

Artisanal goat *coalho* cheese with cachaça as flavoring agent

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Table S1. Pearson's correlation test between microbial count and physicochemical parameters in artisanal goat *coalho* cheeses immersed in cachaça and stored at 4 °C during 60 days.

Parameter	Variable	r	p
Storage period	LAB	0.958	<0.0001
	<i>Lactococcus</i> spp.	0.932	<0.0001
	pH	-0.310	0.108
	<i>L</i> *	-0.747	<0.0001
	<i>a</i> *	-0.192	0.328
	<i>b</i> *	0.506	0.006
	<i>C</i> *	0.501	0.007
	<i>h</i> °	0.314	0.104
	Hardness	0.265	0.173
	Cohesiveness	-0.121	0.541
	Gumminess	0.297	0.125
	Chewiness	-0.113	0.567
LAB	Storage period	0.958	<0.0001
	<i>Lactococcus</i> spp.	0.937	<0.0001
	pH	0.357	0.062
	<i>L</i> *	-0.733	<0.0001
	<i>a</i> *	-0.050	0.800
	<i>b</i> *	0.522	0.004
	<i>C</i> *	0.519	0.005
	<i>h</i> °	0.166	0.400
	Hardness	0.101	0.608
	Cohesiveness	-0.031	0.875
	Gumminess	0.229	0.241
	Chewiness	-0.116	0.557
<i>Lactococcus</i>	Storage period	0.932	<0.0001
	LAB	0.937	<0.0001
	pH	0.356	0.063
	<i>L</i> *	-0.723	<0.0001
	<i>a</i> *	-0.130	0.510
	<i>b</i> *	0.470	0.012
	<i>C</i> *	0.466	0.012
	<i>h</i> °	0.240	0.219

	Hardness	0.062	0.755
	Cohesiveness	-0.021	0.916
	Gumminess	0.268	0.168
	Chewiness	-0.146	0.459
pH	Storage period	-0.310	0.108
	LAB	0.357	0.062
	<i>Lactococcus</i> spp.	0.356	0.063
	L^*	-0.553	0.002
	a^*	-0.140	0.477
	b^*	0.170	0.387
	C^*	0.166	0.399
	h°	0.180	0.360
	Hardness	-0.148	0.452
	Cohesiveness	0.646	0.0002
	Gumminess	0.367	0.055
	Chewiness	0.229	0.241
L^*	Storage period	-0.747	<0.0001
	LAB	-0.733	<0.0001
	<i>Lactococcus</i> spp.	-0.723	<0.0001
	pH	-0.553	0.002
	a^*	0.053	0.787
	b^*	-0.627	0.001
	C^*	-0.625	0.001
	h°	-0.196	0.319
	Hardness	-0.197	0.315
	Cohesiveness	-0.205	0.296
	Gumminess	-0.634	0.001
	Chewiness	-0.256	0.189
a^*	Storage period	-0.192	0.328
	LAB	-0.050	0.780
	<i>Lactococcus</i> spp.	-0.130	0.510
	pH	-0.192	0.328
	L^*	0.053	0.787
	b^*	0.416	0.028
	C^*	0.426	0.024
	h°	-0.979	<0.0001
	Hardness	-0.205	0.295
	Cohesiveness	0.270	0.166
	Gumminess	-0.235	0.229
	Chewiness	0.169	0.391
b^*	Storage period	0.506	0.006
	LAB	0.522	0.004
	<i>Lactococcus</i> spp.	0.470	0.012
	pH	0.170	0.387
	L^*	-0.627	0.001
	a^*	0.417	0.023
	C^*	0.999	<0.0001
	h°	-0.232	0.235

	Hardness	0.005	0.980
	Cohesiveness	0.050	0.801
	Gumminess	0.152	0.442
	Chewiness	-0.011	0.957
C*	Storage period	0.501	0.007
	LAB	0.519	0.005
	<i>Lactococcus</i> spp.	0.466	0.012
	pH	0.166	0.399
	L*	-0.625	0.001
	a*	0.426	0.024
	b*	0.999	<0.0001
	h°	-0.243	0.213
	Hardness	0.004	0.982
	Cohesiveness	0.053	0.788
	Gumminess	0.152	0.440
	Chewiness	-0.005	0.982
h°	Storage period	0.314	0.104
	LAB	0.166	0.400
	<i>Lactococcus</i> spp.	0.240	0.219
	pH	0.180	0.360
	L*	-0.195	0.319
	a*	-0.979	<0.0001
	b*	-0.232	0.235
	C*	-0.243	0.213
	Hardness	0.214	0.273
	Cohesiveness	-0.283	0.144
	Gumminess	0.278	0.152
	Chewiness	-0.195	0.320
Hardness (g)	Storage period	0.265	0.173
	LAB	0.101	0.608
	<i>Lactococcus</i> spp.	0.062	0.755
	pH	-0.148	0.452
	L*	-0.197	0.315
	a*	-0.205	0.295
	b*	0.005	0.980
	C*	0.004	0.982
	h°	0.214	0.273
	Cohesiveness	-0.456	0.015
	Gumminess	0.437	0.020
	Chewiness	0.206	0.294
Cohesiveness	Storage period	-0.121	0.541
	LAB	-0.031	0.875
	<i>Lactococcus</i> spp.	-0.021	0.916
	pH	0.646	0.0002
	L*	-0.205	0.296
	a*	0.270	0.166
	b*	0.050	0.801
	C*	0.053	0.788

	h°	-0.283	0.144
	Hardness	-0.456	0.015
	Gumminess	0.355	0.064
	Chewiness	0.607	0.001
Gumminess (g)	Storage period	0.297	0.125
	LAB	0.229	0.241
	<i>Lactococcus</i> spp.	0.268	0.168
	pH	0.367	0.055
	L^*	-0.634	0.001
	a^*	-0.235	0.229
	b^*	0.152	0.442
	C^*	0.152	0.440
	h°	0.278	0.152
	Hardness	0.437	0.020
	Cohesiveness	0.355	0.064
	Chewiness	0.755	<0.0001
Chewiness (g)	Storage period	-0.113	0.567
	LAB	-0.116	0.557
	<i>Lactococcus</i> spp.	-0.146	0.459
	pH	0.229	0.241
	L^*	-0.256	0.189
	a^*	0.169	0.391
	b^*	-0.011	0.957
	C^*	-0.005	0.982
	h°	-0.195	0.320
	Hardness	0.206	0.294
	Cohesiveness	0.607	0.001
	Gumminess	0.755	<0.0001

LAB: lactic acid bacteria; L^* : lightness; a^* : redness; b^* : yellowness; C^* : chroma; h° : hue angle; r: Pearson's correlation coefficient; p : probability value. Values in bold indicate strong (≥ 0.7) correlation between the variables.

Table S2. Pearson's correlation test between microbial and physicochemical variables with sensory quality scores in artisanal goat *coalho* cheeses immersed in cachaça and stored at 4 °C.

Sensory parameter	Variable	R	p
Appearance	LAB	-0.957	0.043
	<i>Lactococcus</i>	-0.024	0.976
	<i>L</i> *	-0.013	0.987
	<i>b</i> *	-0.794	0.206
	<i>a</i> *	-0.971	0.029
	<i>C</i> *	-0.804	0.196
	<i>h</i> °	0.919	0.081
	Hardness	-0.241	0.759
	Cohesiveness	0.234	0.766
	Gumminess	0.249	0.751
	Chewiness	0.761	0.239
Color	LAB	-0.954	0.047
	<i>Lactococcus</i>	-0.018	0.982
	<i>L</i> *	0.031	0.969
	<i>b</i> *	-0.823	0.177
	<i>a</i> *	-0.961	0.039
	<i>C</i> *	-0.832	0.168
	<i>h</i> °	0.900	0.100
	Hardness	-0.219	0.781
	Cohesiveness	0.209	0.791
	Gumminess	0.222	0.778
	Chewiness	0.785	0.215
Aroma	LAB	-0.687	0.313
	<i>Lactococcus</i>	-0.529	0.471
	<i>L</i> *	0.093	0.907
	<i>b</i> *	-0.555	0.445
	<i>a</i> *	-0.784	0.217
	<i>C</i> *	-0.567	0.433
	<i>h</i> °	0.746	0.254
	Hardness	0.160	0.840
	Cohesiveness	-0.143	0.857
	Gumminess	0.691	0.309
	Chewiness	0.781	0.219
Flavor	LAB	-0.822	0.178
	<i>Lactococcus</i>	-0.338	0.662
	<i>L</i> *	-0.036	0.964
	<i>b</i> *	-0.610	0.390
	<i>a</i> *	-0.899	0.101
	<i>C</i> *	-0.623	0.377
	<i>h</i> °	0.871	0.129
	Hardness	-0.049	0.951
	Cohesiveness	0.062	0.938
	Gumminess	0.571	0.429
	Chewiness	0.742	0.259

Texture	LAB	-0.743	0.257
	<i>Lactococcus</i>	-0.034	0.966
	<i>L*</i>	-0.650	0.350
	<i>b*</i>	-0.160	0.840
	<i>a*</i>	-0.837	0.164
	<i>C*</i>	-0.176	0.824
	<i>h</i> [°]	0.915	0.085
	Hardness	-0.530	0.470
	Cohesiveness	0.564	0.436
	Gumminess	0.495	0.506
	Chewiness	0.173	0.827
Overall impression	LAB	-0.867	0.133
	<i>Lactococcus</i>	-0.220	0.780
	<i>L*</i>	-0.208	0.792
	<i>b*</i>	-0.546	0.454
	<i>a*</i>	-0.942	0.058
	<i>C*</i>	-0.560	0.440
	<i>h</i> [°]	0.939	0.061
	Hardness	-0.219	0.782
	Cohesiveness	0.235	0.765
	Gumminess	0.529	0.471
	Chewiness	0.624	0.376
Purchase intention	LAB	-0.695	0.305
	<i>Lactococcus</i>	-0.207	0.793
	<i>L*</i>	-0.561	0.439
	<i>b*</i>	-0.153	0.847
	<i>a*</i>	-0.811	0.190
	<i>C*</i>	-0.170	0.830
	<i>h</i> [°]	0.882	0.118
	Hardness	-0.374	0.626
	Cohesiveness	0.413	0.587
	Gumminess	0.633	0.367
	Chewiness	0.251	0.750

LAB: lactic acid bacteria; *L**: lightness; *a**: redness; *b**: yellowness; *C**: chroma; *h*[°]: hue angle; r: Pearson's correlation coefficient; *p*: probability value. Values in bold indicate strong (≥ 0.7) correlation between the variables.