	Goat
Fat (%)	0.21 \pm 0.04	4.62 \pm 0.29
Protein (%)	1.73 \pm 0.00	3.47 \pm 0.17
Lactose (%)	6.72 \pm 0.04	4.63 \pm 0.13
pH	6.92 \pm 0.01	6.51 \pm 0.04
SCC (x 1000/mL)	11 \pm 1.41	1326 \pm 101.92
TMC (CFU x 1000/mL)	50	64
<i>Escherichia coli</i> (CFU/mL)	< 10	< 10
Coagulase-positive staphylococci (CFU/mL)	< 40	< 40
<i>Listeria monocytogenes</i> (+/-/25 mL)	/	/
<i>Salmonella</i> spp. (+/-/25 mL)	/	/
<i>Campylobacter</i> spp. (+/-/25 mL)	/	/

Table S3

Sensory attributes (modal values) of cheeses made from donkey milk and mixture of donkey and goat milk

D: donkey milk, M1: 85/15 donkey/goat, M2 70/30 donkey/goat.

*: $P < 0.05$

Attribute	D	M1	M2	Sg
Solubility	1	0	0	
Hardness	0	1	2	*
Adhesiveness	0	1	1	
Friability	3	3	2	*
Creaminess	0	0	1	
Gamy	2	1	0	*
Goaty	0	0	1	*
Sour	0	0	1	*
Cooked milk	2	1	0	*
Salty	2	2	2	
Sweet	3	2	1	*
Acid	0	1	2	*

Figure S1

SDS-PAGE of wheys and cheeses

D: donkey milk, M1: 85/15 donkey/goat, M2 70/30 donkey/goat.

Std: molecular weight standard

