

## PROFESSIONAL TRAINING PROGRAM

### « UNDERSTAND THE PLANT NUTRITION MECHANISMS TO DESIGN HIGH-PERFORMANCE SYSTEMS AT THE FARM LEVEL »

*This programme can also be consulted directly on the TERREOM website at:*

<https://www.terreom.fr/en/formation-nutrition-plante>



#### CONTEXT

The conventional agronomic system approaches the plant's nutrition mechanism by giving a great importance to the input supply, often focused on the nitrogen-phosphorus-potassium tryptic.

This training proposes to adopt a **new point of view** by reconsidering **the importance of all the elements of the plant and their role in the development mechanism**. Also, this training is an opportunity to **understand the fundamental mechanisms for its growth and the importance of soil life to ensure its nutrition**. Moreover, **good nutrition** is the **basis a healthy and productive plant**.

All these agronomic aspects are important to **for establishing a logical, comprehensive and balanced agronomic approach and build efficient cropping systems**.

Afterwards, this training should make it possible to evolve towards the implementation of agro-ecological practices and to reduce the use of inputs (fertilizers, phytosanitary products in particular).



#### OBJECTIVES



##### UNDERSTAND

how the plant nutrition mechanism works



##### KNOW

nutritional elements and their role in plant development



##### KNOW

the role and the importance of soil life in plant's nutrition mechanisms



##### CONTROL

important mechanisms in plant development



### UNDERSTAND

the relationship between nutrition, health, development and performance



### KNOW HOW TO BUILD

an action plan on the farm to improve practices and set up efficient systems



### SET UP

agro-ecological practices to support plant development while reducing the use of inputs such as plant protection products or fertilizers



### PUBLIC CONCERNED



Farmer  
Collaborating spouse  
Joint contributor  
Family helper



Anyone in the process of setting up



### PREREQUISITES

- To have completed a general BAC or an agriculture BAC PRO or to have professional experience in the agricultural sector (as an agricultural worker).

OR

- To have completed the training course « Evolve to agroecology to improve technical and agronomical performances.



## ACCESSIBILITY

If you have a physical disability, please let us know. We will then make the necessary arrangements to enable you to take full advantage of the training.



*Suitable for people with a mobility impairment*



*Suitable for people with a hearing impairment*



*Suitable for people with a speech impairment*



*Suitable only for the visually impaired persons*



## ORGANIZATIONAL CONDITIONS



14 hours



9:00 a.m. to 12:30 p.m. and 2:00 p.m. to 5:30 p.m.



4 minimum – 15 maximum



## « NEAR YOU » TRAINING

In the case of a "near you" training, the minimum number of participants may be adjusted to take into account the distance from our headquarter.



## EDUCATIONAL RESOURCES

### 1. First, second and third half-day



Classroom training



Use of a video-projector and a paperboard



A permanent internet access to the slideshow and training course folder will be provided to each participant at the start of the course



Interactive exchanges with the trainees



Co-construction with trainees of a plan action to promote plant nutrition

### 2. Fourth half-day



Session on the plots of a nearby farm



Tests on soil samples from plots



Performing the test at the spade and use of penetrometer



Realization of different measurements on the plant (pH, redox potential, sugar content)



Practical use of observation sheets



Discussion around the cultivation system in place and possible improvements



Interactive exchanges with the trainees throughout the half day



## TECHNICAL RESOURCES

### 1. First, second and third half-day



Room equipped with a video-projector and a projection screen



Use a video slideshow and a flipchart



Use of educational sheets (soil observation sheets, glossary of understanding soil analysis)

### 2. Fourth half-day



Use of equipment for making a soil profile (knife, spade,...)



Use of measuring equipment soil parameters and the plant (pH meter, redox-meter, penetrometer, refractometer)



Practical use of soil observation sheets



## TRAINING MANAGER

**Raphaël MARTIAL**

*Agricultural engineer (ENITA BORDEAUX) and former adviser to the Landes Chamber of Agriculture  
More than 20 years of experience in the agricultural sector*



## TRAINING PLAN

### I. Master the agronomic bases of nutrition and plant development

- Plant and nutritional elements (respective roles and reserves)
- Plant nutrition and development, fundamental mechanisms
- Plant growth, health and resistance, understand the relationship between these parameters

### II. Implement a progress approach on exploitation

- The different axes of the method
- Levers of action and corresponding solutions

### III. Practice on a farm's plots

- Plant and soil measurements
- Implementation of different observation techniques
- Use of different measuring tools (pH meter, penetrometer,...)
- Use of different observation and scoring sheets
- Discussion on the practices implemented and ways to improve



## MONITORING AND EVALUATION



Signing of an attendance sheet at the beginning of each half-day



At the end of the training, a certificate will be given to each participant



End of course questionnaire completed by each trainee to check understanding and good acquisition of the different topics



## TRAINING PRICE



### Inter-company training

210 € including taxes per day

i.e. **420 € including taxes**

(individual price)



### Intra-company training

1800 € including taxes per day  
(excluding travel expenses)

i.e.

**3600 € including taxes**  
(excluding travel expenses)

(group price)



### Delivery in a training centre

800 € including taxes per day  
(excluding travel expenses)

i.e.

**1600 € including taxes**  
(excluding travel expenses)

## Funding is available!

*Click on the following link to learn more*

<https://www.terreom.fr/en/formations-financement>



**I AM INTERESTED IN THIS TRAINING**

**I REGISTER BY CLICKING ON THE LINK OPPOSITE**

<https://www.terreom.fr/en/inscription-nutrition-plante>