



# Guideline n°2 NOP – Plant Production

TS02 NOPV08

This guideline does not replace the current Regulation.  
It provides some explanations on main requirements for organic Plant production  
To know the organic production requirements, it is necessary to download and read carefully the  
NOP Regulation available on the USDA website:  
<http://www.ams.usda.gov/AMSV1.0/NOP>



## 1 Introduction

This abstract summarizes the NOP requirements for plant production further study of the standard is required for anyone involved in organic production.

As explained in the guideline NOP Certification process TS01 the Organic System Plan/Unit description must include all information explaining how the NOP requirements will be met.

The collection of wild plants and other vegetables may be considered as organic production under some conditions. For further details, please refer to Guidelines TS 08 (NOP) "Wild crop harvesting".

## 2 Prohibited practices (§ 205.105)

- The use of **genetically modify organisms (GMO)**
- The use of **ionizing radiation** and the application of **sewage sludge** are not allowed.
- **Burning** must not be used as a means of disposal for crop residues, except that, burning may be used to suppress the spread of disease or to stimulate seed germination.

## 3 Conversion period and land requirements (§ 205.202)

- Any field whose crops shall be certified organic must have had no prohibited substances applied to it for **a period of 3 years** immediately preceding harvest of the crop.
  - ⇒ **A verifiable field history of at least 36 months must be provided to ECOCERT.**
- The fields must also be managed in accordance with the provisions of § 205.203 through 205.206
- The fields must have distinct, defined **boundaries and buffer zones** to prevent or contact with prohibited substances applied to adjoining conventional land.

## 4 Soil Fertility and Crop Nutrient Management (§ 205.203)

A basic requirement of the NOP is that the natural resources of a certified organic operation, including soil and water quality, must be maintained or improved. The following practices are required **and will be**

evaluated by ECOCERT during the onsite audit. They may lead to non-conformities if they are not respected:

- Cultivation practices and tillage that enhance biological condition of soil and minimize soil erosion. The soil can be covered with crop residues and/or cover crops with a maintenance of a protective layer of vegetation on the soil surface
- Crop rotations (cf. part 5.), cover crops, and application of plant and animal material.
- The NOP has specific requirements for use of raw or composted animal-manure (see TS06\_NOP specific on that subject)

Further applications allowed are:

- Synthetic substances as allowed in the NOP (§205.601) for use in organic crop production
- Natural Substances not listed in the §205.602
- Raw or uncomposted plant materials
- Mined substances of low solubility or high solubility (when in compliance with the conditions in the NOP)
- Ash from burning of plant or animal material (if not treated or combined with prohibited substances). Ash from manure burning is prohibited.

## 5 Crop rotation practices (§ 205.205)

The following practices are required:

- The producer must implement a crop rotation including but not limited to sod, cover crops, green manure and catch crops.
- The rotation will provide for maintaining or improving soil organic matter content, pest management in annual and perennial crops, manage deficient or excess plant nutrients, and provide erosion control.
- An appropriate rotation, diversifying the species in a multiannual program, may include legumes to fix nitrogen in alternation with high nitrogen demanding crops, deep rooted plants and green manure. It may differ according to each operation's conditions (soil properties, climate, hydrology...) and farming practices.
- Perennial cropping systems employ means such as alley cropping, intercropping, and hedgerows to introduce biological diversity in lieu of crop rotation (§ 205.2).

## 6 Seeds, vegetative propagating material, and seedlings (§ 205.204)

- Seeds, planting stock and annual seedlings must be organically produced. If these are not available on the market, **non-organic seeds or planting stock may be used as long as they are untreated, or** – if not available – **only treated with materials listed in the NOP** (for the production of organic edible sprouts, the seeds must be organic).
- In any case, annual seedlings shall be organic.
- Non-organic planting stock (for perennial crops) must have been maintained under organic management for at least one year before the crop may be organic.
- The use of seeds, annual seedlings and planting stocks treated with not allowed synthetic materials equals application to the ground so that the fields have to undergo conversion again (3 years).

⇒ ***The operator has to prove his attempts to find organic seeds to ECOCERT (sheet available)***

## 7 Control of pests, diseases and weeds (§ 205.206)

In order to prevent crop pests, weeds, and diseases, the operator shall apply appropriate measures like crop rotation (which interrupt pest and diseases life cycles, introducing non-host or competitive crops), sanitation measures, and choice of appropriate varieties.

### **In addition:**

- **Pests** may be controlled by mechanical or physical methods like introduction of predators, lures, traps, and repellents.
- **Weeds** may be controlled by mulching with fully biodegradable materials, **cover crops**, mowing, grazing, hand weeding, heat or electrical means, plastic or other synthetic mulches (to be removed at the end of growing or harvest season).
- **Diseases** may be controlled by management practices that suppress the spread of diseases or application of natural biological, botanical, or mineral input.
- **Only if the practices mentioned above are insufficient**, the producer may use materials as allowed by the NOP (either natural substance not listed in the § 205.602 or synthetic substance listed in the §205.601).

- ⇒ *If operators use commercial inputs, ECOCERT has to check in detail all active and non-active ingredients in order to verify their compliance.*

## 8 Post-harvest handling (§ 205.270 – 205.272)

- Harvest, transport, and storage of organic products must be done in a manner that avoids commingling with nonorganic products and protects organic products from **contact** with prohibited substances.
- Special care must be taken not to use or re-use (without thorough cleaning) **packing materials** that has been in contact with substances which might compromise the integrity of organic products.

## 9 Requirements concerning inspection

A certified operation must maintain records concerning the production, harvesting and handling of organic products (§ 205.103). These records must be adapted to the particular business conducted, and fully disclose all activities and transactions in sufficient detail as to be readily understood and audited.

To facilitate the inspector's work, please keep the following documents – as far as applicable - ready for your inspection.

- Field maps indicating contamination risks and buffer zones
- Maps of storage sites
- Field history with information about all inputs used during the last three years (for a first inspection)
- Rotation plan (if applicable)
- Field records describing all on-farm activities
- Harvest records
- Analysis results of soil or product samples (if done)
- Input documentation (purchase of seeds, fertilizers, etc.)
- Sales documentation (products, quantities, clients, labelling)

You will find all information about the NOP on the USDA-NOP homepage:

<http://www.ams.usda.gov/AMSV1.0/nop>

In particular, you can find specifications on some topics in [the NOP Program Handbook](#).

You can check yourself the compliance for using an input according the NOP on the OMRI homepage [www.omri.org](http://www.omri.org) (the Commercial Product list is in free access, the Generic Materials list must be submitted).

You will find more information on **ECOCERT** homepage: [www.ecocert.com](http://www.ecocert.com) (certification, certified inputs, other activities)

If you need further information, we are at your disposal for technical questions.

