sory evaluation was performed by a sensory panel consisting of 20 consumers aged between 20 and 60 years. The panel was asked to assess different types of cheese using a score from 0 to 5 for each of the following attributes: odour (O), flavor (F), salty taste (S), acidity (Ac), bitterness (B), homogeneity (H), consistency (C) and adhesiveness (A). Colorimetric analysis results: The L* value (brightness) of the samples undergoes a decrease from 93.51 (Marzolina cheese) to 78.85 (Scamorza cheese). Values of index a* and b* obtained are in accordance to other studies even if made by sheep cheese. The color change is determined by the lipolytic and proteolytic processes that occur during aging (2 days Scamorza cheese *vs* 180 days Provolone cheese). Sensory profiles: although the used panel test has a scale from 0 to 5, no samples were scored higher than 4 for any parameters. The different sensory profiles depend on the type of cheese, on maturing days and smoking. The odour" reaches the highest value in Provolone cheese (180 days of maturing) and the lowest value in Muzzotta cheese (45 days of maturing). In addition, there were no flaws in the sensory characteristics of samples cheese as spicy and sour flavor. This study is a preliminary analyse of some traditional products made from buffalo milk because the market for this 'new' products in recent years are expanding nationally and internationally.

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Pecorino flavoured cheese: physicochemical, textural and colorimetrical characteristics of different varieties

Francesco Filippetti, Maria Concetta Campagna, Nicola Bottalico, Simonetta Amatiste, Remo Rosati

Istituto Zooprofilattico Sperimentale delle Regioni Lazio e Toscana, Roma, Italy

Corresponding author: francesco.filippetti@izslt.it

The quality of distinctive artisanal cheeses is closely associated with the territory of production and its traditions. Safeguarding these products means also safeguarding the uniqueness of their historical and cultural environment. The Mediterranean ewes' cheeses are included in this sector of the market. This cheese is produced in the Province of Rieti. *Pecorino* flavoured cheese is a semi-hard or hard ewes' cheese, made from raw milk. Therefore, the aim of the present research was to monitor, for the first time, its physicochemical state and textural and colorimetrical characteristics, to determine if it is necessary to regulate the productive process of this distinctive ewes' cheese regarding these aspects. 25 samples of ewe cheese (n° 5 pepper flavored, n° 5 chili flavored, n° 5 oregano flavored, n° 5 basil flavored and n° 5 walnuts flavored) were analyzed from September to November last year. For each sample, characteristics have been analyzed: chemical and physical parameters (fat (F), fat SS (FSS), protein (P), dry matter (FDM) total solids (TS) and moisture (M)) were determined with analyzer FoodScan (FOSS, Denmark) and pHmeter with glass electrode (Table 1); each cheese sample was determined three times. Colorimetric analysis has been carried out using a Minolta colorimeter CR-400 using an iluminant D65 (Table 2). Calibration has been done by white plate Minolta 13833057 with Y=94, x=0.3155 and y=0.3319, obtaining coordinates L*, a* and b*, where L* indicates brightness (0=black, 100=white), a* is a red index (-a*=green, a=red) and b* is a yellow index (-b*=blue, b*=yellow). Rheological parameters were performed on an INSTRON dynamometer, (Universal testing machine model 3343) (Table 3). The following parameters were measured from the force–time curves: hardness (N), cohesiveness (adimensional), adhesiveness (mJ), gumminess (N, as hardness x cohesiveness), springiness (mm) and chewiness (mJ, as gumminess x springiness). This study has defined the physicochemical, textural and colour characteristics of *Pecorino* flavoured cheeses. The results obtained may be used as a basis for defining the main characteristics of these products for definition of standard start. Physicochemical results are similar to reported by other authors. This study is a preliminary analysis to evaluate textural and colorimetric characteristics of *Pecorino* flavoured cheeses.

Table 1. Chemical (%) and physical characteristics of different *Pecorino* flavoured cheese.

	F	FSS	P	FDM	TS	M	pH
Pepper	30.6±0.45	0.47±0.02	29.6±1.80	34.9±2.71	65.5±3.16	34.5±3.16	5.06±0.21
Chili	30.8±2.27	0.48±0.01	27.3±0.10	33.2±0.84	64.0±3.11	36.0±3.11	5.07±0.08
Oregano	30.2±1.76	0.47±0.00	28.4±2.16	33.8±2.11	64.00±3.87	36.0±3.87	5.11±0.09
Basil	29.3±1.21	0.47±0.01	28.4±0.83	33.9±0.37	63.2±1.58	36.9±1.58	5.11±0.24
Walnuts	29.3±0.18	0.47±0.01	28.9±0.80	33.8±1.10	63.2±1.28	36.9±1.28	5.06±0.21

Table 2. Colorimetric analysis of different *Pecorino* flavoured cheese.

	L*	a*	b*	C*
Pepper	73.9±3.69	-4.41±0.78	19.9±2.43	20.4±2.41
Chili	77.2±5.04	-3.02±0.89	19.5±1.24	19.7±1.15
Oregano	60.7±6.52	-2.41±0.74	11.3±2.12	11.6±2.19
Basil	68.7±5.02	-4.57±0.37	15.7±3.14	16.4±3.11
Walnuts	74.4±3.93	-3.50±0.81	16.3±1.78	16.7±1.89

Table 3. Rheological parameters of different *Pecorino* flavoured cheese.

	Hardness (N)	Cohesiveness (adimensional)	Adhesiveness (mJ)	Gumminess (N)	Springiness (mm)	Chewiness (mJ)
Pepper	100±47.9	0.59±0.09	33.3±16.4	56.8±22.3	359±210	6.14±2.88
Chili	92.9±59.6	0.59±0.06	38.5±28.1	53.5±34.2	235±128	4.88±1.87
Oregano	114±55.6	0.61±0.09	52.0±20.86	70.5±39.28	344±309	4.55±2.30
Basil	79.8±20.93	0.61±0.08	36.0±20.80	49.6±16.28	261±240	5.29±4.12
Walnuts	89.0±42.1	0.61±0.08	41.2±25.5	55.2±27.93	312±205	5.86±2.26