

The voice of the European Seed Sector



Why do seeds matter?

Seeds carry the genetic potential that determines the quality, quantity and resilience of our crop harvest. Quality seeds reliably establish a healthy crop that can achieve the best possible production. This is crucial for food supply, health, security and economic well-being at global level.

There is an increasing demand for food due to the world's growing population. At the same time, climate change and environmental challenges threaten our supplies. It is therefore more important than ever to invest in the development of new plant varieties and high-quality seeds that can withstand diverse challenges and meet the evolving needs of farmers and consumers.



Who we are

Euroseeds represents the interests of those active in research, breeding, production and marketing of seeds of agricultural, horticultural and ornamental plant species.

Our vision

Seeds are the foundation of our agriculture and food. Therefore, Europe's seed sector strives to be a key partner for all value chain actors, from farmers to processors and from food producers to consumers. We are passionate about seed innovations to foster food security and sustainability for future generations.

Let's grow the future together!
#GrowingTheFuture

Euroseeds in a nutshell

Our members are active in research, breeding, production and marketing of seeds of agricultural, vegetable and ornamental plant species.

35+ National member associations

from EU Members States and beyond, which in turn represent many thousand seed businesses across Europe.

75+ Direct individual members

from family businesses to international corporations, seed related industries and from non-European countries.

Euroseeds has members also in other parts of the world

e.g. Morocco, South Africa, USA, Canada, Chile and Uruguay



View our membership

Our mission

On behalf of our members, Euroseeds engages with key European and international decision makers, stakeholders, media and the interested public.

Representing the interests of plant breeding and seed companies, we strive to contribute to:



fair and proportionate regulation of the European seed sector



freedom of choice for customers (farmers, growers, industry, consumers) in supplying seeds as a result of innovative, diverse technologies and production methods



effective protection of intellectual property rights relating to plants and seeds

Understanding the seed value chain

Basic and applied research

STEP 1

Public and/or private researchers work on technologies and traits that improve genetic resources

- Public research
- Technology providers
- Breeding companies



Seed production

STEP 3

Seeds of specific plant varieties with desirable traits are carefully multiplied for commercial release.

- Breeding / seed companies
- Seed multipliers



Seed distribution

STEP 5

Commercial seeds are sold and distributed to farmers and growers.

- Breeding / seed companies
- Farm dealers
- Farm supply stores



Breeding

STEP 2

Further R&D activities lead to the development of improved varieties.

- Breeding / seed companies

Seed processing

STEP 4

Seeds are dried, cleaned, sorted, treated and conditioned, and finally packaged for distribution.

- Breeding / seed companies
- Specialised companies

Why do we need plant breeding?

Plant breeding plays a crucial role in adapting plant varieties to the environment they grow in, to their later use in food, feed, fibre and fuel, and to individual taste and preferences.

Production of sufficient quality food for all

Adaptation to climate change

Resource efficiency and reduced environmental impact

Food loss and waste reduction

- Plants with higher nutritional content
- Plants with improved animal feed properties
- Plants with reduced allergens
- Wide choice of convenient & tasty food alternatives
- Plants resistant to flooding
- Plants tolerant to drought or heat
- Plants resistant to pests and diseases
- Plants with higher yields
- Plants with improved resource use efficiency, such as water, fertilizers, land
- Plants with reduced harvest and post-harvest losses
- Food with longer shelf life

Bringing the best seeds to Europe and the world

Our sector is committed to contribute to the EU's goals of secure, sustainable, and high-quality food supply, as well as a greener, circular, competitive, and climate-neutral economy by 2050.



Decision-makers

- Calling for fair access to innovation for breeders and farmers for a more sustainable agricultural production.
- Facilitating the movement of healthy seeds and resilient plant varieties across the European market and beyond.
- Supporting a solid and effective EU regulatory framework for seed innovations and high-quality plant varieties as the base of nutritious food for all Europeans.



Agri-food stakeholders

- Promoting collaboration and partnerships between breeders, farmers, food producers and other actors across the European agri-food sector.
- Driving competitiveness, productivity, employment and growth in our rural areas.
- Collaborating with our partners to strengthen the economic, environmental and social sustainability of our agriculture and food systems.



Consumers

- Providing a sufficient and affordable food supply for all Europeans.
- Developing innovative products that address individual food preferences and health issues (e.g. gluten-free, allergens-free, plant-based, rich in vitamins, proteins, etc.).
- Developing plant varieties for non-food uses that help mitigating climate change by reducing CO₂ emissions and supporting a regenerative bioeconomy.



Adapting plants to adverse climate conditions

Increasing production while preserving natural resources



Driving food production for European consumers and international trade



The European seed sector plays a key role in meeting global challenges of mitigating climate change, feeding a growing world population and supporting resource-efficient farming systems.

Seeding innovation



Plant domestication began thousands of years ago. Evolving from an art to a science with the advent of Mendel's laws of genetics, knowledge and technologies have helped increase the plant breeders' toolbox with efficient and precise techniques.

Conventional breeding, random mutagenesis, marker assisted selection, and newer innovations such as New Genomic Techniques (NGTs), are all essential in increasing the genetic variability to develop improved plant varieties with new, desirable traits such as disease resistance, drought tolerance, nutritional value or flavour. This is the base of high-quality crops with better yields, lower input costs, and reduced environmental impact, as urbanization continues to claim agricultural land across Europe.



Plant breeding @HFFA Research, Euroseeds

67% Plant breeding - induced yield growth

on average and across all **major arable crops** cultivated in the EU

1,16% Annual yield growth

having a significant impact on **EU's crop yield** performance for the last 20 years

Seeding plant health



Planting healthy seeds is essential for cultivating healthy plants and crops. Next to breeding varieties with improved resistances against pests and diseases, the seed itself is cleaned, conditioned and strictly controlled to avoid any infections. Harmful organisms could otherwise spread in the growing crop, leading to significant yield and quality losses as well as potential health concerns. Additionally, targeted applications of seed treatment products can help to prevent infections and protect seed and crop health, yield and harvest quality, using only minimal quantities of plant protection products applied directly to the seed before sowing.



Plant health @EPRS | European Parliamentary Research Service @FAO

18-45% Loss of European crop yields

depending on the region is due to **pests and diseases**. Globally, **yield losses** of the major arable crops reach on average **40%**



Seeding food security



Europe has a responsibility to assure the food supply of its citizens, but must also contribute to global food security. With the world's population projected to reach 10 billion by 2050, the demand for food will rise by 50%, necessitating a substantial increase in agricultural output. Clearly, the simple expansion of agricultural land at the expense of forest or wetlands is not a viable solution.

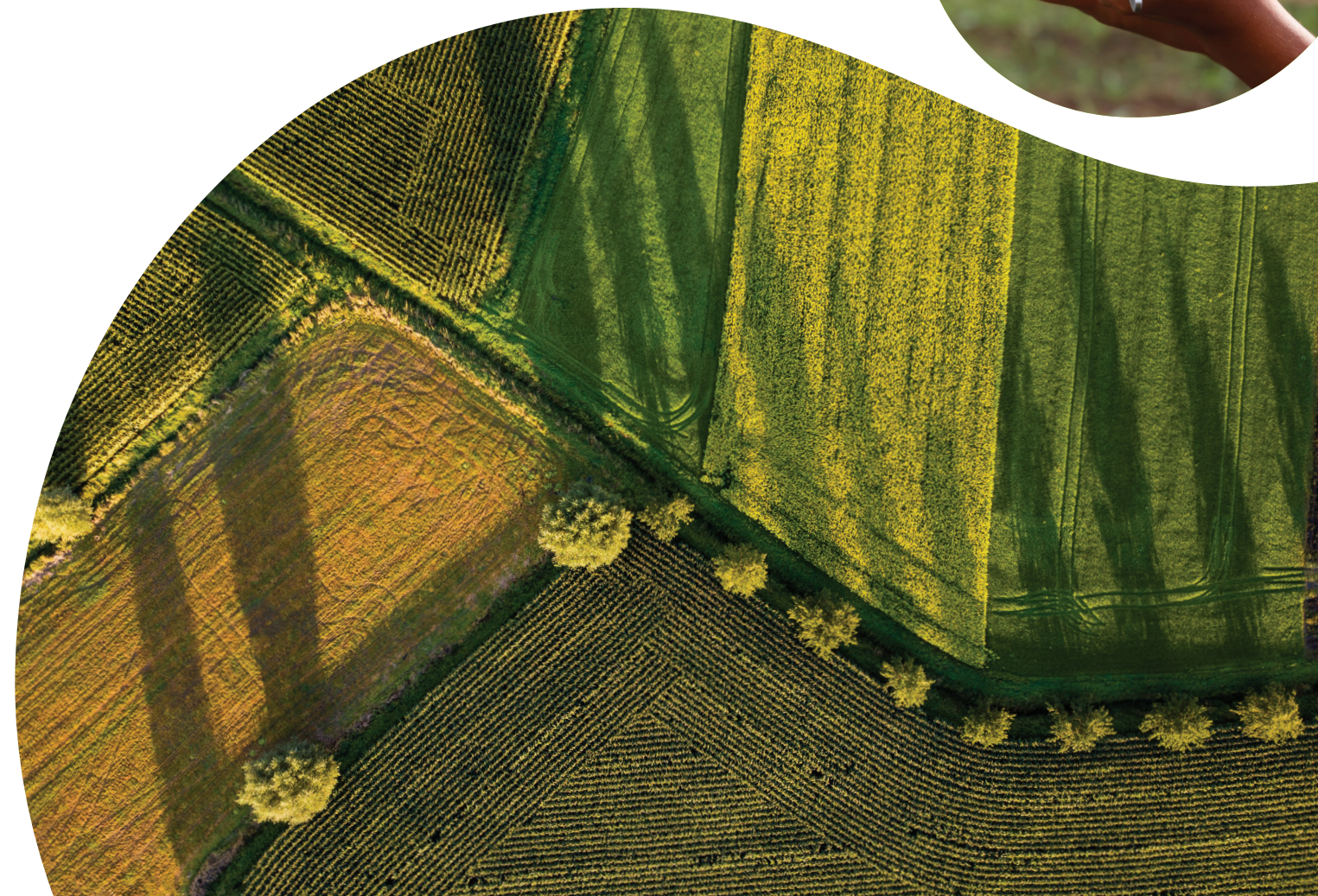
The EU must focus on efficient practices that boost its output performance. This requires innovation in plant breeding and quality seed, enhancing crop resistance to diseases and pests, resilience to drought and floods, and boosting overall productivity.



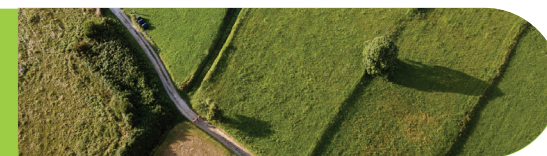
Food security @HFFA Research, Euroseeds

114 Million additional "food baskets"

were produced in the EU in the past 20 years! Innovation in plant breeding accelerated yield increases and enabled the EU to become a net **exporter of food** and large contributor to **worldwide food security!**



Seeding diversity



Advancements in science and technology have revolutionized the conservation and sustainable use of genetic resources. This enables breeders, gene banks and conservation networks to collaborate in the evaluation and use of seed collections for future generations. But plant breeding goes beyond conservation! It creates new diversity by re-combining known genetic resources as the bedrock for new, innovative varieties, with high, stable yields and quality production. As a result, European farmers today can choose among more than 66 000 diverse plant varieties, with over 4 000 new products added each year. Moreover, as urbanization continues to claim agricultural land across the EU, plant breeding innovation becomes pivotal in increasing yields without further land expansion. Modern varieties ensure high, stable yields, quality production, and minimal environmental impact; this helps to preserve natural habitats and their biodiversity.

Biodiversity

@HFFA Research, Euroseeds,
The common catalogues of varieties
of agricultural plant and vegetable
species

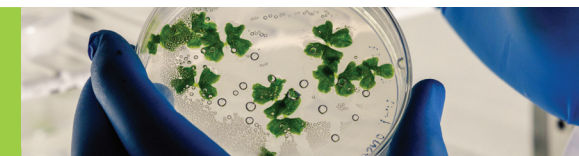
66 000 Different
varieties

of agricultural and vegetable species are
available to EU farmers **today**

4 000 New
varieties

of agricultural and vegetable species come
to the eu market **every year**

Seeding science



Research is crucial for the plant breeding and seed sector. Consequently, a large part of the industry's workforce is dedicated to R&D activities in over 750 stations across Europe. Seed companies, on average, invest up to 20% of their annual turnover in further R&D activities. Still, developing a new plant variety can take up to 15 years!

Euroseeds also actively engages in different EU research projects and supports research and innovation policies that promote the development and adoption of new plant varieties for sustainable future value chains.

Jobs & growth

@HFFA Research, Euroseeds

52 000 Employment
(Approximately)

UP TO 4 000 Annual R&D
Spending

of the companies' turnover

750 R&D
Stations

Seeding sustainability



Plant breeding innovation plays a crucial role in addressing the pressing challenges of our time. Seed innovations enable farmers to produce more food on less land, reducing pressure on natural resources, such as water, and comply with the EU's climate mitigation objectives by reducing CO₂ emissions.

The use of plant breeding innovations not only benefit the environment by reducing greenhouse gas emissions and preserving biodiversity, but also contributes to societal well-being by ensuring food security in the face of climate uncertainties, improving livelihoods, fostering sustainable development practices and employing highly-skilled people in rural areas.

Sustainability

@HFFA Research, Euroseeds

4.0 Billion tons

of **CO₂ emissions** were avoided thanks to
genetic crops improvements in EU major
arable crops over the past two decades

65.4 Billion m³

of EU domestic **water** was saved due to more
water-efficient plants in the last 20 years

21.5 Million hectares of
agricultural acreage

were preserved by plant breeding in the EU in
the last 20 years

Seeding growth, competitiveness and jobs development



High-quality seed of improved plant varieties is essential to support Europe's farms and agri-food value chains through competitive crop production. Moreover, the seed sector in Europe also employs around 52 000 skilled individuals, mainly in rural areas. It generates important employment opportunities itself, but also contributes to the growth and competitiveness of agriculture, rural economies and beyond through its extensive network of input suppliers, service providers and customers. With that, it forms part of the backbone of many rural economies and societies.

Seeding value in the EU

@Eurostat @FoodDrinkEurope

€15 Billion
(Approximately)

commercial seed market value

€220 Billion
(Approximately)

crop output value in the EU

€1.118 Billion

in the **EU food supply** chain value

Why is seed innovation important for the EU agri-food chain?



"Europe's farmers rely on high-quality plant reproductive material to address the challenges of climate adaptation and mitigation and increase resilience against the growing plant disease and pest risks. Plant breeding innovations such as New Genomic Techniques will help farmers to remain productive and competitive, maintaining their ongoing commitment to food security and environmental sustainability, on the base of new varieties specifically developed in Europe and for Europe."

Elli Tsiforou

Secretary General, Copa-Cogeca
(European farmers and European agri-cooperatives)



"In sugar beet, around 50% of yield increase in the past decades is estimated to be due to improved varieties (higher root yield & sugar content, disease tolerances). New Genomic Techniques can contribute to making further progress in agronomic performance, climate resilience and multiple disease tolerances over a much shorter period."

Elisabeth Lacoste

Director, C.I.B.E.
(International Confederation of European Beet Growers)



"Our sector needs an innovative and adequate legislative framework to ensure the supply of high-quality and healthy seed potatoes on the European and international markets. This will allow everyone in the potato supply chain to provide consumers with nutritious and affordable products such as fresh potatoes and other potato derivatives."

Berta Redondo Benito

Secretary General, Europatat
(European Potato Trade Association)



"Buying some 70% of all EU farm produce, the food and drink industry has an important role to play in the transition towards more sustainable food systems. Innovations in plant breeding are key drivers in accelerating this transition, by improving traits of crops, plant raw materials and ingredients."

Dirk Jacobs

Director General, FoodDrinkEurope
(European food and drink industry)



"Young farmers want to use as many tools as possible to be more sustainable. That includes New Genomic Techniques: new varieties for new challenges. Their success will depend on knowledge sharing, so that farmers can make informed decisions, with a clear view on the business model implications for the seed providers."

Marion Picot

Secretary General, CEJA
(European Council of Young Farmers)





Rue Belliard, 40, 1040 Brussels, Belgium
secretariat@euroseeds.eu
www.euroseeds.eu

