

























TRAINING COURSE PROGRAM































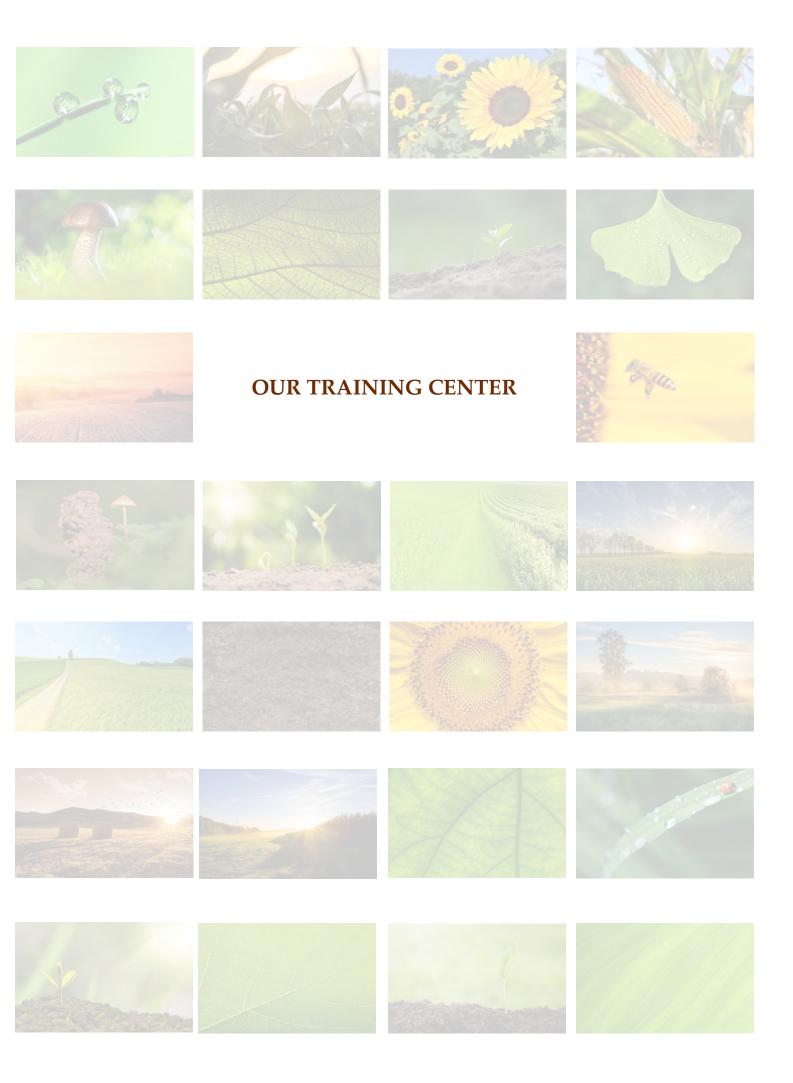


2024



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WHO ARE WE?

1. GENERAL INFORMATION

Our training organization was created in 2020. It is registered with the prefect of the Nouvelle-Aquitaine region under the number 75400153140.

We offer trainings for adults in the field of agroecology, agronomy, soil fertility improvement, cover crops and plant nutrition.

Our training courses are of **short duration** and can be offered both **inter-company** and **intra-company**. They all take place **in person**.

We are also available to offer our training in training centers.

TERREOM is currently managed by Raphaël MARTIAL, agricultural engineer of ENITA Bordeaux (now Bordeaux Science Agro).

2. GEOGRAPHICAL LOCATION

Our headquarter is located at 719, avenue du Houga – Appt 305 – 40000 MONT DE MARSAN.

Geographic coordinates:

N 43°52′53″ W 0°29′8″

There are parking facilities nearby.

For our training courses, we want to get as close as possible to the actors in the field. As such, we choose location close to the participants in our training courses. For each course, the location chosen is mentioned in the program and in the agreement signed between each trainee and the TERREOM training manager.



3. OUR QUALITY CERTIFICATION



Our training center has received a validation from **Datadock under the number 0079997**: we are committed to comply with the quality criteria of the training defined by decree n°2015-790 of 30 June 2015.

This certification allows **non-salaried agricultural workers** to have access to **VIVEA funding**. Currently, we are actively working to obtain the Qualiopi certification that will allow our trainings to have access to the financing arrangements set up by the competence operators (OPCO) or the training funds.

4. FOR SUSTAINABLE FARM PROSPERITY

4 AXES OF REFLECTION



Reconnect Earth and people

Our training center takes its name from the contraction of the word "Earth" and the word "Man" in french. In essence, agriculture is the activity in the world that is most rooted in its territory: historically, products were consumed locally. Today, something produced here is consumed there and vice versa: there is little connection between place of production and place of consumption. At the same time, the number of farms has been constantly decreasing for decades.

That is why we want to work for the sustainable development of farms, so that our territories find meaning again.



4. FOR SUSTAINABLE FARM PROSPERITY

For fertile and living soils

Many indigenous peoples around the world worship the earth's nurturing dimension: the Incas and the Mayans, for example, have developed innovative agronomic systems to develop soil fertility.

In essence, the plant and the soil are closely related, establishing a constant communication: the plant provides the soil with part of the products of its photosynthesis. In return, the soil provides the plant with the elements it needs for its growth. Current work in agronomy shows how much the quality and quantity of the harvested products depend on the quality of this relationship.



In this sense, developing soil fertility is essential.

For coherent and profitable systems for the farmer



Today, although the production methods and systems in place generate technical results that are much better than they were a few decades ago, the added value per unit of surface area is low: "it takes a lot to reach economically profitable levels".

In this context, we want to accompany the agricultural actors to rethink their systems with them and increase their added value. Through this approach, we hope that these positive effects will help to restore a system of positive thinking, useful for building a sustainable multi-performing agricultural model.



4. FOR SUSTAINABLE FARM PROSPERITY

For successful operators involved in their success

In view of the efforts made and the economic benefits they receive, many farmers are now experiencing a loss of meaning and a demotivation of their profession.

However, our experience shows that by carrying out in-depth work on repositioning the farm and the farmers in their day-to-day role, they gradually regain interest. Once the "machine is put back into working order", the operators once again become fully involved in their success.



5. EXPERTISE ON MANY THEMES



Agronomy and soil fertility



Nutrition and plant growth



Cover crops and agroecology



Redox potential, pH and their influence on the plant and the soil



System performance analysis



Systems transition to multi-performance



Implementation of agronomically efficient and coherent systems



Other related topics





6. OUR STRENGTHS



Over 20 years of experience in agriculture



Expertise in agronomy, soil fertility, system optimisation and economic performance improvement



Training topics offering a new vision of agriculture to evolve towards multiperformance and agroecology



We organize trainings near your farm

7. OUR TRAINER



Raphaël MARTIAL

PROFESSIONAL CAREER

- Agricultural engineer ENITA Bordeaux (Bordeaux Science Agro)
- Environment Advisor then Installation Advisor at ADASEA des Landes
- Business and agronomy advisor at the Landes Chamber of Agriculture. Coordinator of the DEPHY farm network and trainer for the Certiphyto Decider.
- Founder and manager of the TERREOM training center



I have been in daily contact with farmers for over 20 years. For 10 years, I have been advising farmers on agronomic issues and on their business conduct.

Throughout my career, I conducted trainings on various topics related to my missions

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OUR TRAINING APPROACH

FOR THE DEVELOPMENT OF YOUR AGRONOMIC SKILLS

1. A THREE-STEP APPROACH





NEED ANALYSIS

- 1. **Identification** of your **objectives**,
- 2. **Analysis** of your **experience** and the **challenges** for your **business**,
- 3. Identification of the **expected results** for your activity and the **conditions for success**,
- 4. Consideration of your constraints (professional organization, possible disability,...).



WRITING OF THE TRAINING CONTRACT

This document is **signed before the training begins.**

It recalls the important elements:

- a. The objectives of the training,
- b. The conditions of organisation,
- c. The teaching methods used,
- d. The content of the training,
- e. The financial arrangements.







ADAPTED S METHODS

We offer training courses that combine theoretical input with practical workshops. This method makes our teaching more concrete and gives you the opportunity to see how to apply the different techniques and knowledge of the training in your own activity.



CONSTANTLY IMPROVED AND ENRICHED TRAININGS

At the end of each training session, we take time to debrief with you on the content and progress of the training course.

In addition, we contact you again a few weeks later to see how you have transformed your knowledge in your daily life.

In parallel, we keep ourselves regularly informed of agronomic and pedagogical developments.

All this information is synthesized to evolve our program and methods.



CONSIDERATION OF DISABILITY SITUATIONS

In the case of a disability, we adapt to allow you to fully experience our courses. This is why we ask you for details when you register.





3. SUPPORT



SYSTEMATIC ANALYSIS OF LEARNING OUTCOMES

Several weeks after the training, we will contact you again. The **exchange time** is useful to **see how you have integrated learning into your daily life** and how you have evolved your practices.

This exchange also makes it possible to **identify any new training needs** and to envisage new developments in your profession.



POSSIBILITY OF SETTING UP PERSONALIZED POST-TRAINING SUPPORT

To enable you to find solutions adapted to your situation, we offer you the possibility of setting up personalized support directly on your structure.

The content and the duration of this collaboration will be adapted to your needs.

2. OUR APPROACH



TRANSMIT

Give knowledge and the

keys to turn it into concrete actions



EXCHANGE

Share our knowledge and experience to learn from each other and enrich each other

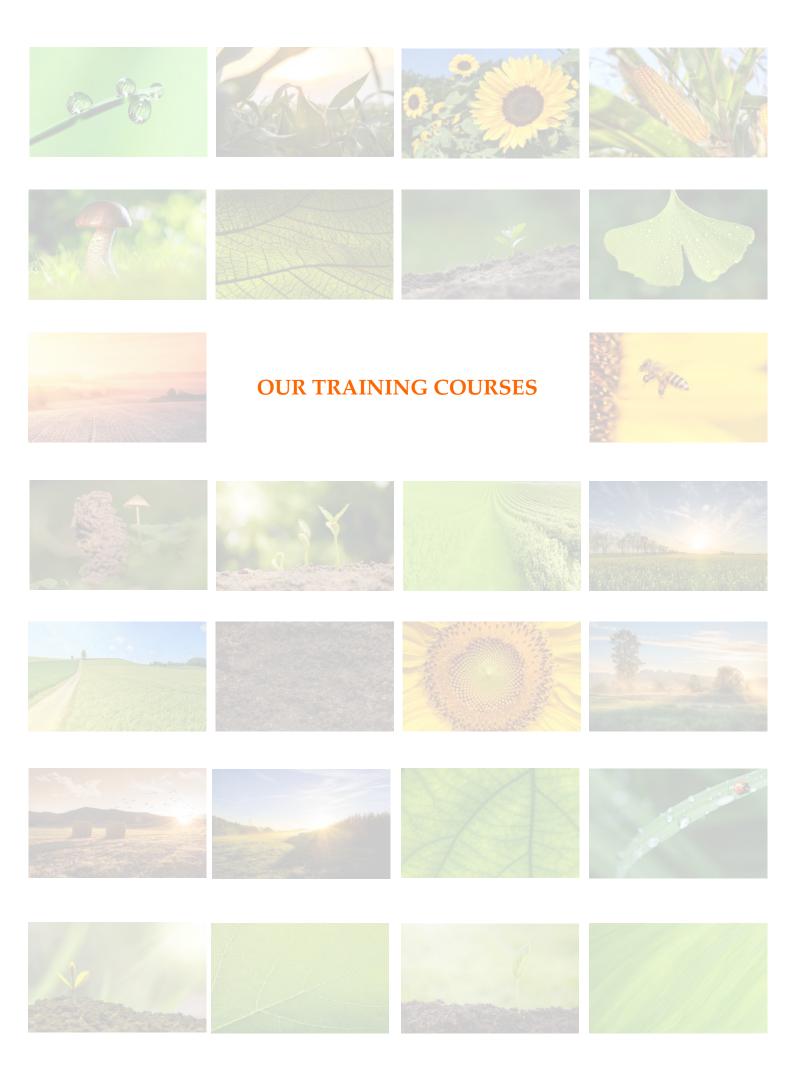


PRACTICE

Make knowledge concrete in order to understand how to implement it and develop practices



Transform knowledge into concrete actions in everyday life to evolve methods and improve systems





KEY POINTS ABOUT OUR TRAINING



INNOVATIVE TOPICS

We design our trainings in such a way as to offer a new perspective on essential topics on the soil, the economics of systems and the role of people in the implementation of this new model.



« PRATICAL » TRAININGS

Except for one day training, we strive to combine theoretical input with practical application. This formula allows you to better understand how to implement solutions in a real situation.



100% AGROECOLOGY

All our trainings aim to
enable learners to develop a
more "compatible" agroecological vision and
practices in such a way as to
encourage the development
of multi-performing
agriculture more in relation
to its territory and its
environment.



SHORT-TERM TRAININGS

Our courses are structured in a 1 or 2 days format. To adapt to all situations, the course can be spread over several half-days.

For "tailor-made" training courses, the duration varies according to the subject covered.



3 TYPES OF TRAINING

Our training courses are designed to be organised mainly on an "intercompany" basis, i.e. bringing together people from different structures.

We also intervene within the same structure or in training centers.





TRAINING FOR FARM WORKERS

Our training courses are mainly aimed at farmers (farmers, collaborating spouse, joint contributor, care giver).

They are also open to people in the process of setting up.





FUNDING SOON AVAILABLE TO ALL

We are currently taking steps to ensure that our training courses will **soon be accessible** to funding for **all sectors of activity.**



TAILOR-MADE TRAININGS

We organize "tailor-made" training courses.

Today, we have **expertise in** a **multitude of agronomic** and **economic topics** related to the farm.

For more information, see the section "Tailor-made trainings".



TRAININGS NEAR YOU

We want to respond as best we can to your training requests. This is why we organize training courses "near you" in addition to the dates already scheduled. For more information, see the section "Trainings near you".



POST-TRAINING SUPPORT

It is essential for us to enable you to put into practice what you have learned during your training. Therefore, we offer personalized post-training support to find solutions to specific situations.



CONSIDERATION OF DISABILITY

If you are affected by a disability, we make the necessary arrangements to enable you to benefit fully from our courses.



AN ADAPTED TRAINING PATH

At present, our training program consists of 5 modules:

- Module M1 Evolve to agroecology to improve technical and agronomic performances,
- Module M2 Increase soil fertility,
- Module M3 Understanding the plant nutrition mechanism to implement effective systems,
- Module M4 Redox potential and pH: understand their influence on the relationship between soil and plant to better develop agroecological practices,
- Module M5 Success in cover crops to improve agroecological performance,
- Module M6 Understand and value the soil analysis to increase its fertility,
- Module M7 Taylor-made training.

The M7 module is in itself **independent**: its content and format will be adapted according to the audience and the subject concerned.

Modules M4, M5 and M6 each go into more detail on a theme covered in modules M1, M2 or M3. The articulation between these modules and the resulting training path depend on the initial status of the participant.

The candidate for one of our courses can follow 2 possible paths. The orientation towards one or the other depends on his or her experience in agronomy and/or agricultural practice. This aspect is measured:

- either just before registering for a course if they contact us beforehand, during an exchange with the candidate,
- or immediately afterwards, in the light of the answers given in the information gathering questionnaire designed to prepare the course.

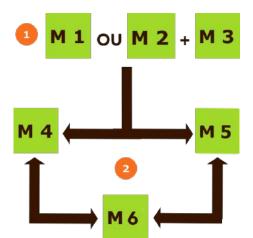




2 POSSIBLE ROUTES

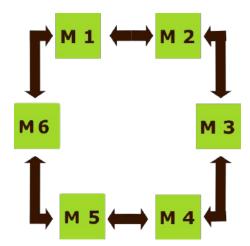


LITTLE OR NO FARMING EXPERIENCE



In this case, we recommend that the candidate first complete module M1 or the modules M2 and M3 before possibly participating in modules M4, M5 or M6 (in any order between these three).





In this case, the candidate can start with the module of his/her choice and then move from one to the other as desired.





OUR EDUCATIONAL METHODS

Our teaching methods are adapted to the subject of the training. They are specified in the training agreement.

We attach great importance to interactive exchange with learners. We also make sure that you understand how to make the training more concrete on your farm by systematically integrating a moment of practical application.

As an example, here are the most frequently used teaching methods for the training courses we currently offer:

- Discussions with the trainees on a targeted agronomic subject,
- Co-design workshops on a specific topic,
- Group work between trainees,
- Practical work on plots with observation and measurements,
- ...





ACCESSIBILITY TO OUR TRAININGS

We take all the necessary measures to enable people with disabilities to fully experience the training.

For each training, pictograms provide information on accessibility according to disability. All our courses are :



Adapted for people with mobility impairments



Adapted for people with a hearing impairment



Adapted for people with a speech impairment



Adapted only for visually impaired persons

For each location chosen for our training courses, we make sure to contact the person in charge of the premises to ensure that the premises are accessible.





OUR TRAININGS NEAR YOU

Our teaching methods are adapted to the subject of the training. They are specified in the training agreement.

1. FOR ALL OUR TRAINING COURSES AND THROUGHOUT FRANCE

In addition to the dates and locations we already offer, we arrange **trainings near you to respond your training request**. This quality applies to **all our training courses, throughout France**.

A specific logo is used to clearly indicate this:



2. WHAT ARE THE ELIGIBILITY REQUIREMENTS?

2 POSSIBILITIES





You live more than 80 km from the training location indicated

OR

You are a group of farmers and you want to organize a training course near your farms.

In both cases, training can take place if the minimum number of farmers is reached.



3. How to benefit from it?



A. CHOICE OF TRAINING

First choose the training of your choice.



B. SEND YOUR REQUEST

For tailor-made training, send us a message with your expectations.

For other topics, register and select "near me" from the drop-down list for the date and location of the selected training.



C. DEFINITION OF ORGANIZATIONAL ARRANGEMENTS

We will then contact you to agree on the organizational arrangements.

In the case of an individual request, we will discuss with you to what extent it is possible to bring together other people located near your farm or your home in order to reach the minimum number of participants required.

4. TRAININGS ON A MULTITUDE OF THEMES



Agronomy and soil fertility l



Nutrition and plant growth



Cover crops and agroecology



Redox potential, pH and their influence on the plant and the soil



Analysis of systems performance



Transition of systems to multi-performance



Implementation of agronomically efficient and coherent systems



Other related topics



FUNDING FOR YOUR TRAININGS

FUNDING AVAILABLE FOR ALL!

The question of how to finance your professional training is a complex one, as there are so many different situations depending on your professional situation. Keep in mind that in the vast majority of cases, your training can be supported in whole or in part.

Our current certification allows non-salaried agricultural workers to have access to VIVEA funding (subject to eligibility conditions). We are currently taking steps to enable all the public to have access to the financing mechanisms set up by the various competence operators (OPCO) or training funds.

The organizations or funds concerned depend on your sector of activity and your professional situation. The **infographic below** helps you **understand how to get them**.

1. PROCEDURE FOR NON-SALARIED AGRICULTURAL WORKERS





BEFORE THE TRAINING



A. INDICATION OF YOUR PERSONAL DATA

When you register for the course of your choice, simply enter your name, first name, home address and date of birth.

These informations are useful for the second step.



BEFORE THE TRAINING



B. VERIFICATION OF YOUR ELIGIBILITY WITH VIVEA

Following your registration, in order to check your eligibility with VIVEA, we enter your identity data on the platform provided for this purpose, whose information is regularly updated in conjunction with the MSA.

At the end of this procedure, we are able to inform you whether or not your training costs will be covered by VIVEA.

To know the eligibility conditions for VIVEA

Click on the following link to learn more

https://www.terreom.fr/en/formations-financement-vivea



C. COMPLETE VALIDATION OF YOUR FILE

We send you the documents related to your registration: the training agreement, the registration form and the estimate.

In addition, we send you an e-mail containing a link to pay the deposit online at $\underline{www.swikly.com}$. This deposit is not collected, it is simply intended to reduce absenteeism. The amount of the deposit is $150 \in$.

Registration is validated once TERREOM has received the registration form, the signed estimate and training agreement and the deposit.

Also, at the latest within 30 days after the training, you must respond favorably to the email sent by VIVEA immediately after your registration: it is simply a matter of confirming your consent for your training to be effectively supported by VIVEA.



AFTER THE TRAINING



D. PAYMENT OF VIVEA SUPPORT

After the training, we enter the states of presence on the tool set up by VIVEA.

VIVEA makes the payment with regard to your participation attested by your signature of the attendance sheet at the beginning of each half-day. At the same time, we send you the invoice, indicating the part that you may have to pay.

2. PROCEDURE FOR OTHER ACTIVE PERSONS











BEFORE THE TRAINING



A. VERIFICATION OF YOUR ELIGIBILITY WITH THE FUNDING ORGANIZATION

To do this check, you can use the infographic below to go to the website of your funding organization.







BEFORE THE TRAINING



A. VERIFICATION OF YOUR ELIGIBILITY TO FUNDING ORGANIZATIONS











For more details, click on the logo



BEFORE THE TRAINING



B. SETTING UP YOUR FILE WITH THE FUNDING ORGANIZATION CONCERNED

To build your file, you will be asked to attach a quote for the training. We thank you to contact us in this regard before even validating your registration with us.



C. VALIDATION OF YOUR REGISTRATION WITH TERREOM

To complete your registration, choose the course of your choice and the desired date.

To register for one of our trainings

Click on the following link to learn more

https://www.terreom.fr/en/formations-agroecologie-agronomie

APRÈS LA FORMATION



D. TRANSMISSION OF TRAINING DOCUMENTS TO THE FUNDING ORGANIZATION

A few days after the training, we will send you the certificate of participation in the training and the invoice.

These documents must be sent to your funding organization to close your file and obtain funding.

If you see that 2 weeks after the training, you have still not received any document from us, this is not normal. We would be grateful if you could come back to us





EVOLVE TO AGROECOLOGY TO IMPROVE TECHNICAL AND AGRONOMICAL PERFORMANCES

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

https://www.terreom.fr/en/formation-agroecologie



Nowadays, agriculture is facing a real challenge: producing more and more. And yet, the number of farms is decreasing, more and more farms are experiencing difficulties, harvest prices are stabilizing at low levels and costs of all kinds are increasing. Added to this is the fact that the climate is becoming more and more capricious each year. In this context, this training proposes to adopt a new perspective by reconsidering the relationship between the soil and the plant to develop the fertility of the soil and improve crop and the farm performances. It also aims to enable to evolve towards the implementation of agroecological practices and reduce the use of inputs (fertilisers, plant protection products in particular).





UNDERSTAND

how the soil is structured



MASTER

the forces of fertility



KNOW HOW TO MEASURE

the overall fertility of the soil



KNOW

the functioning between the plant and the soil



KNOW

the impact of agricultural practices to set up the most virtuous ones and improve the performances of the cropping system



EVOLVE

towards a multi-performing agroecology











Farmer
Collaborating spouse
Joint contributor
Family helper

None



Anyone in the process of setting up



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























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.



1. First, second and third half-day



Interactive exchanges with the trainees



Classroom training



Use of a video-projector and a paperboard



A USB key containing the elements of the training will be delivered to each trainee





2. Fourth half-day



Session on the plots of a nearby farm



Simple tests on soil samples taken from the plots



Performing the test at the spade and use of penetrometer



Creation of a soil profile or a 3 D mini-profile with comments



Pratical 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 et third half-day



Room equipped with a videoprojector and a projection screen



Use of 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



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





I. The soil, a highly organized and living system

- The soil, the meeting of different spheres
- The forces of the soil fertility
- Know the soil and appreciate its fertility (understand and value soil analysis, know how to diagnose soil on the plot)

II. The soil-plant relationship, a dynamic and living relationship under influence

- The plant and its intelligent relationship with the soil
- The relationship between soil and plant, key to system performance

III. Reasoning applied to the plot

- Carrying out tests and measurements on soil samples taken from the plot
- Implementation of different soil observation techniques (soil profile,...)
- Use of different measuring tools (penetrometer, pH meter,...)
- Use of the various observation and rating sheets
- Discussion on the practices put in place and possible ways of improvement



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







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 center

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 FOLLOWING LINK

https://www.terreom.fr/en/inscription-agroecologie





INCREASE SOIL FERTILITY - FROM KNOWLEDGE TO IMPLEMENTATION OF AN APPROACH ON THE FARM

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

https://www.terreom.fr/en/formation-fertilite-sol



Soil is an **essential resource** for agriculture and Humanity. Somewhat neglected by the agronomic model of recent decades, **the soil is the place of an intense biological life** where the root is in permanent relationship with other living organisms.

This training addresses the topic of **soil fertility**, the **means to measure it** and the **levers to develop it**, as well **the most appropriate practices to implement** and the way to **design a cropping system to develop it**. Based on agronomic considerations, it presents the **thinking to be put in place at the farm level to change its practices accordingly.**

Afterwards, the 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).





UNDERSTAND how the soil is structured



CONTROL soil fertility and its forces







KNOW HOW TO USE

tools for measuring overall soil fertility



KNOW HOW TO ELABORATE

a cropping system that promotes development of soil fertility



SET UP

agro-ecological practices to reduce the use of inputs (phytosanitary products, fertilizers,...)





Farmer
Collaborating spouse
Joint contributor
Family helper



Anyone in the process of setting up



 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.





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











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





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.







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



Focus on methods for observing and measuring fertility of the soil



Co-construction with trainees of a plan action to promote soil fertility



TECHNICAL RESOURCES



Room equipped with a videoprojector and a projection screen



Use of a video slideshow and a flipchart



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





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



I. Master the agronomic bases of soil fertility

- The soil in question
- The soil, the meeting of different spheres
- The forces of soil fertility
- Know the soil and appreciate its fertility
- Appreciate the physical and biological fertility of the soil in the field

II. Implement a progress approach on exploitation

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

III. Reasoning applied to the plot

- Test and measurements on soil samples taken from the plot
- Implementation of different soil observation techniques (spade test, soil profile,...)
- Use of different measuring tools (pH meter, penetrometer,...)
- Practical use of different observation and scoring sheets
- Exchange on the practices put in place and possible ways of improvement







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





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)

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3600 € including taxes (excluding travel expenses)

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Delivery in a training center

800 € including taxes per day (excluding travel expenses)

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Funding is available!

Click on the following link to learn more

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I AM INTERESTED IN THIS TRAINING

I REGISTER BY CLICKING ON THE FOLLOWING LINK

https://www.terreom.fr/en/inscription-fertilite-sol





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

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

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



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).





UNDERSTAND

how the plant nutrition mechanism works



KNOW

nutritional elements and their role in plant development



KNOV

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





Farmer
Collaborating spouse
Joint contributor
Family helper



Anyone in the process of setting up



 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.





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

















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.





1. First, second and third half-day







Use of a video-projector and a paperboard



A USB key containing the elements of the training will be delivered to each trainee



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 videoprojector and a projection screen



Use of 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



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





I. Master the agronomic bases of nutrition and plant development

II. Implement a progress approach on exploitation

III. Practice on a farm's plots

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





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







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 center

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 FOLLOWING LINK

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



REDOX POTENTIAL AND PH - UNDERSTAND THEIR INFLUENCE ON THE SOIL-PLANT RELATIONSHIP TO BETTER DEVELOP AGROECOLOGICAL PRACTICES

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

https://www.terreom.fr/en/formation-potentiel-redox-ph



The relationship between the plant and the soil is permanent during the plant's development cycle. For 10 years, the work of Olivier HUSSON, CIRAD researcher, has provided a new vision of the influence of pH and redox potential on this relationship. In posteriori, it appears that this parameter intervenes at all levels of the functioning of the ecosystem, confirming the vision of Albert SZENT-GYORGYI according to which «life is a small current maintained by the sun».

The training aims, firstly, to provide a basic knowledge for a good understanding of pH and redox potential. Then, it will be shown successively how it intervenes in the growth of the plant, in the good balance of the soil and in the mechanism of bioaggression. Then, the impact of agricultural practices on the pH-redox balance will be discussed. In conclusion, all this information will enable the implementation of an action plan that includes all the good practices that are favourable to a good balance between the soil and the plant.

Afterwards, this training should enable the learner to evolve towards the implementation of agro-ecological practices and to reduce the use of inputs (fertilizers, phytosanitary products in particular), while developing the performance of the cropping system.





basic knowledge of pH and redox potential



how pH and redox potential affect plant development and soil balance



the relationship between pH, redox potential, plant health and bioaggression for better protection







CONTROL

the effect of agricultural practices on the right balance between soil and plant



KNOW HOW TO MEASURE

soil and plant pH and redox potential



SET UP

agro-ecological practices that favour the balance between plant and soil





Farmer
Collaborating spouse
Joint contributor
Family helper



 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



Anyone in the process of setting up

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Use of a video-projector and a paperboard



A USB key containing the elements of the training will be delivered to each trainee



Interactive exchanges with the trainees



Co-construction with the trainees of a positive agroecological action plan



TECHNICAL RESOURCES



Room equipped with a videoprojector and a projection screen



Use a video slideshow and a flipchart



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





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



- I. Master the basic knowledge about redox potential and pH
- II. Redox potential and pH in the soil-plant relationship
- Soil, pH and redox potential
- Plant, pH and redox potential
- Plant health, pH, redox et bioaggression

- III. Measures and positive agro-ecological practices
- Redox potential, pH and measuring devices
- Positive agroecological practices and action plan



MONITORING AND EVALUATION



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Intra-company training



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https://www.terreom.fr/en/inscription-potentiel-redox-ph



SUCCESS IN COVER CROPS TO IMPROVE AGROECOLOGICAL PERFORMANCE

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

https://www.terreom.fr/en/formation-couverts-vegetaux



Cover crops are **one of the pillars of soil regenerative agriculture**. They are also **one of the important levers for developing agroecological models**. Set up between two crops, they are **real photosynthetic hyphens** in the sense that they continue to capture light energy to **feed the life of the soil and support its fertility**. Once in place, they provide **many other services**. What exactly are they? How to decide on the **composition of cover crops**? How to **sow them successfully**? What **good practices** should be **implemented** until their destruction **to promote their optimal development**? What are the **interesting decision-making tools** to support this success? These are just some of the questions to which this training course provides an answer.

In retrospect, **this training** should enable the learner to **master the subject of cover crops** in order to further **establish** (as a farmer or advisor) the **implementation of an agroecological approach on the farm**.





the services provided by cover crop



how to compose cover crop



the interest of diversified cover crop





KNOW

how to proceed for successful sowing



KNOW

good practices to manage cover crops until they are destroyed



MASTER

decision support tools for successful cover crops



UNDERSTAND

how to use cover crops to improve the agro-ecological performance of the farm





Farmer
Collaborating spouse
Joint contributor
Family helper



Anyone in the process of setting up



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Use of a video-projector and a paperboard



A USB key containing the elements of the training will be delivered to each trainee



Interactive exchanges with the trainees



Co-construction with the trainees of rotations improved by the use of cover crops



TECHNICAL RESOURCES



Room equipped with a videoprojector and a projection screen



Use a video slideshow and a flipchart



Use of educational sheets (spade test, decision support tools





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



- I. Cover crops, a practice with II. Properly sow cover crops many services
 - Determine the desired objectives
 - Think about the composition of the cover crop
 - Successful seeding (equipment, vigilance points, key points, suitability between techniques and plant species)

- III. Manage cover crop properly until it is destroyed
 - Fertilisation practices
 - Practices to accompany development
 - Properly manage destruction (vigilance points, interest of the spade test, techniques and plant species)

- IV. Decision-making tools useful for successful cover crops
- V. Improve the agro-ecological performance of crop rotations through cover crops







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Inter-company training



Intra-company training



Delivery in a training center

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(individual price)

1800 € including taxes (excluding travel expenses)

(group price)

800 € including taxes

(excluding travel expenses)

Funding is available!

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







I AM INTERESTED IN THIS TRAINING

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 $\underline{https://www.terreom.fr/en/inscription\text{-}couverts\text{-}vegetaux}$



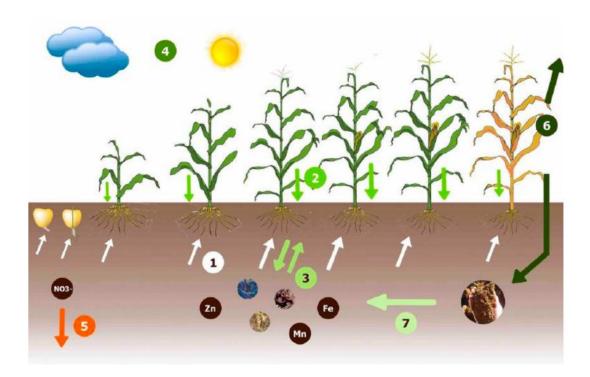
UNDERSTAND AND VALUE THE SOIL ANALYSIS TO INCREASE ITS FERTILITY

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

https://www.terreom.fr/en/formation-analyse-sol



Soil is a constantly changing environment: exchanges and transformations are permanent. To illustrate, here are some aspects:



- 1. During its cycle, the plant collects various elements from the soil.
- 2. In return, it returns some of the products of photosynthesis to the roots.
- 3. This exchange stimulates soil life and results in a change of parameters in the periphery of the rhizosphere. In return, soil-plant exchanges are modified.





- 4. This whole process also fluctuates according to climatic conditions: for example, photosynthesis is greatly stimulated in sunny periods.
- 5. In addition, excessive rainfall can also lead to the leaching of molecules such as nitrates.
- 6. The balance between export (harvest) and restitution of course influences the soil and its structure.
- 7. These different transformations modify the parameters of the soil, and the loop starts all over again.

Of course, many other phenomena can be added to this list. Therefore, it is **essential to monitor the evolution of the soil in order to adapt practices** over time and **increase fertility of the soil**. In this sense, soil analysis is one of the important monitoring tools. Several questions arise: How to properly prepare your sample to obtain a representative soil analysis? What **informations** are commonly **available in this document**? What are **the different indicators of the soil analysis**? What are their **meaning**? **How to interpret their value to adapt the practices accordingly and support the fertility of the soil? How does soil analysis integrate with the measurement of the fertility of the soil? What are the complementary analyses and tests? These are all questions to which this training course provides an answer.**





UNDERSTAND the importance of soil analysis



the meaning of each soil analysis indicator



KNOW HOW TO TAKE a soil sample to obtain a representative soil analysis



the value of each indicator



KNOW the information categories of soil analysis



the decision support tools complementary to soil analysis







KNOW

how the fertility of the soil is built up and its indicators



KNOW

how soil analysis is positioned in the measurement of the fertility of the soil and know the complementary tests



KNOW HOW TO ADAPT

practices to increase soil fertility







Farmer Collaborating spouse Joint contributor Family helper



None



Anyone in the process of setting up



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See directly on our site













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Use of a video-projector and a paperboard



A USB key containing the elements of the training will be delivered to each trainee



Interactive discussion with trainees about their soil analyses





TECHNICAL RESOURCES



Room equipped with a videoprojector and a projection screen



Use a video slideshow and a flipchart



Use of educational sheets (COMIFER recommendation sheets, soil observation sheet (spade test, 3D mini-profile))



Demonstration of online decision support tools



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





I. Properly prepare the soil sample for II. representative analysis

- Sampling techniques
- Sampling equipment
- Good practices and general recommendations

III. Soil analysis in fertility management

- Soil fertility and its indicators
- Soil analysis in the measurement of the fertility
- Tests and analysis complementary to soil analysis

II. Soil analysis, an information-rich tool

- Granulometry and texture
- Organic matter (rate, C/N ratio, mineralization coefficient, microbial activity index, humic balance)
- Cation exchange capacity (soil ion reserves, CEC size, filling rate, composition and distribution of elements)
- PH and acid-base status (pH H2O, pH KCl, carbonate, know how to control soil acidity)
- Macroelements (nitrogen, phosphorus, potassium, phosphopotassic management), trace elements and soil balance

IV. Let's take a look at your soil analysis

Interactive exchange time as an application dedicated to the analysis of documents provided by trainees



MONITORING AND EVALUATION



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Intra-company training



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https://www.terreom.fr/en/inscription-analyse-sol



TAILOR-MADE TRAININGS

The content of this training is also available directly on the TERREOM website at:

https://www.terreom.fr/en/formations-sur-mesure



You are a farm, a group of farmers or another type of structure?

LET'S WORK TOGETHER TO DEVELOP YOUR AGRONOMIC KNOWLEDGE!

Today, we have expertise in many agronomic and economic subjects related to the farm. We can help you set up your group projects or improve your agronomic knowledge and skills:



Agronomy and soil fertility



Nutrition and growth plant



Cover crops and agroecology



Redox potential, pH et their influence on the plant and the soil



Analysis of systems performance



Systems transition to multiperformance



Implementation of agronomically efficient and coherent systems



Other related topics

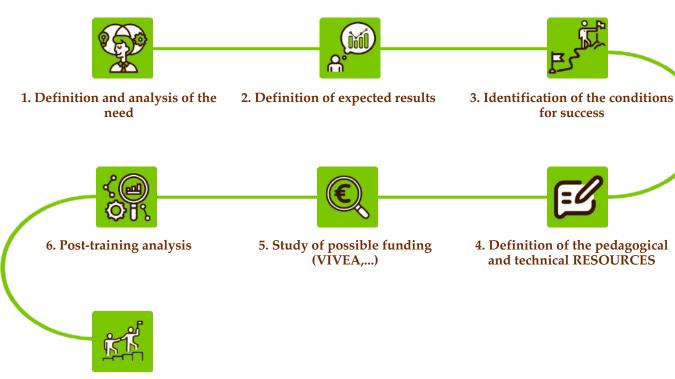




WE ACCOMPANY YOU TO CO-BUILD THE ANSWER TO YOUR NEEDS

We offer tailor-made trainings to meet your needs. We accompany you throughout the process to co-construct your training together.

7 STEPS TO MEET YOUR EXPECTATIONS



7. Possible post-training follow-up





















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Agricultural engineer (ENITA BORDEAUX) and former adviser to the Landes Chamber of Agriculture

More than 20 years of experience in the agricultural sector







On quotation

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https://www.terreom.fr/en/formation-contact



Together, let's create and cultivate our future!

Find all our information on:

www.terreom.fr/en







