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### **ACCEPTED MANUSCRIPT**

# Application of elastic net and infrared spectroscopy in the discrimination between defective and non-defective roasted coffees

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**Abbreviations:** ATR, Attenuated Total Reflectance; CGA, chlorogenic acids; D, particle diameter; DLATGS, Deuterated Triglycine Sulphate Doped with L-Alanine; DRIFTS, Diffuse Reflectance Fourier Transform Infrared Spectroscopy; FTIR, Fourier Transform Infrared Spectroscopy; LASSO, Least Absolute Shrinkage and Selection Operator; MSC, Multiplicative Scatter Correction; NIR, Near Infrared; NIRS, Near Infrared Spectroscopy.

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