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CHARACTERIZATION OF PHYSICOCHEMICAL PARAMETERS OF “AMARELO DA BEIRA BAIXA”

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“Amarelo da Beira Baixa” cheese is a cured cheese, produced with raw milk from sheep’s or sheep’s and goat’s, with a semi-hard or semi-soft paste and characterized by a yellow color. It is produced in the central region of Portugal, namely Castelo Branco, with a Protected Designation of Origin (PDO). These cheeses represent 52.6% of the cheeses from Beira Baixa region, which accounting for 25% of the Portugal cheese production.

This work aimed to compare the physicochemical parameters (colour, pH, ashes, salt, moisture content, protein, total lipids, profile of saturated and unsaturated fatty acids, carbohydrates and energetic value) for PDO cheeses (n=34) and cheeses without certification (n=26). The mean values and standard deviations, respectively, that characterize these PDO cheeses for each parameter are: colour (L^* : $73,08 \pm 10,37$; a^* : $-3,4 \pm 1,2$; b^* : $18,5 \pm 4,4$), pH: 5.44 ± 0.25 ; ashes: $4.06 \pm 0.56\%$; salt: 2.34 ± 0.61 g/100 g; moisture content: $42.92 \pm 4.34\%$; protein: $20.98 \pm 1.11\%$; total lipids: $31.23 \pm 3.67\%$; carbohydrates: $0.81 \pm 0.74\%$ and energetic value: 368.3 ± 35.4 kcal. The profile of saturated are (SFA) $18.6 \pm 1.9\%$ and unsaturated fatty acids are MUFA: $8.8 \pm 0.5\%$ and PUFA: $1.4 \pm 0.3\%$, also relatively to PDO cheeses.

Only the parameters moisture content/dry extract, protein, pH and two fatty acids (C18:2 and C20:0) present significant differences (Scheffe test with $\alpha=0.05$) for PDO cheeses compared to those without certifications. The results present in this study denoting a good production process of “Amarelo da Beira Baixa” cheeses, in this region, and that more producer could be aggregated to the PDO.

Keywords: Cheese; “Amarelo da Beira Baixa”; Protected designation of origin; Chemical composition; Lipid profile.

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