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Abstract

The aim of this study was to measure the starch content in adulterated fresh cheese using hyperspectral imaging technique. Adulterated fresh cheese was prepared using concentrations of starch of 0.055 – 12.705 mg g^{-1} (0.0055% – 1.2705%); subsequently, hyperspectral imaging in the range of 200 to 1000 nm, distributed in 101 bands were acquired. The modeling of starch content was performed by the method of partial least squares regression (PLSR). A correlation coefficient (R^2) of 0.9915 and a Root Mean Square Error of cross-validation (RMSECV) of 0.3979 was obtained. With five latent variables, a correlation coefficient of validation (R^2) of 0.8321 and a RMSEP of 1.3515 was obtained for a reduced model.