

# Analysing sensory data with R and SensoMineR

## Presenters

Sébastien Lê, Marine Cadoret

Agrocampus Ouest, laboratoire de mathématiques appliqués

## Abstract

The aim of this tutorial is to present the SensoMineR package (<http://sensominer.free.fr>). SensoMineR collects very classic methods used when analyzing sensory data as well as methods developed in our laboratory. SensoMineR provides numerous graphical outputs easy to interpret, as well as syntheses of results issuing from various analysis of variance models or from various factor analysis methods accompanied with confidence ellipses. SensoMineR tackles the following problems: characterizing products, relating sensory data and instrumental data, mapping consumers' preferences, assessing panel's performances, comparing panels' performances.

## General presentation of R and the SensoMineR package

1. Installing SensoMineR and its graphical user interface.
2. Using SensoMineR within Excel: SensoMineR as an Excel plug-in.
3. Combining SensoMineR and Visual Basic for Applications.

## Analysing QDA data with SensoMineR

1. Characterizing products from both univariate and multivariate points of view: how to obtain an automatic description of the products and confidence ellipses around products?
2. Assessing panel performances.
3. Relating sensory data and instrumental data.
4. Mapping consumers' preferences.

*Exercises using R and the SensoMineR package within Excel.*

## Analysing holistic data with SensoMineR

1. Napping® data.
2. Categorization data.

*Exercises using R and the SensoMineR package within Excel.*

## References

Francois Husson and Sebastien Le (2009). SensoMineR: Sensory data analysis with R. R package version 1.10. <http://CRAN.R-project.org/package=SensoMineR>