



Connecting
Scientific research
with Business ideas

PROJECT TITLE

Botanical and geographical discrimination and adulteration of plant products using Diffuse Reflectance Fourier Transform Infrared, Raman Spectroscopies and Chemometrics

CLIENT

Industry
State Food Authority

OUR TEAM

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OBJECTIVES / ENTREPRENEURIAL OPPORTUNITIES

The development of a method for determining the authenticity of plant products using mid-FT-IR and Raman spectroscopy. It can be achieved by combining the results of previous methods to the information of the FT-IR and FT-Raman spectra and chemometrics. The method is simple, rapid, inexpensive and readily applicable by unqualified personnel.

SOLUTION

In recent years there has been increased demand for agricultural products or foodstuffs with identifiable characteristics, particularly linked to their geographical origin. For this reason, the European Union adopted the regulation 1151/2012 for quality schemes for agricultural products and foodstuffs. This regulation protects the geographical indication products and the products of designated origin. The indication of geographical origin allows producers to better promote their products. False use of geographical indications by unauthorized producers or dealers is detrimental for both consumers and legitimate producers. We pursue adulteration-free condition for plant products industry. Such objective is absolutely relevant on the basis of the CAP and the European Union Policy on Food Safety and Consumer Protection.

RESULTS

The final results of our idea will be the creation of a data base of IR and Raman spectra of plant products from different origin, suitable for quality control and traceability of origin of these products. Together with this, the implementation of the standardized analytical methodology required to obtain the needed quality controls will be developed.







