

Measurement strategies for the classification of edible oils using low-cost miniaturised portable NIR instruments

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Supplementary Materials

Table S1. Classification of different classes of olive oils applying LDA classification to SCiO and NeoSpectra data.

		Precision	Accuracy	NPV	FPR	FNR
SCiO	EVOO training set	1	1	1	0	0
	POO training set	1	1	1	0	0
	ROO training set	1	1	1	0	0
	VOO training set	1	1	1	0	0
	EVOO test set	0.91	0.94	1	0.13	0
	POO test set	1	1	1	0	0
	ROO test set	1	0.94	0.93	0	0.20
	VOO test set	1	1	1	0	0
NeoSpectra method 1 (home-made cells)	EVOO training set	1	1	1	0	0
	POO training set	1	1	1	0	0
	ROO training set	1	1	1	0	0
	VOO training set	1	1	1	0	0
	EVOO test set	0.91	0.94	1	0.13	0
	POO test set	1	1	1	0	0
	ROO test set	1	0.89	0.87	0	0.40
	VOO test set	0.50	0.94	1	0.06	0
NeoSpectra method 2 (paper)	EVOO training set	1	1	1	0	0
	POO training set	1	1	1	0	0
	ROO training set	1	1	1	0	0
	VOO training set	1	1	1	0	0
	EVOO test set	0.67	0.61	0.56	0.38	0.40
	POO test set	-	0.89	0.89	0.00	1.00
	ROO test set	0.50	0.72	0.79	0.15	0.60
	VOO test set	0.20	0.78	1	0.24	0

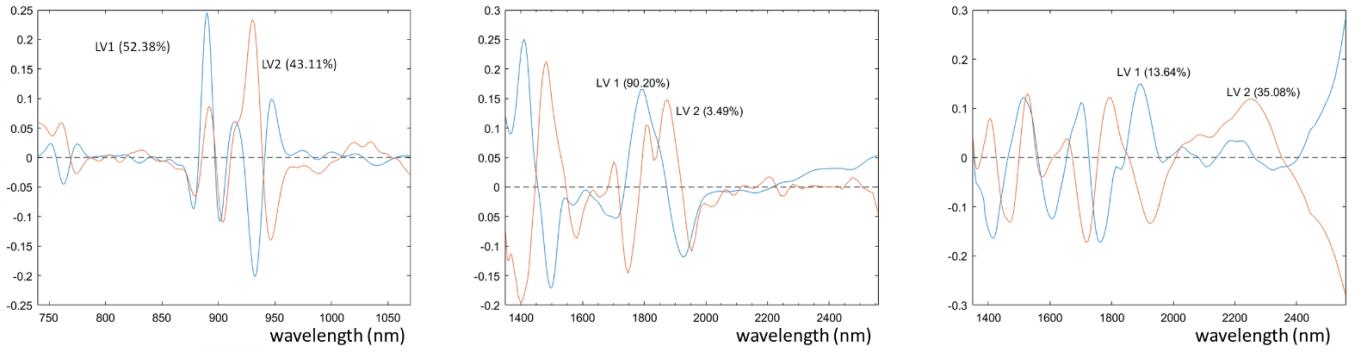


Figure S1. PLS-DA loadings for a) SCiO, b) NeoSpectra method 1 (home-made cells), c) NeoSpectra method 2 (paper).

For the sake of clarity, in the case of NeoSpectra only the loadings for the 2 first latent variables are shown in Figure S1.