Colloidal stability of milk: reinterpretation of alcohol test results by digital microscopy

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Supplementary Material

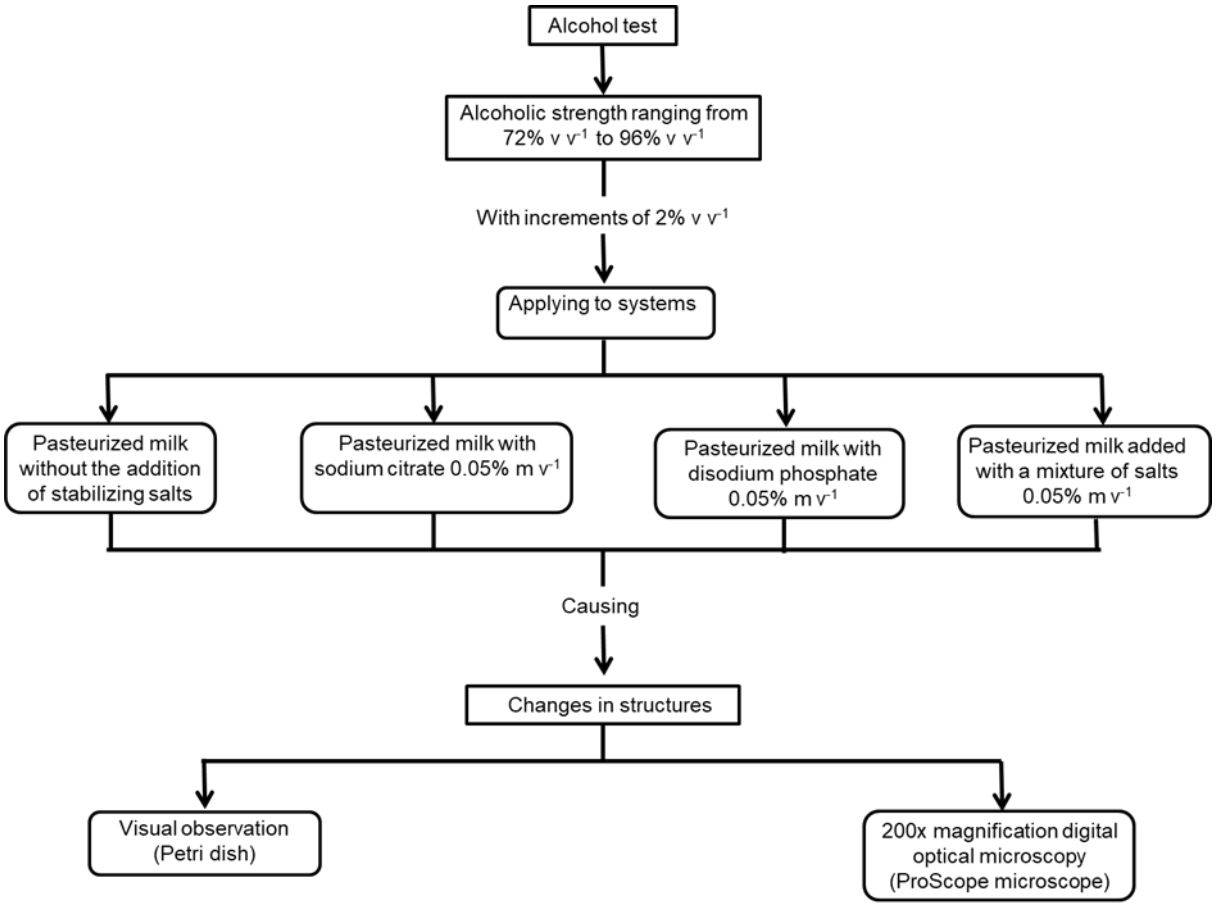

Figure S1 - Outline of the microstructural evaluation of pasteurized milk submitted to alcohol testing, aiming at UHT processing.

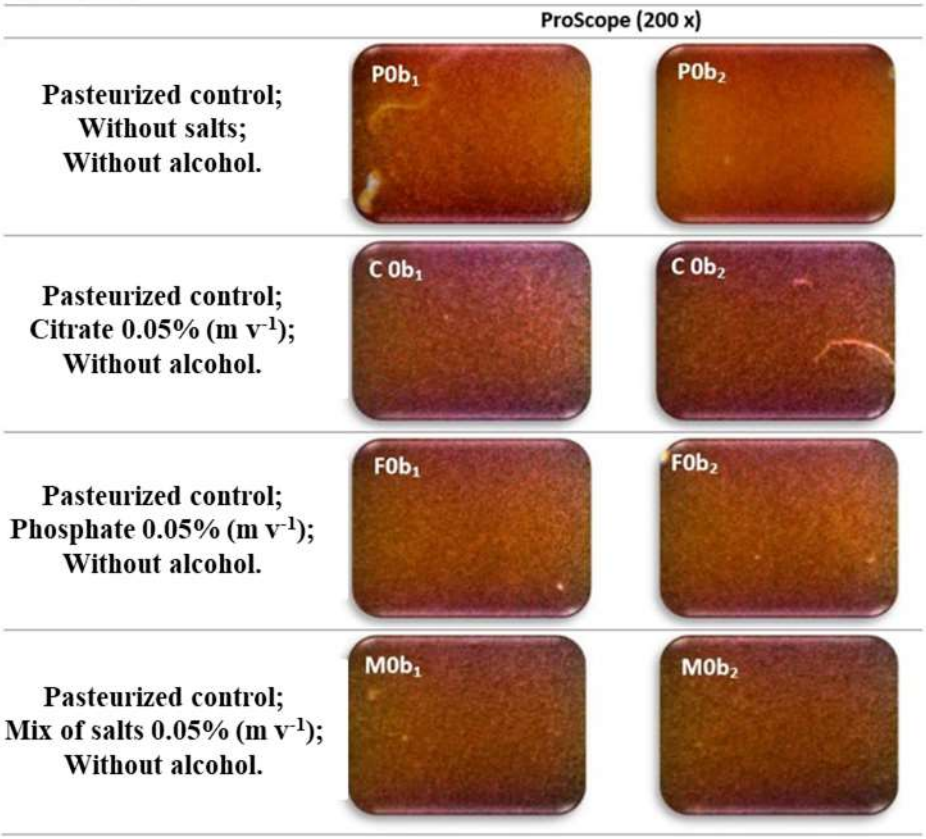

Figure 2S: Images of the visualizations of 2 optical fields of pasteurized milk without alcohol addition, in portable digital microscope with 200x increase of treatments: control($P0b_1$ and $P0B_2$), with addition of sodium citrate ($C\ 0b_1$ and $C\ 0b_2$), with addition of disodium phosphate ($F0b_1$ and $F0b_2$) and with the addition of the LAC 8074-7 salt mix ($M0b_1$ and $M0b_2$).

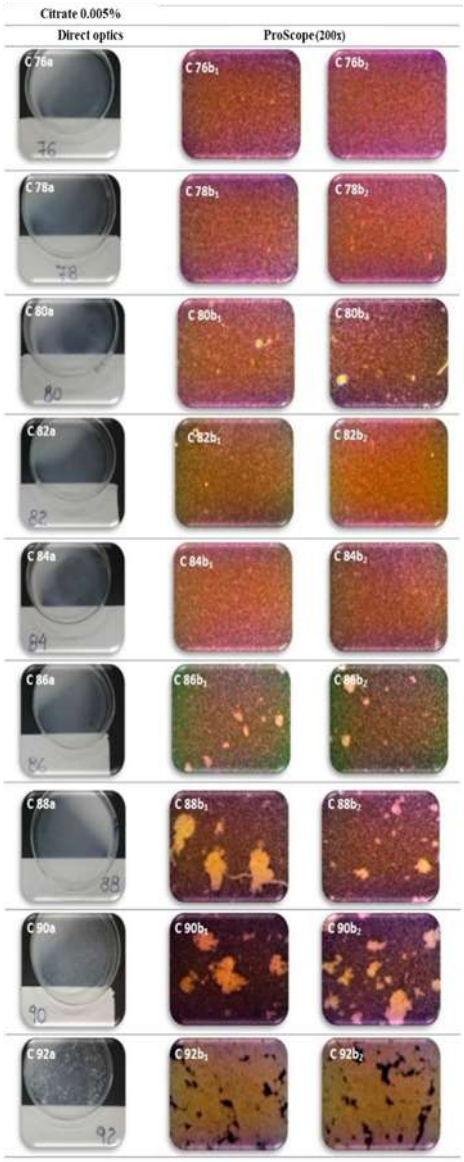

Figure 3S: Comparative images of the alcohol test visualization for pasteurized milk with the addition of 0.05 %(m v^{-1}) sodium citrate (C) in alcohol concentrations ranging from 76% (v v^{-1}) to 92 % (v v^{-1}) (the number indicates the alcoholic degree): direct optics (a), portable digital microscope 200x field 1 (b1) and portable digital microscope 200x field 2 (b2).

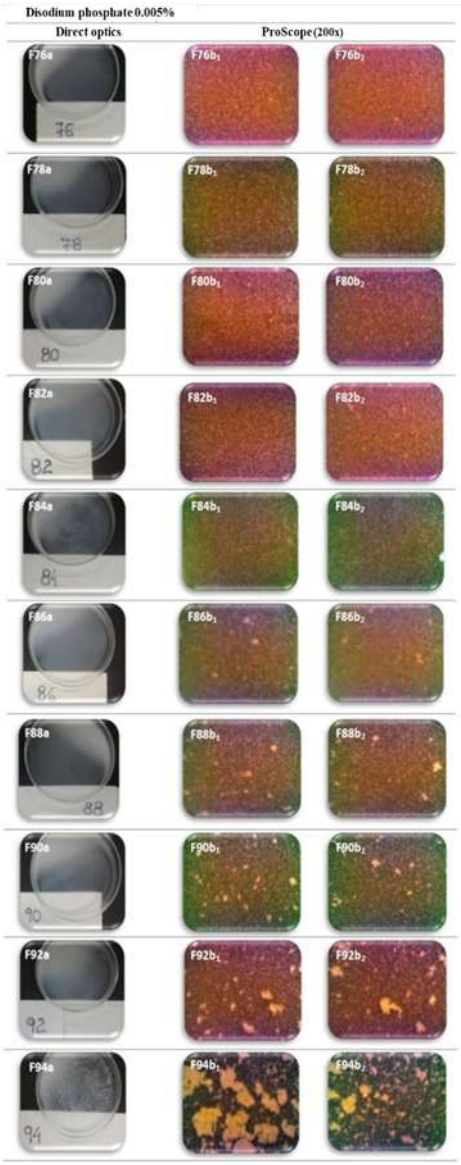

Figure 4S: Comparative images of the alcohol test visualization for pasteurized milk with the addition of disodium phosphate (F) in alcohol concentrations ranging from 76% (v v^{-1}) to 94% (v v^{-1}) (the number indicates the alcoholic degree): direct optics (a), portable digital microscope 200x field 1 (b1) and portable digital microscope 200x field 2 (b2).

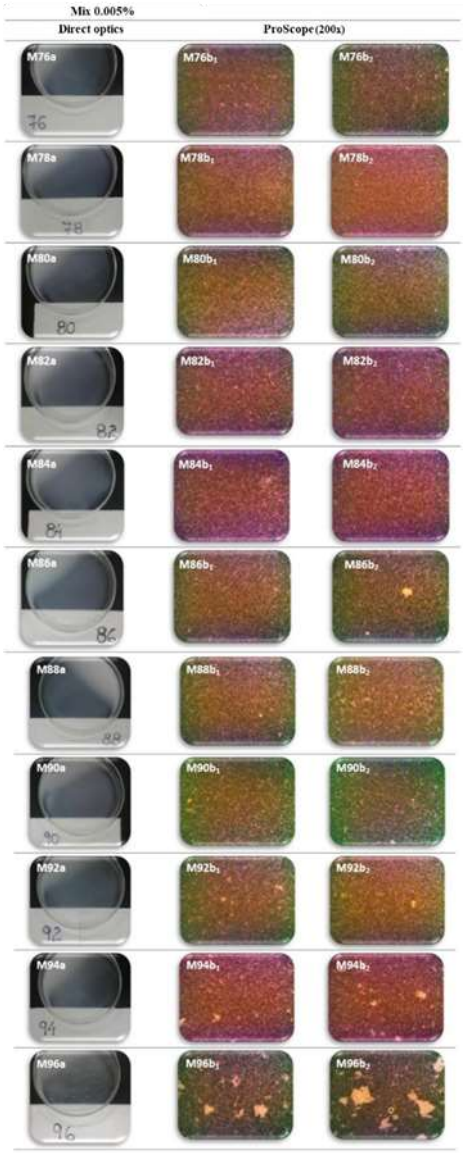

Figure 5S: Comparative images of the alcohol test visualization for pasteurized milk with the addition of Mix of salts Lac 8074-7 (M) in alcohol concentrations ranging from 76% (v v^{-1}) to 96% (v v^{-1}) (the number indicates the alcoholic strength): direct optics (a), portable digital microscope 200x field 1 (b1) and portable digital microscope 200x field 2 (b2).

Table 1S: Composition and physicochemical properties of whole pasteurized milk.

Constituent or physical-chemical property	Value
Moisture (%m m^{-1})	87.85
Fat (%m v^{-1})	3.20
Protein (%m v^{-1})	3.24
Ash (%m m^{-1})	0.69
Lactose* (%m v^{-1})	5.02
Acidity (°D)	15.00
pH	6.76

* by difference