

Study of the Biochemical Properties of the Protease Coagulant Milk Extracted from Sunflower Cake: Manufacturing Test of Cheeses Uncooked Dough Press and Analysis of Sensory Properties

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Abstract : The development of the world production of the cheese these last decades, as well as agents' greater request cheap coagulants, accentuated the search for new surrogates of the rennet. What about the interest to explore the vegetable biodiversity, the source well cheap of many natural metabolites that the scientists today praise it (thistle, latex of fig tree, Cardoon, seeds of melon). Indeed, a big interest is concerned the search for surrogates of vegetable origin. The objective of the study is to show the possibility of extracting a protease coagulant the milk from the cake of Sunflower, available raw material and the potential source of surrogates of rennet. so, the determination of the proteolytic activity of raw extracts, the purification, the elimination of the pigments of tint of the enzymatic preparations, a better knowledge of the coagulative properties through study of the effect of certain factors (temperature, pH, concentration in CaCl_2) are so many factors which contribute to value milk particularly those produced by the small ruminants of the Algerian dairy exploitations. Otherwise, extracts coagulants of vegetable origin allowed today to value traditional, in addition, although the extract coagulants of vegetable origin made it possible today to develop traditional cheeses whose Iberian peninsula is the promoter, but the test of 'pressed paste not cooked' cheese manufacturing led to the semi-scale pilot; and that, by using the enzymatic extract of sunflower (*Helianthus annuus*) which gave satisfactory results as well to the level of outputs as on the sensory level, which, statistically, did not give any significant difference between studied cheeses. These results confirm the possibility of use of this coagulase as a substitute of rennet commercial on an industrial scale.

Keywords : characterization, cheese, Rennet, sunflower

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