



Applied training: Bases in Statistical Analyses with R (Delivered in French and English)



Scientific coordinator
S. Thévenon & E. Loire
(Cirad/IRD, UMR INTERTRYP
Cirad/INRA, UMR ASTRE)

1 week
14 to 18 October 2019

Data analysis is omnipresent in the research work. Unfortunately, poor design of an experiment or poor analysis of data can lead to the absence of interpretable results or to erroneous conclusions. Understanding the basic concepts of statistics is essential for the effective leading of a research project. Associated with this, the use of the R software allows simple, rapid and reproducible analyzes.

Course objectives

At the end of the training, you will be able to analyze simple data sets using the R software.

Operational objectives:

- You will be able to distinguish different types of variables and their distributions and identify the relationships between variables
- You will be able to explore, describe and visualize your data with R
- You will be qualified to apply basic statistical tests with R
- You will guarantee the traceability and reproducibility of the analyzes
- You will design experimental or sampling plans in dialogue with a statistician

Audience

This workshop is for students (Bachelor's degree+ 2 years), technicians (Bachelor's degree + 2 years), engineers or researchers wishing to acquire the bases in data analysis with R, for a practical use afterwards.

Prerequisites: Feel like learning!

Know how to manipulate files in Excel.

Ideally, have a set of data to analyze or have an experience to plan or in progress, for a short-term analysis.

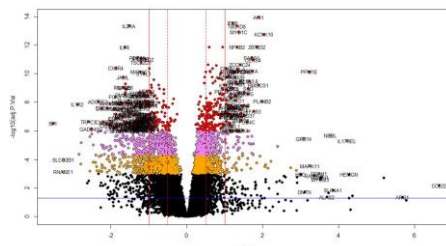
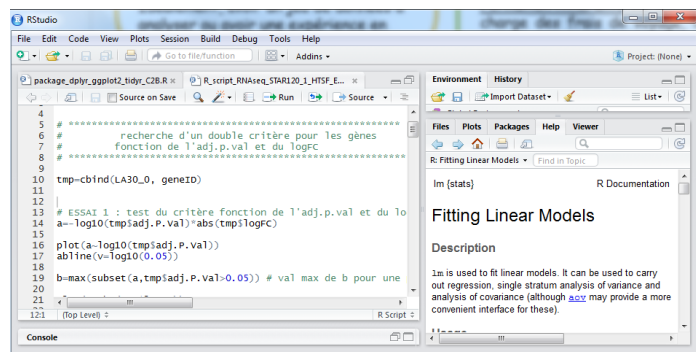
Modular training

Program and Organisation



- **Courses:** Theoretical presentations in PowerPoint, alternating with practical work with R, with simulated or real datasets and pre-established R scripts, to gain autonomy
- **Training at CIRAD in Montpellier (France)** (campus international de Baillarguet)
Number of participants: maximum 12 / minimum 5
- **Itinerant training by invitation:** Support of the travel expenses, accommodation and expertise of the trainer(s) by the host organization with provision of a room equipped with computers for at least 1 student out of 2.

This training is on a full-time week. It can be delivered in French or English upon request.



Cost

- Training cost at Cirad: €1,500
- Itinerant training with invitation: please contact us
- Travel expenses: not included
- Housing expenses: not included, plan a minimum of €90 a day

If necessary, a customized quote can be established upon request.

Important

CIRAD cannot provide study grants. If you wish to request a grant, submit an application as soon as possible to national authorities in charge of livestock and/or scholarships; Cooperation and Cultural Action Services (SCAC) of your local French Embassy; the embassies of other countries; international organizations (FAO, UNDP, EU, IAEA, IDB ...); development projects or NGOs.

Application procedure

Applications, consisting of a detailed resume, a motivation letter and details about the organization managing your grant, must be sent by email to formation-emvt-fvi@cirad.fr.



See our other trainings : <http://formation-elevage-suds.cirad.fr>