



# CHOOSE THE EUROPEAN ORGANIC LEAF FOR A BETTER WORLD.

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# ORGANIC AGRICULTURE: WHAT DO WE NEED TO KNOW?



**In Reg. (EU) 2018/848 (in force since 1 January 2022), which establishes the rules for organic production in the European Union, organic agriculture is defined as follows:**

***“... an overall system of farm management and food production that combines best environmental and climate action practices, a high level of biodiversity, the preservation of natural resources and the application of high animal welfare standards and high production standards in line with the demand of a growing number of consumers for products produced using natural substances and processes. Organic production thus plays a dual societal role, where, on the one hand, it provides for a specific market responding to consumer demand for organic products and, on the other hand, it delivers publicly available goods that contribute to the protection of the environment and animal welfare, as well as to rural development.”***

Organic production is governed by specific laws which have to be respected not only when growing crops, but also when raising livestock and seafood, and when processing the foods. Only products of natural origin may be used, and it's strictly forbidden to use GMOs or chemical fertilizers, pesticides and weedkillers, which are harmful to both people and the environment.

To re-establish balance between food production and natural ecosystems, the fertility of the soil is maintained and even enhanced by practising multi-annual crop rotation with the aid of legumes and green manure, and the only fertilizers which may be used are of plant-based, animal, microbial or mineral origin, or derived from authorized types of algae.

What's more, in order to prevent damage from pests, diseases and weeds, farmers use cultivation techniques which employ mechanical and physical methods that protect the natural combatants of these harmful elements (beneficial bugs).

The selection of more resistant plant varieties also helps minimize the risk of the crops succumbing to diseases.



One of the main forms of defence for plants used in organic agriculture is biological pest control. This method exploits the natural balance between pests and their predators, or in other words, it leverages the antagonism found in nature between living organisms in order to control the organisms which damage crops. In organic

farming, it's also important not to waste resources; a lot of care is taken to recycle animal- and plant-origin subproducts to give nutritional elements back to the soil. This keeps the use of non-renewable resources to a minimum.

## SOME OF THE MOST COMMON METHODS IN ORGANIC FARMING

With **crop rotation**, you avoid sowing the same plant species in successive years, so that pests and weeds don't have time to adapt to the environment and proliferate. This practice also encourages a more rational and efficient – as well as less intensive – use of the nutritional substances in the soil. Moreover, this method employs disease-resistant crop varieties which are suitable for the specific environment;

**mulching**, which means spreading a layer of hay or fresh grass over the ground to protect it from extreme temperatures and to inhibit the growth of weeds;

the **green manure** technique, which involves planting certain plants (broad beans, clover, oats, vetch, peas), which are buried in the soil after they have finished flowering, providing organic matter to enrich the soil without having recourse to chemical fertilizers;

**planting hedges and trees**, which increases biodiversity and provides a home for the natural predators of pests, as well as creating an efficient physical barrier against external sources of pollution;

**intercropping**, in other words simultaneously cultivating several crop varieties which form relationships with each other, to the point where they help each other fight off pests, or simply to increase yields.

**Organic farming promotes balance between the production system and the environment it operates in. It's based on four ethical principles: health, ecology, care and fairness. As regards this last point, it's no accident that the objectives of organic-production policy incorporate the objectives of the Common Agriculture Policy, which provides for financial support for farmers who respect the EU rules on organic agriculture, so that their efforts are rewarded fairly. The growing demand from consumers, ever more of whom want rigorously certified organic products, also creates a virtuous circle which boosts the development of the organic market.**

The organic farms which operate in conformity with Reg. (EU) 2018/848 also have to apply rigorous criteria when it comes to livestock welfare, ensuring the health and natural expression of each species throughout its life cycle. There are many advantages to organic farming, for consumers – as they purchase healthy food –, producers – as they avoid using harmful chemical substances –, and the environment – thanks to the low environmental impact of organic production.

Every farmer who converts to organic and runs their farm in accordance with the principles and methods of European organic is driven by a strong sense of responsibility regarding environmental issues, and moves towards more careful use of energy and natural resources, in order to conserve water supplies and preserve their quality, enhance the fertility of the soil and encourage biodiversity.

## REGULATION (EU) 2018/848: OBJECTIVES AND GENERAL PRINCIPLES FOR EUROPEAN ORGANIC

The right choice for the environment, for the health of the soil and for consumers.

### OBJECTIVES

Reg. (EU) 2018/848 states that organic farming is a farm-management and food-production system which helps protect the climate and the environment, preserve the fertility of the soil in the long term, and attain a non-toxic environment. It also promotes the adoption of short supply chains and local production, and encourages the preservation of rare and indigenous species in danger of extinction. Further objectives are to safeguard our natural heritage, and to avoid and combat the impoverishment of organic matter in soil; this is why it makes use of seeds and animals with a high level of genetic diversity and resistance to diseases. A lot of care is also taken to ensure animal welfare.

### OVERALL PRINCIPLES

**Organic agriculture is a sustainable management system based on the following general principles:**

- a) respect natural cycles and systems, and enhance the state of soil, water and the air, the health of plants and animals and the balance between them;
- b) preserve elements of the natural landscape, such as natural heritage sites;
- c) ensure that energy and natural resources such as water, soil, organic matter and the air are used and treated responsibly;
- d) produce a wide variety of foods, as well as other products of agriculture and aquaculture, of the highest quality and which meet consumer demand for products obtained through the use of procedures which do not damage the environment, human health, plant health or animal health and welfare;
- e) guarantee the integrity of organic production at all stages of producing, processing and distributing foods for humans and animals;
- f) design and manage appropriate biological processes based on ecological systems using natural resources within the management system;
- g) adapt the production process, whenever necessary and under the auspices of the Regulation in question, in order to allow for sanitary conditions, regional differences in terms of the balance in ecosystems, the climate, local conditions, the various stages of development and appropriate animal husbandry practices;
- h) keep animal cloning, artificially induced polyploidy in animals and ionizing radiation out of the whole organic food chain;
- i) maintain a high level of animal welfare by respecting species-specific behavioural needs.



**DOWNLOAD**  
General principles  
REG. (EU) 2018/848



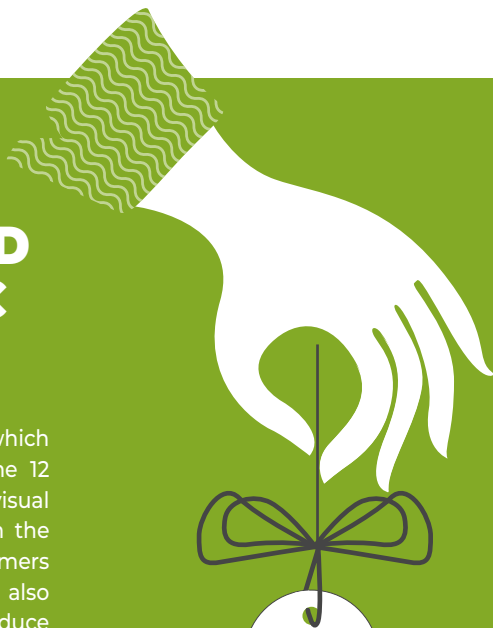
## HOW TO READ THE ORGANIC LABEL

**1** The European organic logo, which features a leaf surrounded by the 12 stars of the EU flag, provides a visual identity to organic products from the European Union. This allows consumers to identify organic products and also helps farmers to market their produce around the EU.

The organic logo can only be used on products which have been certified as organic by an authorized control body. This means they have met stringent requirements in terms of production, processing, transportation and warehousing.

**2** The place of cultivation or breeding is also stated on the labels of organic products. The country or region may be given (e.g. GROWN IN ITALY or GROWN IN ITALY/MARCHE) when at least 95% of the base materials it's made up of come from the same country or region.

**3** The label also shows the code assigned by the relevant authority to the body in charge of certification which checks that the product conforms to EU regulations. In Italy, these bodies must be approved by the Ministry for Agriculture, Food Sovereignty and Forests.



## THE ORGANIC CERTIFICATION SYSTEM IN EUROPE: HOW TO RECOGNIZE ORGANIC PRODUCTS ?

When we talk about organic, the key words are safety and transparency, especially concerning consumers. In European Union member states, organic farming is governed by Regulation (EU) 2018/848, in force since 1 January 2022. The Regulation contains the requirements to meet for every aspect of organic crop cultivation and animal husbandry: production, processing, labelling, transportation, warehousing and importation of organic products from outside the EU.

In Europe, every member state assigns either public or private control bodies the task of carrying out rigorous inspections, under the supervision of the central authorities. The member state assigns a unique code to each body assigned to controlling and certifying organic production, which is printed on the label.

Farms that meet the requirements laid down in the Regulation can obtain certification from one of the authorized control bodies and use the label and logo given only to European organic products: the green leaf. As well as carrying out an initial inspection for certification, control bodies carry out one or more annual spot checks in order to ensure that the conditions for certification are maintained.

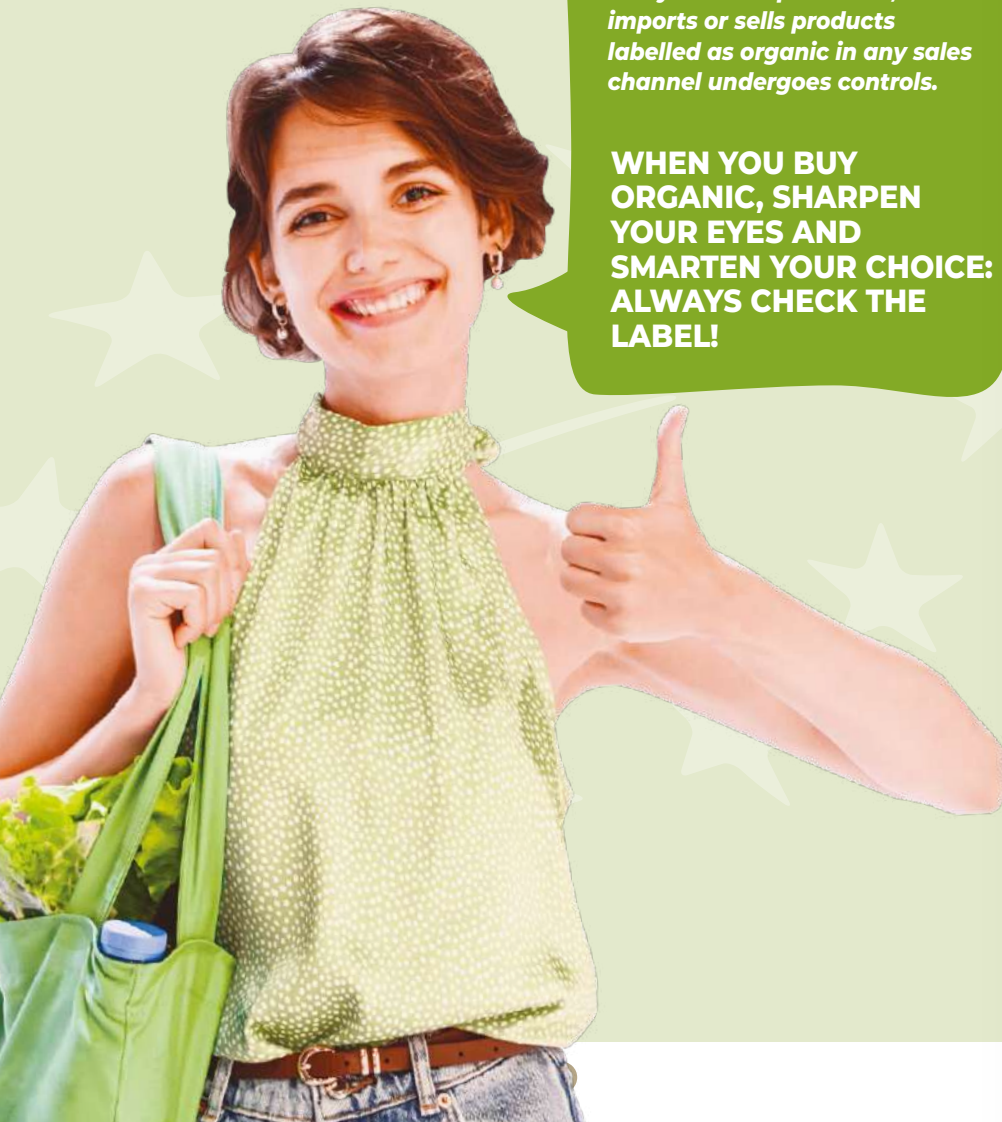
The logo can only be used on products which contain at least 95% organic ingredients, and the remaining 5% have to adhere to stringent criteria. An ingredient cannot be used

in organic and non-organic form in the same product.

When a product bears the European label, it shows that the product has been recognized and certified as organic by the European Union. This is guaranteed by the monitoring system foreseen by Reg. (EU) 2018/848, which is overseen in Italy by the Ministry for Agriculture, Food Sovereignty and Forests, by regional and provincial governments and by ACCREDIA (the national accreditation body).

The label is the main way to identify and distinguish an organic product from a conventional one. If a product is packaged, the label is located directly on the packaging, whereas for loose products it has to be displayed near the produce or as a transaction certificate.





*It's important to point out that organic certification involves all levels of the production chain: not only those who produce the food, but also everyone who processes, imports or sells products labelled as organic in any sales channel undergoes controls.*

**WHEN YOU BUY ORGANIC, SHARPEN YOUR EYES AND SMARTEN YOUR CHOICE: ALWAYS CHECK THE LABEL!**

# ORGANIC PRODUCTION PRINCIPLES

## ORGANIC CROP PRODUCTION

Organic crop production has to contribute to sustaining and enhancing soil fertility, as well as to preventing erosion.

The fundamental elements of organic crop production are:

- soil fertility management;
- selection of appropriate, resistant plant varieties and animal species;
- multi-annual crop rotation using legumes and green manure;
- organic fertilizing and cultivation techniques which make it possible to avoid using synthetic plant medicines.

**Genetically modified organisms** and the products derived from or containing them are incompatible with organic production.



## PRODUCING PROCESSED ORGANIC FOODS

The production of processed organic foods is based on the following list of principles:

- at least 95% of the ingredients must come from organic farming;
- the use of food additives, non-organic ingredients, micronutrients and technological adjuvants must be limited, and only natural-origin additives may be used;
- substances and processing methods which could mislead consumers about the true nature of the product must not be used;
- organic foods must be processed with care, preferably using biological, mechanical and physical methods;
- the use of nanomaterials is forbidden.



## ORGANIC LIVESTOCK PRODUCTION

In organic livestock production, there's a very close link between husbandry practices and the land available for use, in part to conform to the Nitrates Directive (91/676/CEE), which foresees a maximum number of units per hectare, and also to ensure that the distribution of livestock manure on the land does not exceed the quantities laid down in the Directive. All organic livestock farms must have outdoor spaces available and focus attention on satisfying the behavioural needs of the different species. The principle of disease prevention applies also to organic livestock farms, and involves adequate stalling conditions, low livestock density (guaranteed minimum spaces are required both indoors and outdoors) and appropriate husbandry practices.

If the precautions and the phytotherapy or homeopathic remedies used are insufficient, the farmer may use synthetic allopathic veterinary medicines (antibiotics included), but must double the withdrawal period.

### SPECIFIC PRINCIPLES:

- select animal species for their ability to adapt to local conditions, their reproductive capacity, their longevity and their resistance to disease and other health issues;
- practise site-adapted and land-related livestock production;
- apply animal husbandry practices which reinforce the animals' immune systems and stimulate their defences against disease, including regular exercise and access to spaces in the open air and to pastureland when weather conditions permit;
- administer organic feeds containing organic plant-based products grown as far as possible on the same farm, and preferably supplemented only by products from other local organic farms;
- raise the animals providing them with the best possible living conditions in order to safeguard their health and welfare.



## ORGANIC AQUACULTURE

Aquaculture is one of the most flourishing activities in the organic sector. Its development has been helped by a specific EU regulation (Reg. (EC) no. 710/2009, subsequently implemented by Reg. (EU) 2018/848 and amendments to the same) coming into force, and by the growing demand for organic and high-quality seafood in the biggest European markets.

The growing consumption of seafood – caused in large part by new eating trends around the world – has led to the creation and intensive development of fish farms that generate low-quality end products and require the administration of large amounts of medicines and non-natural products to boost the growth and development of the species being bred. **Organic aquaculture is different, as it cares about the health and welfare of the aquatic animals (like in organic livestock production) and the methods it uses ensure:**

- large spaces which allow the water to be well oxygenated and remain healthy;
- freedom to graze for fish, with density levels as close as possible to natural conditions;
- avoidance of closed recirculation systems where waste is pumped back into the farm;
- structures which respect the behavioural and health needs of the aquatic organisms being bred, in order to limit the onset of disease and subsequent use of medicines. In organic aquaculture, the approach to animal health focuses on disease prevention.

### WHAT ARE THE ANIMALS FED IN ORGANIC FISH FARMS?

Organic feeds containing ingredients produced using organic farming methods; if necessary, products from sustainable fishing can be incorporated. Moreover, in organic fish farms the preventive administration of antibiotics, and the administration of synthetic chemicals, hormones and hormone derivatives in order to artificially stimulate reproduction, is prohibited.

The main objective of running an organic fish farm is to obtain high-quality products through the use of techniques which cater to the animals' specific needs and allow them to lead a healthy life.



# SUSTAINABILITY

## ORGANIC AGRICULTURE AND BIODIVERSITY

Out of the various principles guiding organic methods, biodiversity is one of the most crucial for farming and food production, as it's through diversity that connections and interactions between species are activated, leading to dynamic, productive and sustainable agroecosystems.

Synthetic chemicals are not used in organic farming, in order to protect the health of the soil, the local ecosystems and people.

Each link in the organic production chain is designed to maintain and, wherever possible, enhance the diversity of plants and animals, and most of the farming methods employed positively influence biodiversity. The correct application of the organic farming method in itself constitutes a tool for preserving biodiversity in both natural and rural settings:

- the use of only organic fertilizers and the prohibition of synthetic pesticides and fertilizers lead to greater biodiversity in the soil and increase the concentration of microorganisms living in that same soil;
- crop rotation, when accompanied by an appropriate choice of plant varieties, increases biodiversity on a genetic and species level;
- the adoption of local varieties and indigenous species helps sustain and safeguard biodiversity and the unique features of different areas;
- the introduction of the natural enemies of pests (biological control) instead of pesticides means that the populations of useful organisms and microorganisms are not adversely affected;

## ORGANIC AGRICULTURE AND CLIMATE CHANGE

The foundation of the organic farming method lies in recycling organic matter as a way of preserving and enhancing the fertility of the soil, which becomes better able to retain large amounts of water, prevent erosion and increase its carbon content, an important factor in the fight against climate change. The **'Climate Change and Land'** report published by the United Nations Intergovernmental Panel on Climate Change (IPCC) highlights the relationships between climate change and the way in which land is worked. The intensive use made of the soil in agriculture is responsible for almost a quarter of all the greenhouse-gas emissions caused by human activity.

Intensive farming, monoculture and the use of synthetic weedkillers, decontaminants and fertilizers are some of the factors which most impoverish the soil. Degraded soil has a reduced capacity to retain and store carbon, which contributes to global threats like climate change. The agroecological approach, of which organic and biodynamic farming constitute the most advanced and efficient models, inverts this dangerous trend.



## ORGANIC AGRICULTURE AND SOIL

Soil is a precious resource where 90% of the biodiversity on the planet (in terms of living organisms) is concentrated and on which 95% of food production depends. In organic farming, the preservation and enhancement of the fertility of the soil is a vital prerequisite in order to provide healthier, more balanced environments for crops and is achieved by avoiding the use of synthetic chemicals and recycling organic matter. Healthy soil is crucial if we want to produce resilient crops and preserve our ecosystems, because it helps retain water, sustain a variety of essential living organisms and conserve carbon stores, all factors which help mitigate climate change.

Safeguarding the fertility of the soil is the only way to meet the growing demand for human foods, animal feeds and fibres now and in the future.



## ORGANIC AGRICULTURE AND CIRCULAR ECONOMY

A circular economy is a model of production and consumption designed to use resources more efficiently and to reduce waste and the production of refuse by extending the life cycle of products as much as possible. Organic farming is based on the sustenance and enhancement of life and aims to nourish plants mainly through the action of the soil ecosystem. Based on the principles of health, ecology, fairness and care, it's a perfect circular-economy model which supports and encourages healthy soil, plants, animals, human beings ... and a healthy planet. Many agroecological practices constitute concrete examples of circularity.



The "Being Organic in EU" project aims to make a telling contribution to creating a sustainable food system in line with the European Green Deal and the Farm To Fork and Biodiversity 2030 strategies, in order to aid the transition towards food-production chains that are more ethical, healthy and resilient in terms of climate and ecology, from the producer to the consumer, and transform the EU into a modern economy with greater efficiency in its use of resources and competitiveness, ensuring that:

- **by 2050 there will be net zero greenhouse-gas emissions;**
- **economic growth is detached from the exploitation of resources;**
- **no people and no places are neglected or ignored.**

We can see that the initiatives put in place by the project are in line with Green Deal objectives and strategies, and contribute to the implementation of the 'EU Action Plan for the Development of Organic Agriculture'.