Poster session 1 and refreshments

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Application of sensory methodology for comparing cheese made with Cynara cardunculus coagulant and animal rennet

Cristina Conceicao[1,2], Flávio Silva[2], Ana Garrido[2], Francisca Machado[2], Graça Machado[1,2], Bartolomeu Alvarenga[3,4,5], João Dias[3,6], João Carvalho[3], António Martins[4,5], Fátima Duarte[7,1]

[1]ICAAM, Portugal. [2]U. Évora, Portugal. [3]ESA, Portugal. [4]UTI-INIAV, Portugal. [5]LEAF-ISA, Portugal. [6]GeoBioTec, Portugal. [7]CEBAL, Portugal

Abstract

Évora cheese is a hard or semi-hard cheese, with an PDO designation, obtained from the coagulation of ewe's raw milk by the action of *Cynara cardunculus* L. aqueous extracts, in Alentejo, a Southern Region of Portugal. Over the centuries, this coagulant agent has been widely used for cheesemaking, with influence on texture and sensory characteristics.

The aim of this study was to evaluate the effect of aqueous extracts of three *Cynara* populations (C1, C2, C3) on Évora cheese sensory properties, comparing these results with an animal coagulant (control) using two sensory methods. A descriptive sensory test was undertaken at days 45, 60 and 90 of ripening and a consumer acceptability at day 90 of ripening. A trained panel of 11 tasters scored 27 attributes on an intensity ratings scale of 10 cm and an acceptability scale was used for the 117 consumers. The descriptive panel did not differentiate significantly cheeses in most of the attributes, but overall aspects profile was significantly different between cheeses manufactured with animal coagulant (control) and *Cynara* cheeses. The consumer's results showed that cheeses made with animal coagulant had a significant ($p<0.05$) lower score of smell and texture when compared with cheeses manufactured with Cynara cardunculus L. which is in agreement with the physicochemical characteristics of the cheese. Consumer panels are progressively being used in tests traditionally carry out by trained panels, which can save time, expenses and incomes, when properly applied.

KEYWORDS: Évora cheese; ewe; *Cynara cardunculus* L.; sensory analysis, methodology .

Keywords

sensory methodology , PDO, cheese, Cynara cardunculus, rennet