

***Agrio et Emulsio* – development of fruity mustard creams**

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Agrio et Emulsio project (POCI-01-0145-FEDER-023583) presents an proposal in the areas of vinegar products and food emulsions. Combining technical features with mediterranean traditions and *Nouvelle Cuisine*, two prototypes of fruity mustards are undergoing final development, valuing regional raw materials and profiling into the gourmet/vegan/veggie markets. Mustard creams are oil-in-water emulsions but its practice is linked to vinegar traditions since the thirteenth century, in France, with the foundation of the first confraternity of *Maîtres Vinaigrier-Moutardier*. Thus, by applying the ancestral practice, mustard (seeds, fragments, powder) was first submitted to maturation studies, varying the type of vinegar and the time of immersion/contact. Maturation reached equilibrium on the 16th day, but pH evolution shows a practically stationary state from the 7th. Best results were obtained with seeds and powdered mustards in red wine vinegar, 4 % (m/v) acidity. The assays were carried out at room temperature using *Sinapis Alba* (*Linnaeus*) mustard species. Prototyping articulated technical, analytical (physicochemical, rheological, microbiological) and sensory tests. Each final prototype has a distinct profile of ingredients, mustard, fruits (raspberry and beet or blueberry), olive oil, water, salt, sugar, honey and spices. Both creams retain the *sui generis* taste of mustard tinted with the fruit flavour plus an innovative pink colour.

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