



EDITORIAL FOR THE SPECIAL ISSUE ON: AGROSTAT 2010 “11th EUROPEAN SYMPOSIUM ON STATISTICAL METHODS FOR THE FOOD INDUSTRY”

Marc Danzart⁽¹⁾, Pietro Amenta⁽²⁾, Luigi D’Ambra⁽³⁾,
Amjad D. Al-Nasser⁽⁴⁾, Enrico Ciavolino⁽⁵⁾

⁽¹⁾*AgroParisTech, France*

⁽²⁾*Dipartimento di Analisi dei sistemi economici e sociali, Università del Sannio, Italy*

⁽³⁾*Dipartimento di Scienze Biologiche, Università di Napoli Federico II, Italy*

⁽⁴⁾*College of Business Administration, University of Dubai, Dubai*

⁽⁵⁾*Dipartimento di Filosofia e Scienze Sociali, Università del Salento, Italy*

During the last thirty years, several countries have seen to develop the agriculture in a form fast and substantial, with a significant contraction of the traditional systems of production and a marked differentiation of productive activities. The competition pushed towards the specialization and the technological development, particularly in the area of higher agricultural productivity. The development of agricultural sector increased the demand of technical-scientific knowledge leading to an agricultural statistic system that focused on issues relating to production and productivity. In this context, then, it is necessary that statisticians and industrial users have to meet, exchange experiences, keep in touch with the state-of-art of statistical methods in the food industry and evaluate their impact upon food quality and industrial competitiveness.

AGROSTAT 2010 Conference (*February, 24-26, Benevento, Italy*) aimed at drawing an overview of the use of statistical methods in the food industry and at evaluating practical benefits given by new techniques. The conference focused strongly on applications. The aim was to highlight the power of statistical analysis as a decision tool and as help for defining locally optimal competitive industrial strategies. Due to the complexity of the agricultural statistic system, privileged conference themes were: Sensometrics, Chemometrics, Process Control and Risk Analysis.

In this special issue much attention has been given to specific industrial problems as well as to highlight new statistical approaches in this methodological context. Several interesting researches have been then selected: the prediction of the product temperature at various positions in a vertical refrigerated display cabinet as well as the quantification of the influence of random parameters such as

ambient temperature of supermarket and radiative conditions (**Laguerre, Derens and Flick**); a new method for the statistical analysis of suitable multi-block matrices (**Bougeard, Qannari, Lupo and Chauvin**); a non parametric approach for the study of the controls in the production of agribusiness products (**Alibrandi and Giacalone**); the investigation of the consumer's knowledge of specific quality of olive oil as well as the consumer preference and the perceived quality (**Scarpato and Pagliuca**); the proposal of using differential geometric LARS algorithm in order to study the expression profile of a sample of patients with latex-fruit syndrome (**Augugliaro and Mineo**); the use of genetic algorithm on mid-infrared spectrometric data to estimate fatty acid profile of goat milk (**Ferrand, Huquet, Barbery, Barillet, Brochard, Larroque and Leray**); a proposal to apply the global sensitivity analysis to food safety risk assessment (**Augustin**); the impact of chemical and sensorial characteristics on the market price of Italian red wines (**Brentari and Zuccolotto**) and the use of the Bipolar Mean in Sensory Analysis (**Brentari, Dancelli and Maffenini**).

A number of new ideas based on classical or new methods have been then put forward and tested. There will be applications or extensions of well known methodology which are not usually employed, as well as several papers propose new approaches. Going through the published articles you will find many interesting research ideas, it is evident that they encourage new directions for further researches.

Marc Danzart (Chairmen of Scientific Committee)
Pietro Amenta (Chairmen of Organizing Committee)
Luigi D'Ambra (Chairmen of Organizing Committee)
Amjad D. Al-Nasser (Founding Editor of EJASA)
Enrico Ciavolino (Executive Managing Editor of EJASA)