



Training Handbook: The New EU Organic Regulation (2018/848) for Producer Groups

Part 2: Organic Production Rules

Version 1.2 December 2023



In cooperation with :



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FiBL, Version 1.2, December 2023

Overview of the Handbook

The Training Handbook on the New EU Organic Regulation for Producer Groups consists of three parts:

Part 1: Introduction and Basic Requirements

Part 2: Organic Production Rules

Part 3: Internal Control System (ICS)



See also separate Part 1 and Part 3

Content Part 2

- 2.1 Organic plant production rules
- 2.2 Organic and non-organic production units and activities
- 2.3 Processing and traceability in a Group of Operators



2.1. Organic crop production rules

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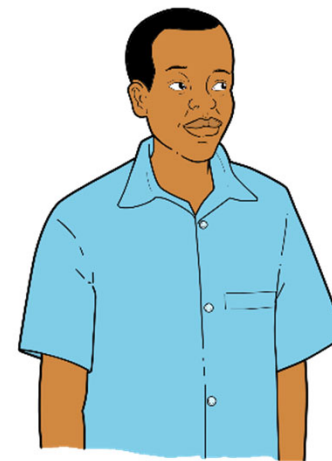


Photo: Judith Riedel (FiBL)

Organic production rules for Group of Operators

The relevant organic rules for the group's members can be summarised in simpler 'internal production rules', which are checked and confirmed by the CB.

- **ICS manager needs to be aware of the EU organic regulatory production rules**
 - may need to look up specific sections of 2018/848 and secondary regulations referenced in this training.
 - clarify with CB in case of doubt.
- **ICS inspectors need training in the internal organic production rules** plus additional clarification / details if relevant
- **Farmers need to understand the basic requirements (Do's and Don'ts)**, but mainly need training and support in organic production.



What are the rules to be a certified organic farmer?



→ See also Part 3: ICS

Overview of organic production rules applicable to groups of operators in Third Countries and their members

What production rules apply to our organic farm members or to us as a group of operators?



The most important production rules of Regulation 2018/848 (use the “consolidated version”) are in

- **Part III of the Regulation: Art 9 to 12**
- **Annex II, Part I Plant Production Rules**
+ related Reg. 2021/1165 on authorised substances
- **Art. 16 & 23 with Annex III & Part IV or Annex II**
(product handling and processing by members & GoO)
- **Control in Third Countries: Reg. 2021/1698:** especially Art. 10 and 24

Note: Reading the regulatory texts is complex. Some specific rules/procedures apply only to operations in EU member states. Some articles include a specific section applicable to ‘Third countries’, whereas for others, relevant rules for application in Third Countries under the ‘compliance scheme’ are indicated in the Regulation on Control in Third Countries 2021/1698. Some articles may apply to operators but not necessarily to ‘groups of operators’.

→ Summary of applicable rules and detailed references are indicated in this handbook

Overview of changes in organic crop production rules

There are some changes, but the basic rules for plant production as relevant for small producers have not changed so fundamentally.

Rules that have become stricter:

- **New restrictions and less flexibility especially for plant protection.** New lists of authorised substances;
- Retroactive recognition of conversion period
- Use of non-organic seeds and planting materials
- Stricter conditions for parallel production
- Requirements on crop rotation and crop diversity
- Documentation and separation of production units for members in GoO



The most significant change for operations will be that the detailed EU crop production rules will need to be met in a 'compliant way', no longer in an equivalent way! This may imply some significant changes.

General requirements for plant production

Organic crops, except those which are naturally grown in water, **shall be produced:**

in living soil

or in living soil mixed with materials allowed in organic production

in connection with the subsoil and bedrock

Hydroponic production is prohibited

OK to grow seedlings or transplants in containers for later planting,

Exceptions for certain plants in pots and for a few plants

All techniques used shall prevent or minimise any contribution to the contamination of the environment.



Reg 2018/848 Annex II,
Part I, I.1-I.6

Origin of plants and plant reproductive materials



For production of organic plants and plant products, only ORGANIC plant reproductive material (PRM) shall be used.

- **‘Plant reproductive material’ means plants and all parts of plants, including seeds,** at any stage of growth that are capable of, and intended for, producing entire plants.
- **If from the farmer’s own holding:** Use of organic and in-conversion PRM permitted.

Organic Plant Reproductive Materials (PRM):

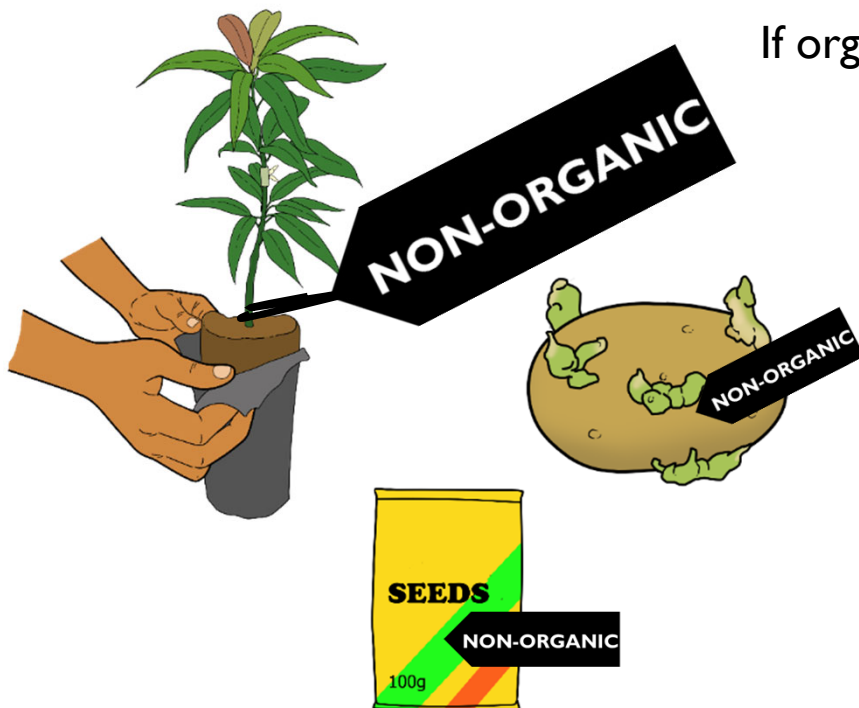
- **The mother plant** is under certified organic production for at least one generation, or, in the case of perennial crops, for at least one generation during two growing seasons.
- **All multiplication practices** shall be carried out under certified organic management
- Specific additional rules apply for producing RPM to be sold as an organic product (art 13, Annex II, I.8)



Reg 2018/848 Annex II, Part I, I.8

Operators shall give preference to organic RPM suitable for organic agriculture.

Exceptional use of non-organic plant reproductive material (PRM)



If organic PRM is not available → In-conversion PRM shall be used

Use of untreated non-organic PRM in an organic or in-conversion production unit in a third country may be authorised by the CB:

- **Only when organic or in-conversion plant reproductive material is not available** in sufficient quality or quantity in the third country (of the operator)

Note: difference to EU - within the EU use can be authorised only in case of confirmed un-availability in official databases

- **Must be authorised BEFORE** sowing or planting
- **Authorisation granted only for one season** at a time; CB to keep list of quantities authorised



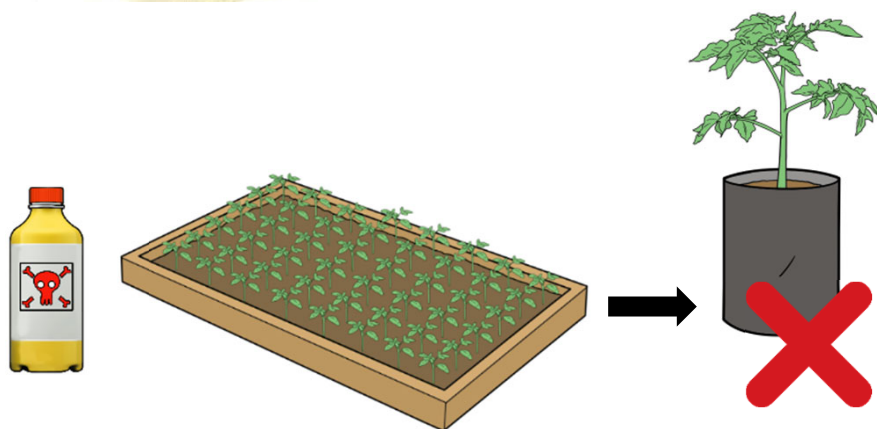
Reg. 2018/848 Annex II, Part I, I.8. 5.2

Conditions for exceptional use of non-organic PRM



The non-organic PRM (incl. seeds!) may not be treated after harvest with plant protection products other than authorised for organic production

If treated seeds are used in the organic unit (even for intercrops that are not sold as organic) → land needs to undergo conversion.



Non-organically grown SEEDLINGS are not permitted!

= young plants from the germination of seeds and not from cutting. Only species that have a cultivation cycle completed in one growing season, from the transplantation of the seedling to the first harvest of product.

- **Seedlings must be grown in line with organic rules**
- **The seeds used to grow the seedling shall be organic, but use of non-organic untreated seeds may be authorised by CB as 'organically usable' seedling (cannot be sold as 'organic seedling')**

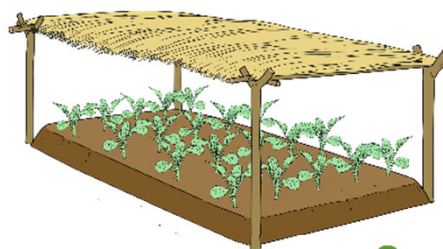


Reg. 2018/848 Annex II, Part I, I.8.5.3

Implications for Groups of Operators and the ICS

ICS must inform members and ensure that :

- **for all certified organic crops only organic PRM or seeds** may be used **OR specified untreated non-organic seeds/PRM as approved** by the CB for the coming season.
- Seedlings for organic crops **MUST** be grown in compliance with organic rules



No use of seeds treated with unauthorised substances in organic fields (including crops not sold to the group)!

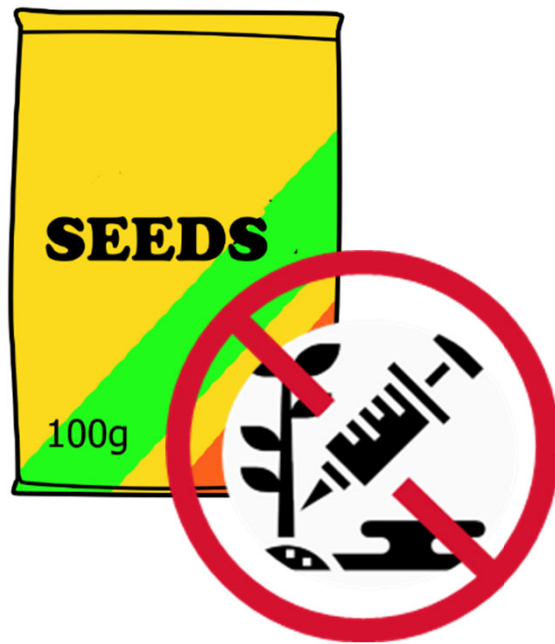


The ICS must check in internal inspection :

- ✓ use of organic seeds/PRM for all organic crops sold to the group
- ✓ and that **NO** treated seeds used in the entire organic unit (any crop)

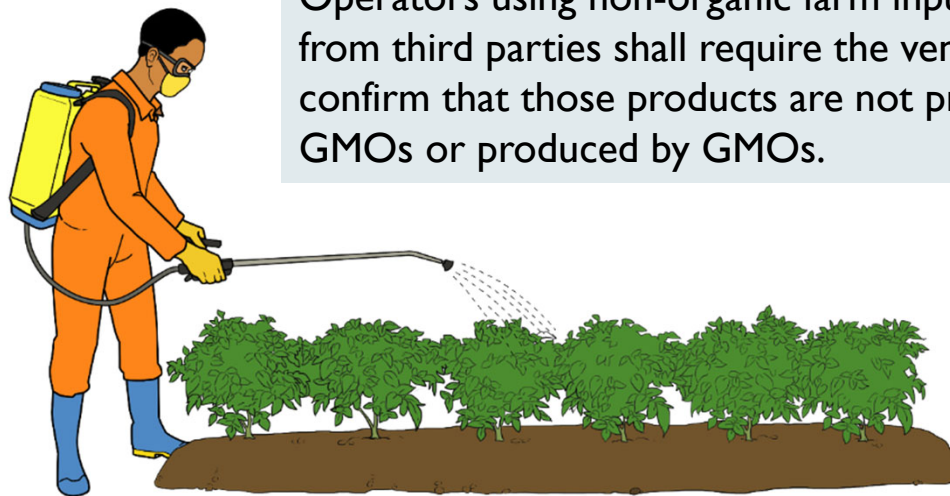
Note: GoO may need to support members to produce or source organic seeds / planting material.

Prohibition of the use of GMO



- GMOs, products produced from or by GMOs, shall not be used
- **in organic food or feed**
 - **or as plant protection products, fertilisers, soil conditioners, plant reproductive material, micro-organisms, food, feed, processing aids, or animals in organic production**

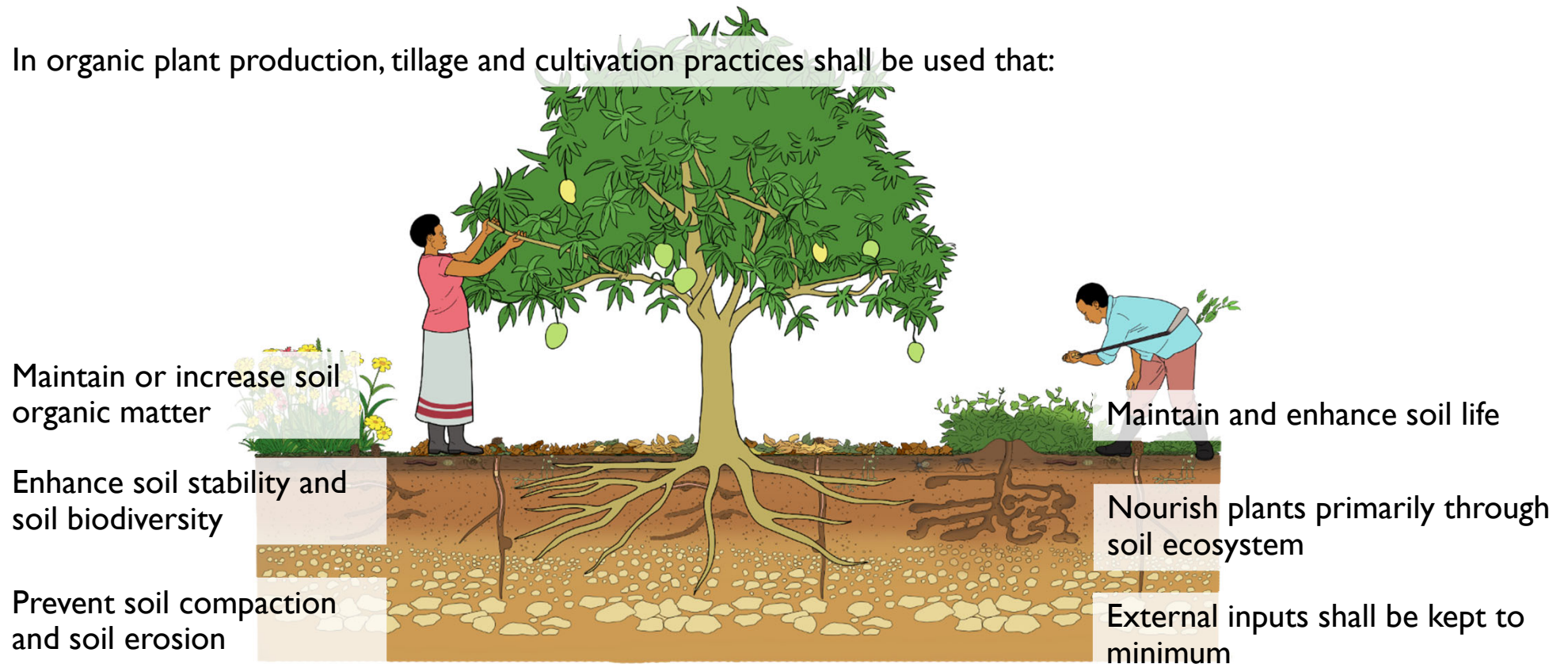
Operators using non-organic farm inputs purchased from third parties shall require the vendor to confirm that those products are not produced from GMOs or produced by GMOs.



§ Reg. 2018/848 Art. 11

Organic soil management principles

In organic plant production, tillage and cultivation practices shall be used that:



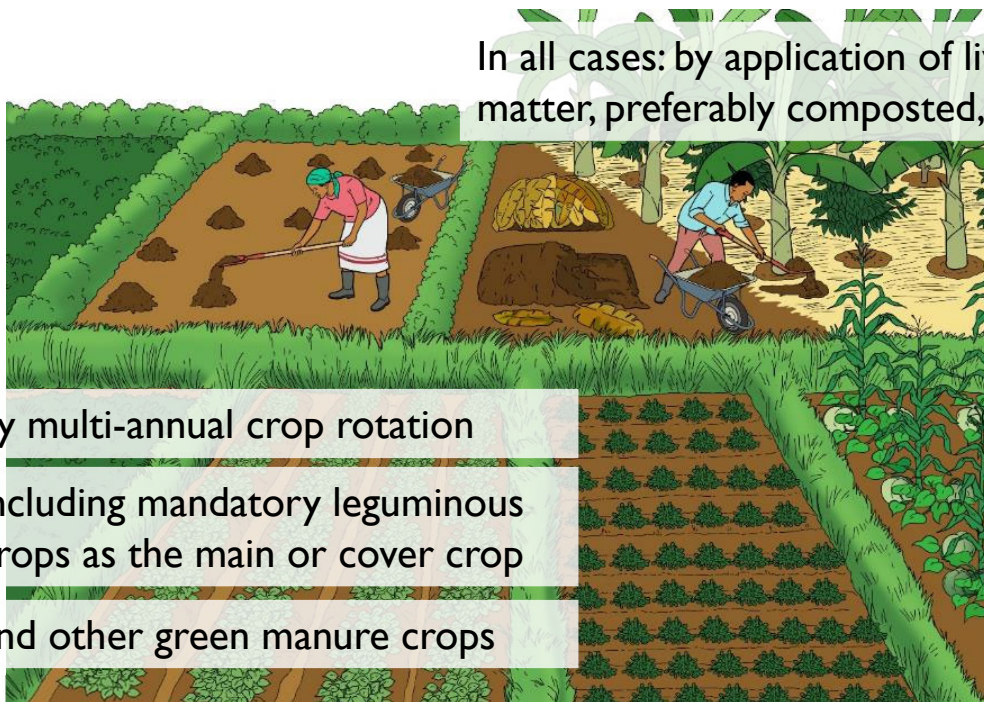
Reg. 2018/848 Art 6 and Annex II, Part I, I.9

Crop rotation to maintain and increase soil fertility

The fertility and biological activity of the soil shall be maintained and increased:

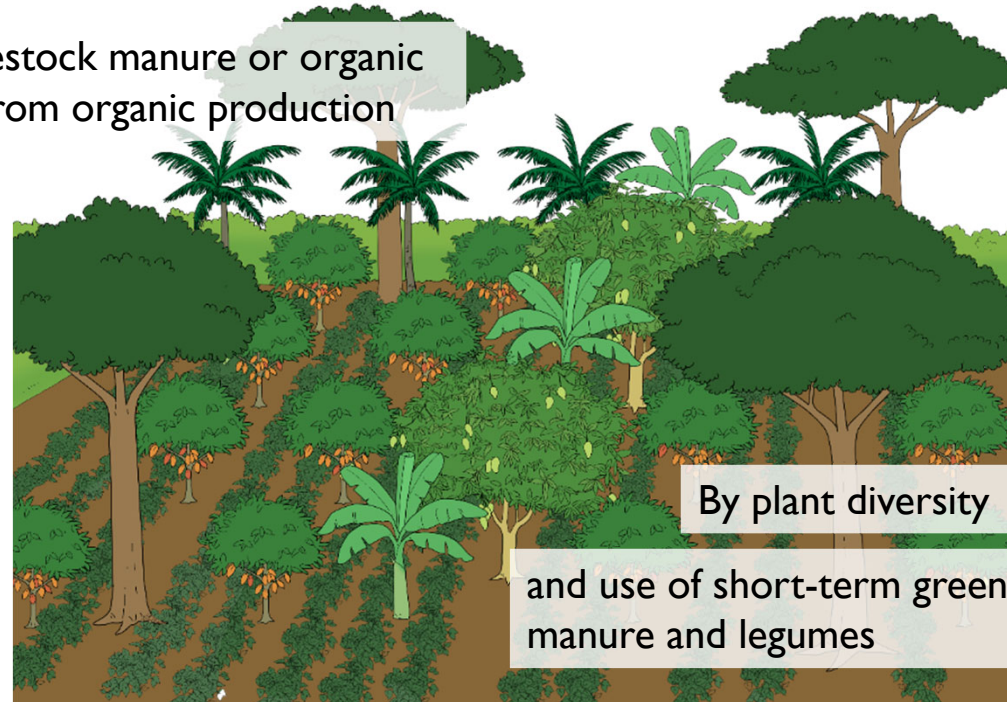
ANNUAL CROPS (except grassland and perennial forage):

In all cases: by application of livestock manure or organic matter, preferably composted, from organic production



by multi-annual crop rotation
including mandatory leguminous
crops as the main or cover crop
and other green manure crops

PERENNIAL CROPS (and greenhouse crops):



By plant diversity
and use of short-term green
manure and legumes

§ Reg. 2018/848 Annex II, Part I, I.9.2

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Use of fertilisers and soil conditioners

Total amount of livestock manure:
<170 kg nitrogen per ha per year

Preparation of micro-organisms and
biodynamic preparations may be used



For compost activation: plant-based preparations
and micro-organisms may be used



Reg. 2018/848 Annex II, I.9.3 - I.9.9

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Only if the nutritional needs of plants cannot be
met by crop rotation and application of livestock
manure or organic compost.



Use of fertilisers and soil conditioners authorised
for use in organic production (listed in EU
Regulation 2021/1165)

Authorised organic fertilisers (Reg. 2021/1165)

Only the products and substances listed in Annex II Regulation 2021/1165 may be used in organic production as fertilisers and soil conditioners for plant nutrition, some according to specific conditions, e.g. :

Composted or fermented mixture of vegetable matter; vermicompost

Animal manures (all not from factory farming):

- Farmyard manure; dehydrated poultry manure, composted animal excrements
- Liquid animal excrements, Guano

Products and by-products of plant origin, e.g. oilseed cake, cocoa husk

EXAMPLES on the list



Products and by-products of animal origin (not applied to edible part of plant; no Chromium detectable), e.g. blood meal, horn meal, bone meal

Microorganisms to improve soil conditions or nutrient availability

Saw dust, wood chips, composted bark, wood ash (wood not chemically treated)

For details and complete list see:



Reg. 2021/1165, Annex II

For the complete list with all details always check consolidated Version of Regulation 2021/1165 Annex II.

Authorised soil conditioners (Reg. 2021/1165)

Only the products and substances listed in Annex II Regulation 2021/1165 may be used. Various restrictions apply (e.g. minimum content nutrients, max level contamination), **please check in Annex II.**

Soft ground Rock Phosphate
Aluminium Calcium Phosphate
Basic Slag (Thomas Phosphate)

Calcium carbonate (chalk, ground limestone)
Industrial Lime from sugar production of vacuum salt production only.

Elemental Sulphur

Inorganic Micronutrient Fertilisers

EXAMPLES
on the list



Potassium sulphate, magnesium sulphate, calcium sulphate

Stone meal, clay minerals, organic rich sediments of freshwater bodies

Bio-Char

Xylite, Leonardite (mining by-products)

Humic and fulvic acids

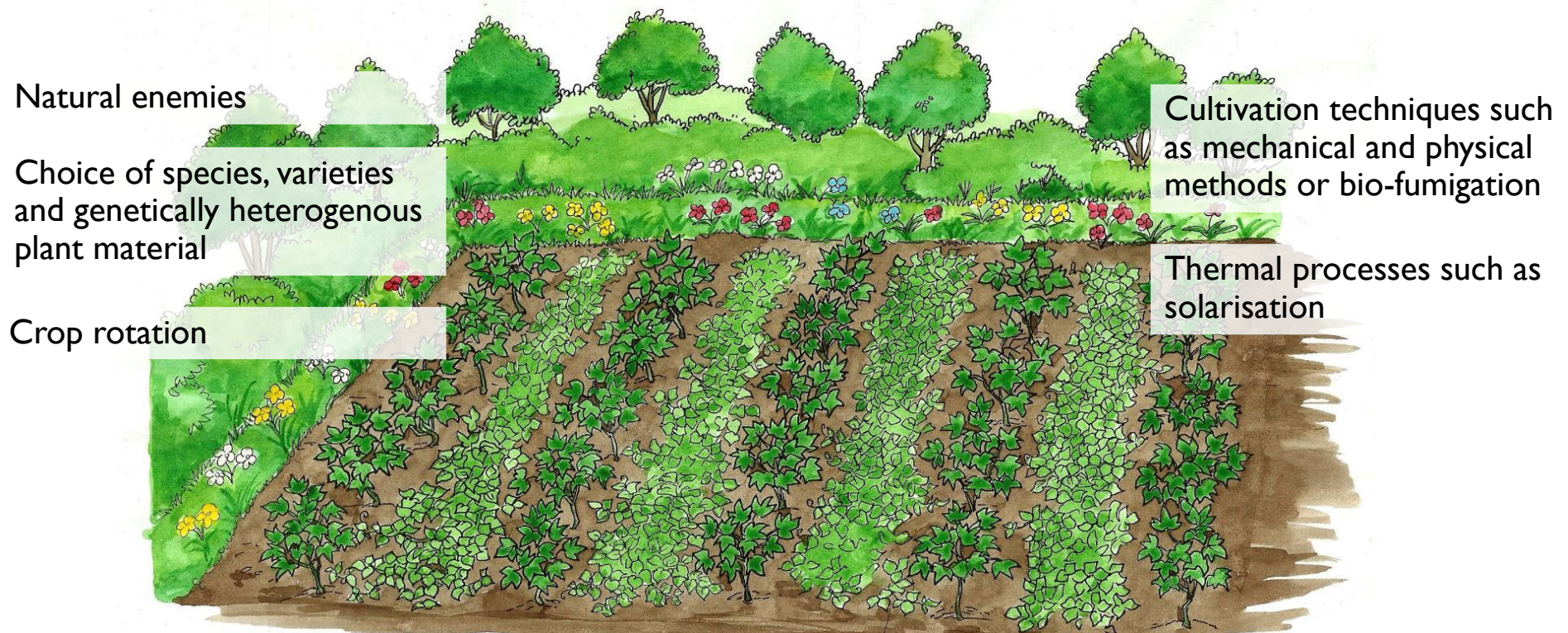
Off-farm input products are usually authorised by the CB for use in the group.



Reg. 2021/1165, Annex II

Organic pest and disease management principles in the Regulation

The prevention of damage caused by pests and weeds shall rely primarily on the protection by:



Reg. 2018/848 Annex II, Part I, I.10.1

Organic pest and weed management in the Regulation (2)

Only where these measures are not sufficient or in case of an ESTABLISHED threat to the crops, products and substances authorised in Annex I of Reg. 2021/1165 may be used.

Only 'to the extent necessary'

Keeping records for external inputs

- Proving the need for the products used
- Date and name of product, amount applied crops and parcels

Substances in traps and dispensers, other than pheromones: prevent contact with crops and release of substances into the environment

No use of any herbicides! Not even authorised substances like e.g. vinegar or fatty acids can be used for herbicidal purposes !



Reg. 2018/848 Annex II, Part I, I.10.2&3

Organic pest and weed management on smallholder farms

Use of well adapted and pest resistant varieties

Crop rotation is important to prevent build-up of pest populations, diseases and weeds!

Intercrops contribute to fewer pests and weeds!

Promote biodiversity and beneficial insects; trap cropping

Maintain a healthy, living soil for healthy plants that can withstand pests and diseases

Timely planting and harvesting

Mulching and cover crops suppress weeds; protect soil

Weed management by mechanical measures

Regular crop monitoring

Mechanical pest control (removal, trapping)

Plant Diseases: remove and burn plant parts

Use of home-made preparations

Authorised substances for plant protection

Only exactly the substances listed in Annex I of Regulation 2021/1165 may be used for plant protection purposes. Many substances in the list have very specific restrictions and new conditions.

All substances used must ALSO be EU authorised for use in EU agriculture in general (EU pesticide data base for active substances; Reg. 540/2011) → *New restrictions expected especially for local plant protection products containing local microorganisms and plant extracts* → *Check products with CB before use!*

Specified 'basic substances' from plant and animal origin and based on food, e.g. vinegar, whey, sunflower oil, onion oil, sodium chloride, cow milk, allium extract.

Microorganisms including viruses:
not GMO. Only if strain is EU authorised and listed in Reg. 540/2011.



Reg. 2021/1165, Annex I
Reg. 540/2011 (Consolidated updated version 2022)

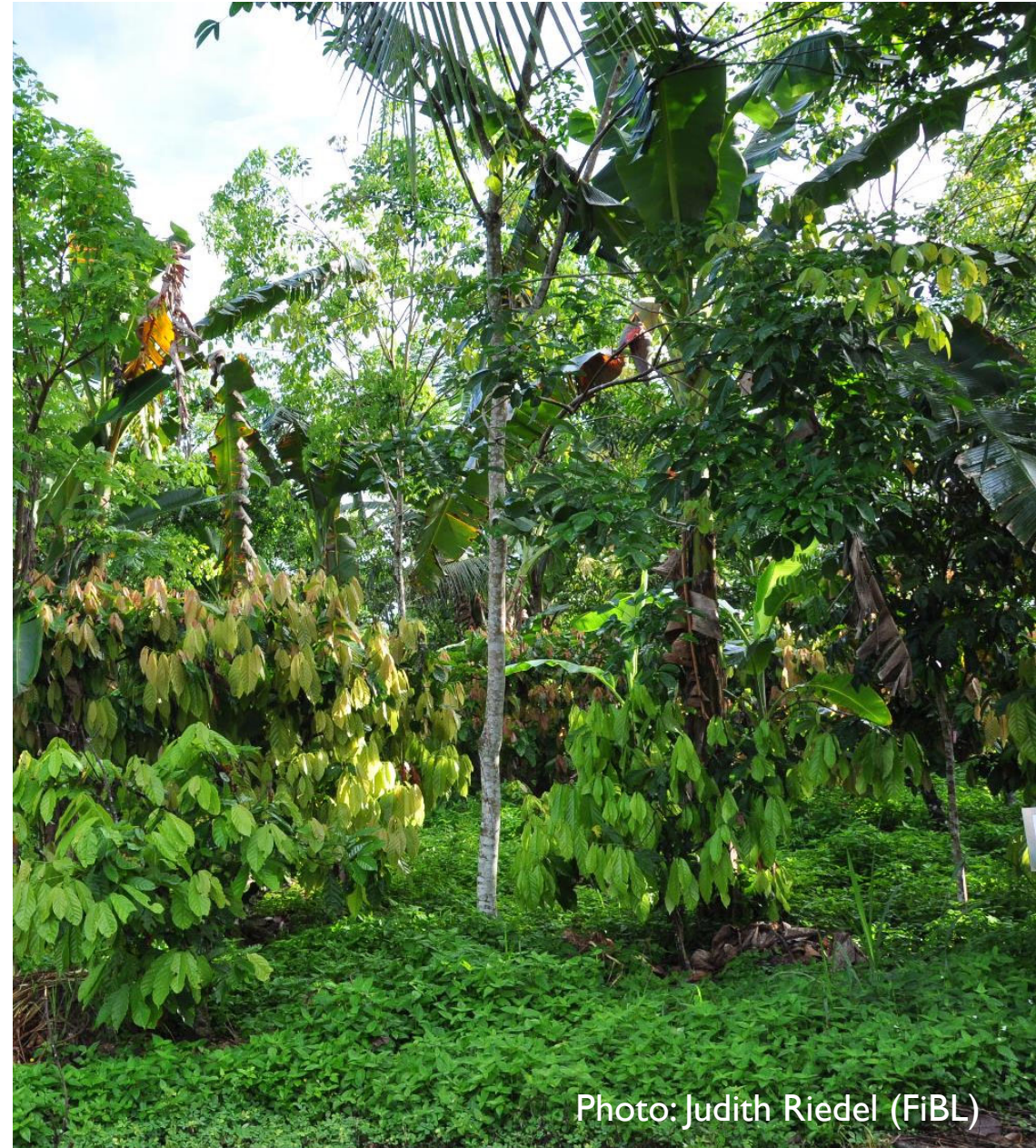
Examples of authorised substances:



Oils: citronella, clove, rape seed, spearmint, orange, tea tree, **azadirachtin** (from neem), **pyrethrins** from plants.
pheromones in traps/dispensers

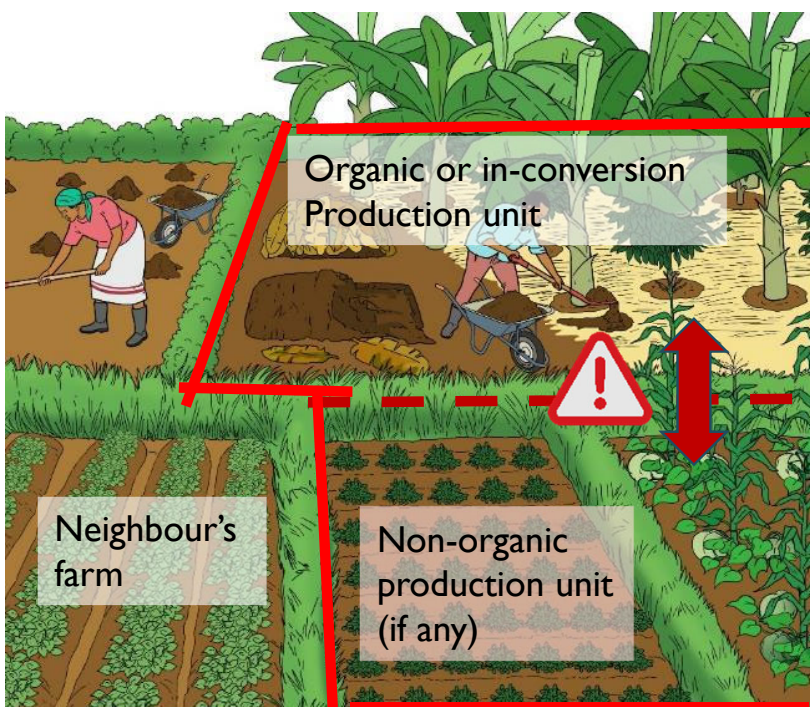
Sulphur, lime sulphur, copper oxide, oxychloride, hydroxide, Bordeaux mixture, tribasic copper sulphate, paraffin oils, kaolin (aluminium silicate), **diatomaceous earth, ethylene** (only bananas, potatoes; citrus), **spinosad**

2.2. Production units of members and conversion



Member's holding and production units

The entire holding shall be managed organically. Alternatively, it is permitted to split the farm holding into clearly and effectively separate 'production units' = land parcels (Art 9.2 & 9.7):



Reg. 2021/279 Art 5 (GoO list of members)
Reg. 2018/848 Art 9.2 & Art. 9.7

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Organic and in-conversion unit

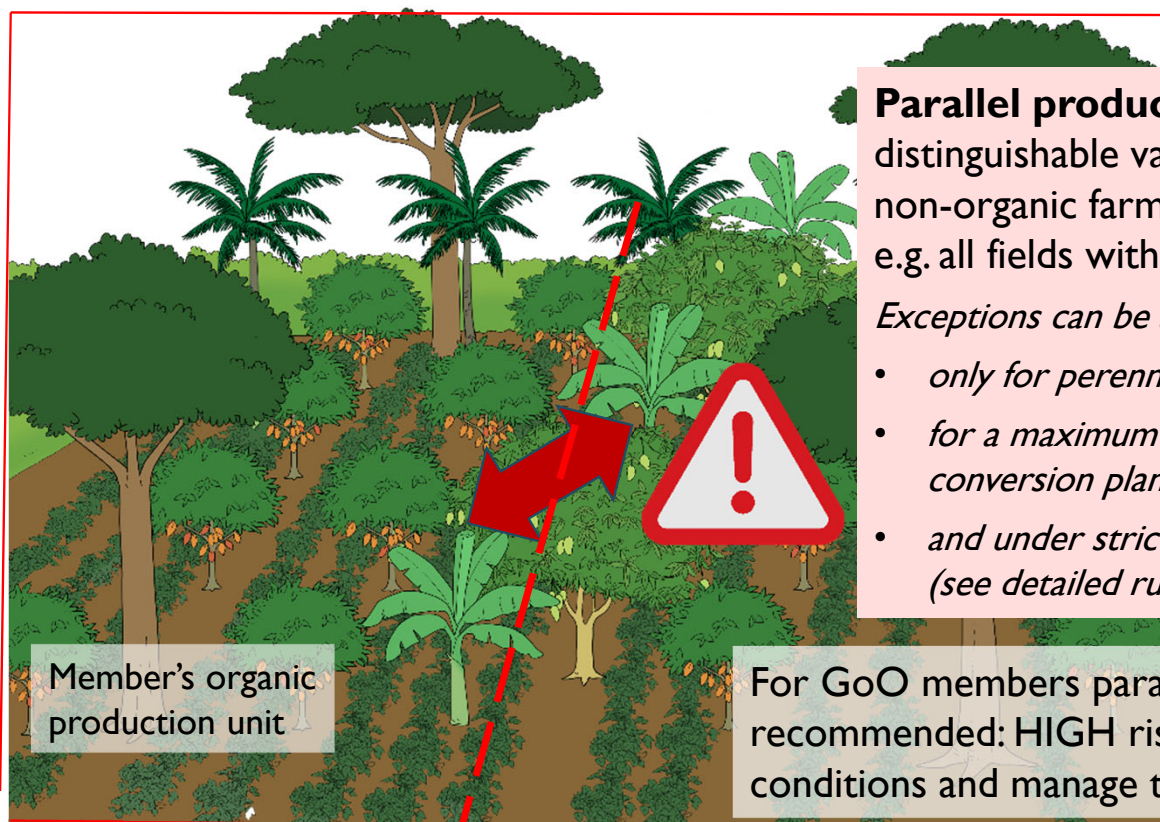
- ✓ **all crops in these units** (on the organic or in-conversion plots) **must be managed in line with the organic production rules!**
- ✓ **all land for production of organic crops shall be in the organic unit**, including rotation land.
- ✓ New: in-conversion unit must be separate from organic unit

Non-Organic Unit (normally for other crops; not sold to the GoO)

- ✓ **All non-organic fields and crops managed by the member need to be registered by ICS** and all details listed in the GoO list of members.

The ICS needs to register the member's entire farm holding under the management of the member - not just plots with crop(s) sold to the Group.

Organic and non-organic crops grown by a member



Parallel production of the same crop (not easily distinguishable variety) in the organic or in-conversion and the non-organic farm unit of the farmer is generally not permitted, e.g. all fields with cocoa trees shall be managed organically.

Exceptions can be authorised by the CB, but

- *only for perennial crops,*
- *for a maximum of 5 years until last plot is organic, with a conversion plan*
- *and under strict conditions for notification of each harvest period (see detailed rules in Art 9.8)*

Member's organic production unit

For GoO members parallel production (of perennial crops) is not recommended: HIGH risk, increases control; most ICS unable to meet conditions and manage the high risks.



Reg. 2018/848 Art 9.7 & 9.8

Conversion of land parcels to organic (plant production)



For Annual Organic Crops

- ✓ First organic harvest if sown at least 24 months after the begin of the conversion period



If the land has been contaminated with products or substances not authorised in organic production (including use of treated seeds!), conversion starts again.

For Perennial Crops

- ✓ First organic harvest **from 3 years** after the beginning of the conversion period onwards



Reg. 2021/848 Annex II, Part I, I.7

Begin of conversion and retroactive recognition

During the whole conversion period, all organic production rules must be met.

The conversion of a land parcel starts with notification to a CB and once all organic production rules are met. The CB sets the official begin of conversion (normally with first certification decision).



Art 10: No previous period (before notification or application to CB) **may be retroactively recognised as being part of the conversion period...**except where (...) the operator can provide **proof** that the land parcels were natural or agricultural areas that, for a period of at least three years, have not been treated with unauthorised products or substances.

CBs in Third Countries can (still) grant ‘retroactive recognition’ of a period previous to the notification/application to the CB as ‘part of the conversion period’ but under much stricter conditions.

- **Operators must request retrospective approval from CB and submit detailed documentation for each parcel of land** to prove that the land units were natural/not treated **for past 3 years:** maps of each parcel, geolocation coordinated, details of ongoing production
- **CB shall carry out risk analysis, risk based sampling and provide inspection report** of the operator after physical inspection to verify consistency of information

See details in Reg. 2021/1698 Art.24 (Third countries outside EU)



Reg. 2021/848 Art 10 & Annex II, I.7
in third countries Reg. 2021/1698:Art 10 & 24

Retro-active recognition in a GoO

The ICS has to have documented ICS procedures for registration of GoO members or adding new fields/activities for existing members. The procedure needs to be approved by CB.

It is the ICS manager's responsibility to approve new members or units/activities of members.



For retroactive recognition of conversion period of GoO members/member's land:

- ✓ Procedure for this shall be included in ICS procedures; documents to submit and process for recognition to be clarified with the CB
- ✓ **ICS will need to request retroactive recognition and present details** (e.g. size and geolocation of any plot, maps, photos, production details) **for each new member/land parcels** to the CB
- ✓ **Retroactive recognition can only be granted by the CB** (after risk analysis, sampling & detailed inspection):
- ✓ **Recommended to contact CB as early as possible** and check procedures and costs for retroactive recognition under the new rules.



Reg. 2018/848 Art 36 I g (ICS procedures), Art 10 & Annex II, I.7
Third Countries Recognition Conversion: Reg. 2021/1698: Art 10 & 24

→ See also Chapter 3

Product status during conversion: perennial crops

Begin of Conversion



Conversion Year 1

Products harvested in the first 12 months of conversion.

PRODUCT LABELLING

(No reference to organic)

Conversion Year 2+3

Products harvested 12 to 36 months after the begin of the conversion (food products of plant origin; single ingredient only)



After Year 3

Products harvested 36 months after the begin of conversion onwards can be labelled as ORGANIC



Example:

- Begin of conversion = Last application of prohibited inputs on the plot in August 2020
- Products harvested from August 2021 are 'IN-CONVERSION'
- Crop harvested from August 2023 are ORGANIC!



Reg. 2018/848, Art. 10

Product status during conversion: annual crops

FOOD PRODUCTS FROM PLANT ORIGIN

PRODUCT LABELLING

Conversion Year 1 (0 to 12 months)

Products grown 0 to 12 months after beginning of the conversion period are non-organic.

(No reference to organic)

Conversion Year 2+

Products harvested AFTER 12 months of conversion UNTIL 24 months may be market as IN-CONVERSION (single ingredient products only)



After Conversion

First organic harvest: crops sown at least 24 months after begin of conversion

Example:

- Last application of prohibited inputs was in August 2020
- Cotton sown in April 2021 and April 22: IN-CONVERSION product
- Cotton sown in April 2023 - harvested in Nov 2023 are ORGANIC!



§ Reg. 2018/848, Art. 10

2.3. Requirements for preparation, processing and traceability of organic products in a GoO

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Photo: FiBL

Key rules preparation/processing by members

Key production rules for preparation/processing by GoO Members, which must be carefully checked by the ICS and crosschecked by the external CB during member re-inspections:



Only authorised substances may be used at any time for pest control in any area where organic products are stored or handled.

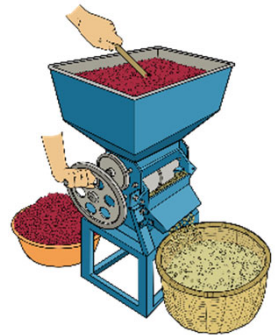


Reg. 2018/848 Art. 9;6
From 2024: Reg. 2021/1165 Authorised
Substances, Annex IV

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Precautionary measures to prevent commingling and contamination of the certified product at all stages (Art 9.6):

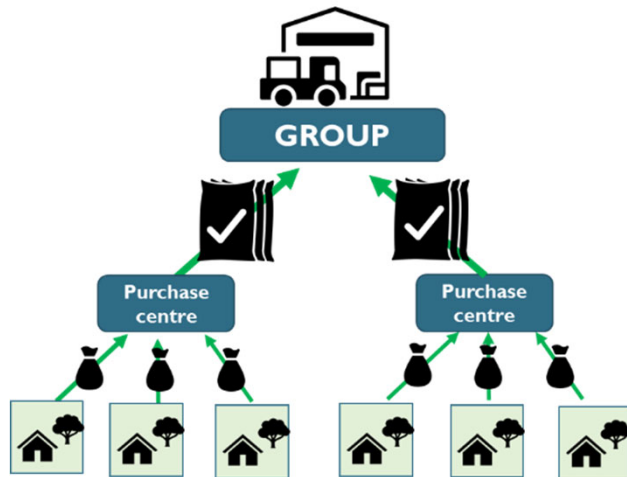
- during post-harvest activities by the member (e.g. drying, de-hulling etc)
- during on-farm storage (in clean containers, no contamination by, e.g. pest control in the farmers house, separate storage area is farmer stores also non-organic crops)
- during member's transport to the purchase centre



Note: the required separation measures if member's is be handling of the same crop in organic/conversion quality are tricky to manage in a GoO – possible with ICS supervision of member's harvest & handling activities.

Only specified products will be allowed for cleaning and disinfection in on-farm production, processing and storage
(will be included in Reg. 2021/1165).

Traceability and product flow control in a GoO



Art 36.1 (g): ICS shall comprise documented procedures on ... the internal traceability, which

- show the origin of the products in the joint marketing system and
- allow the tracing of all products of all members throughout all stages, such as production, processing, preparation or export
- include estimation and cross-checking the yields of each member

Note: the new requirements extend the ICS responsibility beyond the delivery to purchase centres – ICS responsible for traceability until sales by the GoO legal entity!

- At purchase, **member deliveries must be added up to cross-check** with yield estimates
- **A consistent lot identification system** from point of purchase through preparation and storage up to final sales to another unit is very important.
Note: In case of Major NCs, the measures will be much more severe if affected lots cannot be located as separate from rest of production!



Traceability records (Reg 2021/279, Art 5g)

- ✓ **Joint purchase and distribution of farm inputs** (incl. seeds or planting material to members)
- ✓ **Records on delivery of products from each member** to the joint marketing system. List of producers & quantities contributing to each lot must be recorded for traceability
- ✓ **GoO production, storing (in and out) and preparation records**
- ✓ **Sales of products by the GoO**

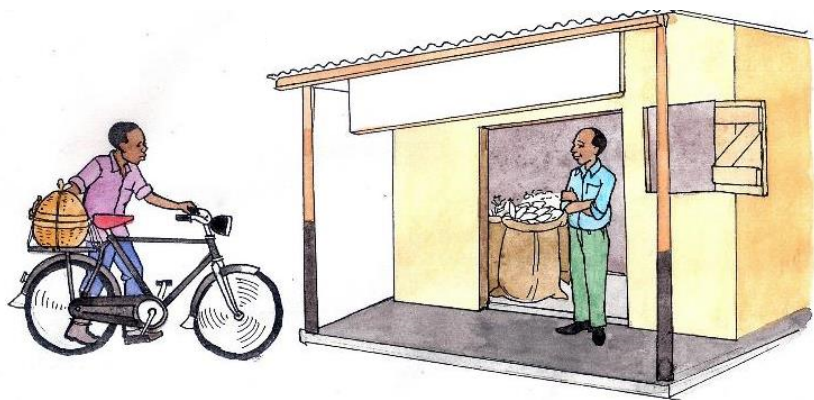
→ See also Chapter 3



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Reg. 2018/848 Art. 36.1 (g & h) (added by Reg. 2021/715)
Reg. 2021/279, Art 5, Reg. 2021/1698 Art 22 & Annex IV

Purchase / collection from members into the joint marketing system



If farmers deliver the products to a GoO purchase centre :

- ✓ Receipt to farmer and purchase record
- ✓ Documented Reception check: confirm organic status and yield estimate



If farm gate collection system by the GoO:

Detailed measures to be taken by collection driver :Annex III. I

Precautionary measures and traceability at the purchase centre (checked in ICS inspection)

- ✓ Purchase staff needs to be trained in organic production rules
- ✓ Purchase procedures to effectively ensure correct check and reception from members, immediate product identification as 'organic' and to prevent accidental mixing with non-organic (or conversion) products at all times
- ✓ Detailed purchase and traceability records (consistent lot number system)
- ✓ Organic products to be kept separated and labelled as 'organic' in designated organic areas that are not treated with unauthorised substances at ANY time during the year.



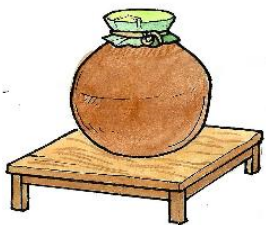
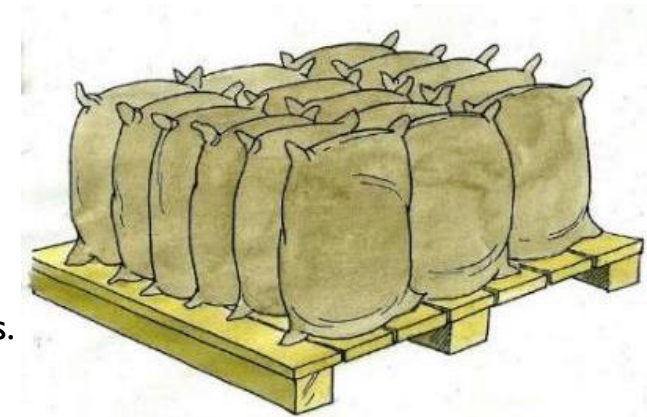
Reg. 2018/848:Art. 9.6,Art. 28,Annex III; 2021/771:Art 2

Each Purchase Centre must
be annually inspected by ICS

General principles product handling in the GoO

General principles for transport, storage and preparation (including 'processing') of organic products at all times → See details in Annex III

- Precautionary measures to prevent contamination: clean packaging or storage areas, only authorised substances used at any time for areas where organic products are handled)
- Specific rules for storage:
 - ✓ Clear identification of organic products at any time
 - ✓ Detailed measures in case of storing multiple qualities or other agricultural products. (→ Annex III, 7.1 & 7.4)
- ✓ Detailed traceability records (incl. storing, preparation/processing and sales records) required with consistent lot number system to trace lots back to GoO members.



'Processing' = any action that substantially alters the initial product, e.g. heating, curing, extracting, marinating, drying

If GoO performs 'processing' of organic products after receiving them from members → Detailed processing rules in Annex II/ Part IV apply and controlled according to CBs processing control procedures and requirements.



Reg. 2018/848: Art. 9.6, Art. 28, Annex III;
Rules for production of processed food: Annex II, Part IV