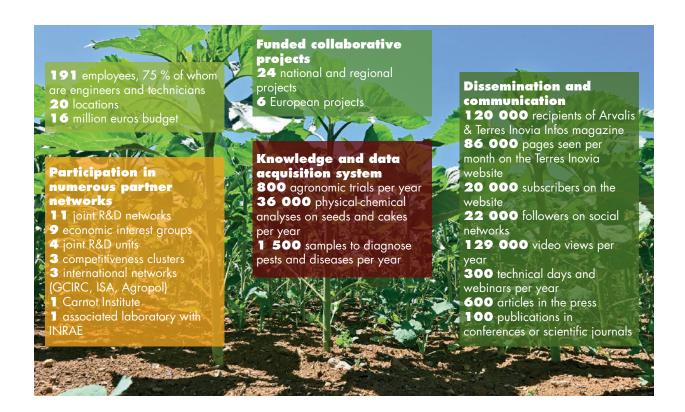


The technical agricultural institute for the oilseeds, grain legumes and hemp sectors



## Key figures of the institute



#### Who are we?

An independent applied research and development organization to support producers of oilseeds, grain legumes and hemp crops. Terres Inovia is qualified as an industrial technical center (Code de la recherche articles L.521-1 and following).

- It is qualified as an agricultural technical institute by the Ministry of Agriculture and Food.
- It is financed by producers through a levy contribution, collected by the oilseeds and grain legumesinterbranch organization Terres Univia and its equivalents Interchanvre for hemp and Anils for lentil. These resources are completed by public subsidies and private contracts linked to research and development projects, expertise and services.

### Editorial



Gilles Robillard president of Terres Inovia, farmer in Yonne department

# To be as close as possible to farmers' concerns

To be the efficient tool that it is for our industry, our institute makes its impact on the ground thanks to the strong mobilization of its staff, their diverse and complementary expertise, their drive to innovate in order to improve cropping practices, and to their links with numerous networks and partners at the regional, national and international levels.

Being as close as possible to producers' problems, the Institute's teams are mobilized to offer webinars on cultivation techniques, solutions to difficulties during the season, innovative cropping systems, etc.

Producers are facing strong constraints linked to climate change, regulatory changes in inputs and, in general, the decline in availability of inputs. Terres Inovia has adapted its R&D, and is able to propose alternative techniques and strategies to keep producing in optimal conditions.

The institute's research now accounts for societal demands for sustainable production with less environmental impact. Its innovative projects are a good illustration of this. For example, it is leading the R2D2 project, which aims to support farmers in Burgundy in the sustainable management of field crop pests, in particular by using biological regulations. It also works hand in hand with farmer networks to build innovative cropping systems (Syppre network) or to develop cropping practices such as direct seeding and cover cropping (with the Magellan group).

Finally, let's not forget that our technical institute is at the heart of the National Protein Strategy, initiated as part of the French government's plan to increase protein production. It co-leads Cap Protéines, the research, development, innovation and transfer program of this Plan to create an ever stronger dynamic of sustainably produced plant proteins.

# Our mission : providing innovation and expertise to growers

We strive to improve the competitiveness of oilseeds, grain legumes and hemp crops through innovation and independent expertise, by adapting agricultural production and grain processing to different economic contexts and societal demands.

Thanks to a stimulating environment for our employees and effective alliances with our partners, we contribute to :

- promoting diversified, multi-performing crop systems;
- developing digital agriculture, tailored to the diversity of producers in their territories;
- strengthening national and european sovereignty in plant-based proteins for human and animal nutrition in France.



### A word from Laurent Rosso, Director of Terres Inovia "An Institute of strong core values"

#### An independent expertise from upstream to downstream

Terres Inovia's analyses and studies provide objective and factual data to farmers and grain users as well as to public authorities. Its code of ethics guarantees its complete independence.

#### Always innovating

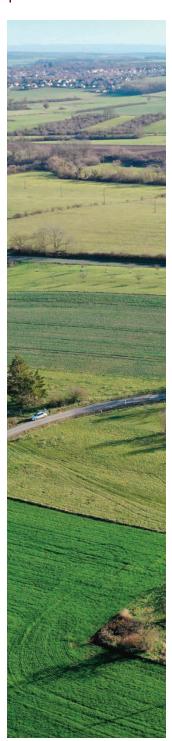
As a catalyst for innovation, Terres Inovia participates in research, financing and implementation of innovations, in particular through tests carried out on its technological platforms.

#### Objective references

The quality of our scientific and technical references is guaranteed by our rigorous methodologies and procedures. The physico-chemical analysis laboratory is accredited by Cofrac (NFEN-ISO-CEI 17025 standard) and the experimentation network is approved according to the "Good Experimentation Practices" standard to carry out trials officially recognized by the Ministry of Agriculture.



# Concrete actions serving agricultural production



#### Improving crop competitiveness

In order to make agricultural production more competitive and sustainable, Terres Inovia identifies and designs technical itineraries to meet market demands. The institute also produces references and expertise on operational solutions to advise farmers on the most appropriate solutions for their production system. It studies crop pests to better control them and evaluates inputs, particularly varieties and plant protection products, including biocontrol products.

## Contributing to the transition to sustainable, high-performance cropping systems

To develop multi-performing cropping systems, Terres Inovia identifies their strengths and weaknesses in each production area, identifies on-farm innovations and builds, for and with farmers and advisors, tools and operational knowledge to help them produce.

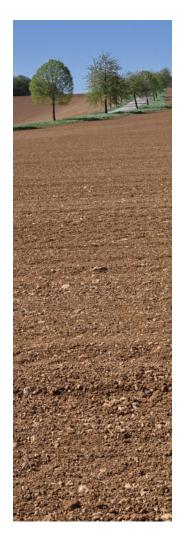
#### Reinforcing the natural benefits of ecosystems

Climate change, technical and environmental limits, and health issues impose agricultural transformation. Terres Inovia is committed to better understanding and recognizing the services provided by ecosystems, such as reducing the use of phytosanitary products through biodiversity, preserving soil fertility and reducing nitrogen losses, as well as mitigating climate change through the symbiotic fixation of legumes and soil cover.

#### A representative governance

The Board of Directors determines Terres Inovia's strategy. It is made up of representatives of all the economic sectors in the oilseeds, grain legumes and hemp industries: gowers, grain collectors, seed multipliers, plant breeders, crushers and other grain processors, research.

Since September 2020, it has been chaired by Gilles Robillard, a farmer in the Yonne region.



#### Supporting the growth of the organic sector

While some crops are perfectly integrated into the crop rotation of organic farms, others still suffer from major obstacles. Terres Inovia leverages its know-how on each crop and on the multi-performance of production systems in general to build shared references dedicated to organic farming. Through its network of partners, the institute disseminates all the expertise acquired to conduct robust and efficient organic farming systems.

#### **Creating downstream value**

In order to enhance the value of grain production, Terres Inovia is committed to meeting societal and regulatory expectations regarding food safety, to securing and diversifying markets for its crops, to developing sustainable sourcing that contribute to regional economic development of challenges, and to researching new processes to enhance the value of grains. Increasing protein sovereignty through process innovations is one of the major objectives of this work.

#### **Exploiting digital tools**

Terres Inovia develops and promotes new technologies in agriculture, such as sensors, remote sensing, modelling and drone imagery. The institute develops decision rules and enriches the available offer of digital tools for better crop management. It also deploys all its dissemination and communication activities via its website and social networks.



#### Cap Protéines : innovating for plant protein sovereignty

Terres Inovia co-leads with the Institut de l'élevage the research, development, innovation and dissemination program of the Protein Plan launched by the public authorities as part of the France Recovery Plan. Called Cap Protéines, it will last two years (January 2021-December 2022). It sets up a major partnership system of experimentation, reference production and communication to give farmers the technical and operational tools to ensure the protein sovereignty and competitiveness of their farms. Cap Protéines mobilizes more than 200 technical partners, and targets 100,000 crop growers and more than 100,000 ruminant ranchers in 2021 and 2022 and has a budget of €55.5 million, including €20 million financed by the Ministry of Agriculture and Food as part of the France Relance plan.



#### **Technical recommendations in real time**

- Regular news throughout the season on the Terres Inovia website
- Webinars targeting the main crop difficulties and opportunities, depending on the period of the growing season and production areas
- Active communication on social networks
- Explanatory videos on technical points, key itineraries, farmers' testimonies...
- Tools to help farmers make the right decisions

#### A wide range of documents

- Guides on 10 crops, organic and conventional
- Thematic books to deepen technical points
- Small handbooks on diseases and pests
- Methodological sheets for conducting trials

#### Advice in the field, as close as possible to agricultural production

- Field days and training sessions in all production regions
- Monthly digital technical meetings
- Participation in scientific conferences and symposiums













## A network of mobilized partners

Terres Inovia has forged strong links with research and agricultural players to build collaborative projects together and support producers at the regional, national and European levels.





**9** Economic Interest Groups, organizations at the interface between research and private companies.



1 associated laboratory in partnership with INRAE to produce knowledge, methods and tools to manage the protection of rapeseed and protein crops.



**5** réseaux d'agriculteurs pilotés ou co-pilotés par Terres Inovia.



3 international organizations6 European research and coordination projects.



**4** Joint R&D Units, which bring together players in research, training and agricultural development.



**3** competitiveness clusters, which bring together companies, research laboratories and training organizations at the regional level.



**11** Joint R&D Networks, which bring together a group of experts on specific topics.



Partnerships with other institutes or actors in technical innovation working on the same crop systems or the same sectors.



**24** regional or national projects following grant applications.



## A strong involvement within the industry



**Terres Univia** brings together the main professional associations and federations involved in the production, marketing, processing and use of oilseeds and protein-rich plants. Terres Inovia works very closely with this interbranch organisation make proposals to public authorities on the Protein Plan and, more generally, to strengthen France's food sovereignty.



#### **Anils**

The national inter-branch association for pulses is a specialized section of Terres Univia. Created in 2015, it helps organize and develop the market for lentils and other pulses in France.



#### Interchanvre

Interchanvre's mission is to federate the actors of the hemp sector, to ensure the representation of the sector to the different authorities, to encourage scientific and technical research actions and to promote the environmental qualities of hemp. Terres Inovia carries out work to improve hemp cultivation and disseminates technical recommendations to farmers and advisors.

# An active participation in two networks of excellence



#### Acta

Terres Inovia is a member of the Acta network, which brings together 18 qualified agricultural technical institutes, in animal and plant sectors.



#### **Institut Carnot Plant2Pro**

Terres Inovia is part of the Carnot Institute Plant2Pro. It proposes an integrated and multidisciplinary R&D offer, from the laboratory to the field, dedicated to agricultural plant production.

## An expert role for public authorities



Terres Inovia is recognized for its agricultural expertise. The institute is involved in shaping national strategies related to agriculture, such as the development of the National Plant Protein Strategy, the preparation of the Varenne de l'eau on climate change, pollinator protection, etc...



### Terres Inovia's activities

#### Development, transfer and dissemination



Listening to the needs of farmers and all regional actors, development engineers ensure, in each region or on a specific theme, dissemination and development actions on Terres Inovia's productions.

# Studies and operational research



The research managers design and lead applied research actions as true project managers. They contribute to Terres Inovia's expertise and to the development of our crops by producing and organizing knowledge in their field of competence.

## Experimentation



The experimentation technicians carry out testing programs and field surveys aimed at improving agricultural production: evaluation of new varieties, testing of crop protection products and new production systems.

### Analysis



Terres Inovia's laboratories carry out biological and physico-chemical analyses and control tests to establish diagnoses on crop diseases and pests or to measure the characteristics of grains and cakes.

### An institute rooted in the field



- Head office
- Research unit
- Laboratory
- Development office
- Experimentation



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