

# Product evaluation criteria for the Dutch Input List

Standard Operating Procedure (SOP)

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# I. Introduction

This document explains how products submitted for the Dutch inputs list are evaluated. It will be updated if necessary. Please refer always to the most recent version, which can be found on the website <https://dutchinputlist.fibl.org>. The latest version which is available on the website is the only valid version.

## I.1 About the Dutch Inputs List

The Dutch inputs list is a public list of 'inputs' which may be used by certified organic farmers in the Netherlands. For the time being, the scope of 'inputs' is limited to fertilisers and soil improvers, plant protection products and related products; expansions of the scope might be possible in the future. The first issue of the Dutch inputs list was published in 2016.

Dutch organic farmers may use products from the Dutch inputs list. If they use a product not listed there, they have to prove during inspection that the use of the product is allowed, otherwise it will be treated by Skal as a non-conformity. For proving the compliance of non-listed inputs, farmers should consult the document Evaluation Criteria.

## I.2 About the project partners, contact information

The Dutch inputs list is produced in collaboration by Skal and FiBL. Skal is an accredited control authority of organic operators in the Netherlands, while FiBL is a private research institute based in Switzerland.

For further details and contact information, see the document «Administrative procedures and requirements concerning the Dutch inputs list» (SOP DIL-APPL).

## I.3 Document history

Version	date	author(s)	description
001	08. 07. 2016	B. Speiser	First version of the document published.
002	08. 12. 2016	B. Speiser	Amendments of chapter 3.2 (manure), 3.6 and 3.7 (mineral nitrogen fertilisers), 3.8 (rock and sea salt), 4.4 (chitosan).
003	09. 02. 2017	B. Speiser	Amendments of chapter 3.7 (trace elements).

Version	date	author(s)	description
004	12. 04. 2017	B. Speiser	Amendments of chapter 3.2 (manure), 3.9 (co-formulants in fertilisers), 3.10 (other products, particularly seed coatings), 4.1 (derogations for emergency situations), 4.8 (co-formulants in plant protection products).
005	04. 08. 2017	B. Speiser	Amendments of chapter 2.7 (scope), 3.2 (by-products from air scrubbers), 3.4 (biochar, wood ash), 3.8 (potting soils), 3.9 (guano, humic and fulvic acid), 4.1 (Dutch legislation on nature conservation), 4.7 and 5 (other products).
006	31. 08. 2017	B. Speiser	Amendments of chapter 3.2 (by-products from air scrubbers), 3.4 (biochar).
007	16. 11. 2017	B. Speiser	Amendments of chapter 2.3 (declaration of previous use), 3.4 (calculation tool), table 3 (egg shells) and 5 (seed treatments).
008	21. 6. 2018	B. Speiser	Amendments of chapter 2.1 (compliance with legislation), 3.8 (coconut fibre), 3.9 (materials from filtering beds), Annex (scope).
009	29. 8. 2018	B. Speiser	Amendments of chapter 1.1 and Annex (scope).
010	22. 11. 2018	B. Speiser	Amendments of chapter 3.2 (air scrubbers), 3.4 (biochar), 3.9 (humic and fulvic acids), 7 (seed treatments).

## I.4 Terminology used

In this document, the following terminology is used:

by-products	The term 'by-products' is used in the way in which it is used in the Organic Regulation Reg. 889/2008.
companies	In this document, the term 'companies' is used as a collective denomination for distributors, manufacturers, authorised representatives and importers. For more details, see the Application guidance, chapter 3.
growth media / growing media	In this document, the following distinction is made: Growth media = media for growing plants (potting soil, potgrond). Growing media = media for culturing micro-organisms (substraat voor microorganismen).

## **2. General provisions**

### **2.1 Administrative and formal pre-conditions**

The administrative and formal aspects of registration are described in a separate document called 'Application guidance'. Please pay special attention to the following points:

- Only products which are in the scope of the Dutch inputs list (see 2.7) will be included.
- Only products which comply with the relevant EU and Dutch legislation will be included. For details, see the product application forms. The Dutch Input List reserves the right to reject products, if it suspects that they do not comply with legislation. For example, this applies to products which are not registered as plant protection products, but which are sold with claims of a plant protection effect.
- Only products which are on the market in The Netherlands can be included.
- Companies must register for the Dutch inputs list prior to submitting products for evaluation.
- Requests must be complete. All questions in the application form must be addressed, and all required supporting documents (e.g. registration documents, product labels) must also be submitted. The application forms provide guidance regarding the documents required.
- All additional information requested by FiBL during the evaluation process must be submitted as soon as possible.
- Requests must be submitted before the application deadlines given on the website.

### **2.2 Conduct of the company**

Companies must comply with the provisions of the general business contract. In case of severe breach of these conditions, companies shall be removed from the Dutch inputs list, together with all the products registered under their name. This applies in particular to the following situations:

- A company fails to pay the listing fees.
- A company makes unauthorised use of the names or logos of FiBL or Skal or the EU organic logo.
- A company has given incorrect and/or misleading information on their products to FiBL.

## 2.3 Disclosure of composition

Disclosure of the full composition and manufacturing process of the product is a prerequisite for the evaluation in all cases. The following minimum requirements apply:

- The production process has to be described.
- All components which are used during the production process have to be declared.
- All components have to be described with English names. If possible, use standard chemical nomenclature. Where available, give also CAS numbers.
- For each component, the quantity must be given (in %, g/kg or other suitable units).
- Where known, indicate the technical function of each component.

## 2.4 Substances and components with a GMO risk

The following components must not be GMOs or products from a GMO:

- Active substances of plant protection products
- Components of fertilisers or other products

At the moment, a 'non-GMO declaration' is required for the following products:

- micro-organisms and microbial products
- maize, rapeseed, soy, cotton, sugar beet and products thereof
- lecithin
- FiBL can also request a non-GMO declaration in other cases.

The 'non-GMO declaration' must be made in official writing, and must respect all requirements set out in the organic regulation. It is strongly suggested to use the form provided on the website of the Dutch inputs list. FiBL reserves the right to reject declarations which are not made with that form.

## 2.5 Compliance with the objectives and principles of organic farming

FiBL and Skal reserve the right to reject products/uses which they consider to be non-compliant with the objectives and principles of organic farming, as set out in Reg. 834/2007. Such decisions will be jointly taken by FiBL and Skal, possibly with involvement of the advisory board. Such decisions will usually be incorporated into the evaluation criteria.

## 2.6 Quality assurance

As described in the document 'Application guidance', selected products from the Dutch inputs list will be submitted to supplementary investigations. These may apply to new applications as well as to listed products. FiBL may request additional information on a product, its composition, manufacturing process or its use. Failure to provide such information within the specified period may result in non-inclusion or de-listing of the product (see General Business Contract).

Analytical spot-checking is also part of the quality assurance procedures. Detection of substances which are not in line with the evaluation criteria may result in non-inclusion or de-listing of the product (see General Business Contract).

## 3. Evaluation criteria for fertilisers, soil conditioners and related products

As a rule, fertilisers, soil conditioners and related products shall contain only substances listed in Annex I of reg. 889/2008 and complying with Reg. 834/2007.

The following sections (3.1 – 3.11) explain in more detail how this rule is implemented and clarified in different cases and for different materials. Products are only included in the list, if the product as a whole and each component fulfil the specific criteria.

### 3.1 Compliance with relevant legislation for fertilisers, soil conditioners and related products

As a rule, products have to comply with the relevant EU and Dutch legislation concerning these products. Fertilisers, soil conditioners and related products must fulfil one of the following criteria:

- It is a fertiliser type described in Reg. 2003/2003 (only inorganic fertilisers).
- It is a material included in the Dutch Fertilisers Decree (Uitvoeringsbesluit Meststoffenwet) or in the Implementing Regulation (Uitvoeringsregeling Meststoffenwet). These fertilisers are limited to the categories (i) inorganic fertiliser, (ii) other organic fertiliser (e.g. mulching materials), (iii) liming material. Animal manure and compost are not in the scope of the Dutch input list, while sewage sludge and recovered phosphates are not permitted in organic production.
- It is a waste product or by-product included in the implementing regulation (Uitvoeringsregeling Meststoffenwet), Annex Aa.
- It is a product with such a low nutrient level (<0.5 % N, P or K per dry matter) that it does not meet the criteria of the Dutch Fertilisers Act (Meststoffenwet). Such products will be included in the category of plant aids.

### 3.2 Solid and liquid manure as components of fertilisers

Unprocessed solid and liquid manure are out of the scope of the Dutch inputs list (see Annex). However, processed non-organic manure (type B) might be present as one component in multi-component commercial fertilisers.

**Organic manure/slurry (type A):** The Skal interpretation of Reg. 889/2008 article 3 under 3 requires that organic manure may not be transported/sold to non-organic operators. To ensure this, manufacturers and traders of commercial fertilisers containing organic manure have to register with Skal as ‘intermediar’. When the product is submitted to FiBL for evaluation, a confirmation by Skal about the existence of a valid ‘intermediar’ contract has to be included. Only products consisting of 100 % organic manure/slurry are acceptable under the rules for ‘intermediars’.

**Other acceptable sources of manure/slurry (type B):** Reg. 889/2008 requires that manure may not come from ‘factory farming’. Dutch legislation makes additional **requirements** and distinguishes between sources called type A, B or C. Table 1 shows the classification in relation to the husbandry system. For non-organic manure/slurry from acceptable sources, no ‘intermediar’ contract is required.

**Table 1:** Accepted husbandry systems for manure and slurry, and classification into type A and B fertilisers. For organic manure, a valid ‘intermediar’ contract must be shown; only **products** consisting of 100 % organic manure are acceptable.

<b>Animal species</b>	<b>Accepted organic husbandry systems</b>	<b>type</b>
cattle, sheep, goats, horses	<ul style="list-style-type: none"> <li>from organic farming (valid ‘intermediar’ contract)</li> </ul>	A
pigs	<ul style="list-style-type: none"> <li>from organic farming (valid ‘intermediar’ contract)</li> </ul>	A
chicken and other poultry, rabbits	<ul style="list-style-type: none"> <li>from organic farming (valid ‘intermediar’ contract)</li> </ul>	A
<b>Animal species</b>	<b>Accepted non-organic husbandry systems</b>	<b>type</b>
cattle, sheep, goats, horses	<ul style="list-style-type: none"> <li>from ground-related breeding, where the animals can graze, or</li> <li>from animals which have access to pasture, or</li> <li>from animals which have partly closed floors with litter at their disposal</li> </ul>	B
pigs	<ul style="list-style-type: none"> <li>from free-range pig farming</li> </ul>	B
(chicken and other poultry, rabbits)	<ul style="list-style-type: none"> <li>(no other husbandry systems accepted)</li> </ul>	-



## **Rules on the use of straw in animal husbandry systems**

Conventional straw may be used as litter, but straw from GM plants is prohibited (non-GM declaration is not required).

### **By-products from air scrubbers**

Consistent with Art. 4(b)(iii) of Reg. 834/2007 and with the policy described in chapter 3.5 of the EGTOP report in fertilizers (III), all kinds of products obtained from air scrubbers are prohibited.

## **3.3 By-products of animal origin**

For animal by-products, there are no requirements regarding the animal husbandry system in Reg. 889/2008. The hygienic requirements relating to diseases such as BSE must be respected. Products must meet the requirements of EU Reg. 1069/2009 and EU Reg. 142/2011. Hydrolysed proteins from animal material are allowed. Biochar from animal materials is not allowed at the moment. Animal by-products are considered as type B fertilisers.

## **3.4 Products of plant origin**

As a rule, products and by-products of plant origin are allowed. The following specifications apply:

- Hydrolysed proteins from plant material are allowed.
- Products and by-products of GM plants are not allowed (see 2.4).
- Aqueous extracts are generally allowed, while extracts with chemicals are not allowed (exception for seaweed products: see below). Extraction with ammonia is not permitted.
- Seaweed products may be obtained by extraction with acids or alkaline aqueous solutions. Clarification: Acids/alkalines which increase the concentration of nutrients in the final product are restricted or prohibited. This means that nitric and phosphoric acids are not allowed, because they act as easily soluble mineral fertilisers. Extraction with KOH is only allowed, if the amount of K supplied with KOH is smaller than the amount of K contained in the seaweed. If KOH is used for extraction, the manufacturer has to provide the necessary data for this point to be verified.
- Fermented products such as vinasse are allowed, up to a maximum level of 5 % nitrogen. For products with a nitrogen content >5 %, a decision will be taken case by case (the manufacturer will have to supply additional information about the source of the nitrogen, as required by FiBL).
- By-products of plant materials derived by physical processing are allowed. The material may not be contaminated with non-authorized substances (e.g.

chemical solvents) during the process. In such cases, the applicant must explain the production process including all substances used in sufficient detail, and he must demonstrate the absence of contaminants with chemical analyses. If the absence of contaminations cannot be established beyond doubt, the evaluation team may reject the product.

- Wood ash is allowed, if the applicant can demonstrate with analyses that the final product complies with the requirements of the Dutch fertiliser legislation concerning the maximum content of heavy metals and of PACs.

Composted mixture of vegetable matter (green compost) is considered as type A. All plant materials from organic origin are also considered as type A. All other plant materials are considered as type B.

### **Biochar from plant materials**

Consistent with the policy described in chapter 3.1 of the EGTOP report in fertilizers (III), biochar from plant material is allowed under the following conditions:

- It is derived from plants materials which have not been chemically treated in the production process or after harvest. Wastes are excluded as feedstock materials.
- The content of polycyclic aromatic hydrocarbons (PAHs) does not exceed 4 mg/kg dry matter.

## **3.5 Micro-organisms as components of fertilisers / microbial products**

Micro-organisms have traditionally been used in organic farming, and there is no objection to their use. They are not explicitly mentioned in Annex I of Reg. 889/2008, because they are not considered to be fertilisers according to EU and Dutch fertiliser legislation at the moment. Products containing micro-organisms can be included in the Dutch inputs list under the following conditions:

- The micro-organisms must not be GMOs. A declaration of absence of GMOs is required for each microbial strain.
- The identity (type of microorganism and species) of the microorganism must be given.
- If requested by FiBL, the applicant must document that in normal use, they are harmless for humans, environment, crops and animals.
- The manufacturer must specify all ingredients which are used for the growing media. If possible, use standard chemical nomenclature.

The manufacturer must declare whether remains of the growing media used to grow the micro-organisms, or microbial products (e.g. antibiotics) can be found in the final product, and approximately how much. If remains of the growing media are present in

significant amounts, their acceptability is determined case by case. The acceptability of microbial products is determined case by case; the presence of antibiotics in the final product is not allowed.

- For the growing media for micro-organisms, there are no requirements regarding the GM status. However, if remains of the growing media can be found in the final product, no DNA of GMOs must be detectable. This has to be demonstrated with analytical reports.
- If the growing media for the micro-organisms contain synthetic nitrogen compounds, these must not be added in excess. In case the final product contains more than 5 %  $N_{\text{mineral}}$ , the manufacturer is obliged to demonstrate that synthetic nitrogen compounds have not been added in excess (detailed description of the production process). If this cannot be demonstrated, such products will be rejected.

### **3.6 Mineral fertilisers**

Possible sources are given in table 2. Please note that mineral nitrogen fertilisers are not permitted (see Article 4(b)(iii) and Art. 12(1)(e) of Reg. 834/2007). This includes synthetic compounds such as ammonia, nitrate and urea, but also natural sources such as 'Chilean nitrate' (also known as 'Chile salpeter', 'Peru salpeter', 'Caliche').

Table 2: Sources for mineral fertilisers, their specification in Reg. 2003/2003 and notes according to Reg 889/2008.

<b>Phosphatic fertilisers</b>	<b>Specification in Reg. 2003/2003</b>	<b>Notes</b>
soft ground rock phosphate	Annex I A.2, point 7	1
aluminium-calcium phosphate	Annex I A.2, point 6	1
basic slag	Annex I A.2, point 1	
<b>Potassic fertilisers</b>		
crude potassium salt / kainit	Annex I A.3, point 1	
potassium sulphate, possibly containing magnesium salt	Annex I A.3, point 5 and 6	2
<b>Inorganic secondary nutrients</b>		
Calcium sulphate of natural origin (gypsum)	Annex I D, point 1	
Calcium chloride	Annex I D, point 2	3
Elemental sulphur	Annex I D, point 3	
<b>Liming materials</b>		
Magnesium sulphate of natural origin (kieserite)	Annex I D, point 4	
Calcium carbonate of natural origin	see Reg. 463/2013	4
Magnesium and calcium carbonate of natural origin	see Reg. 463/2013	5
Industrial lime from sugar production and from vacuum salt production	Annex I G, point 3 1a	

**Notes**

- 1: In phosphate fertilisers, Cd content must be  $\leq 90$  mg/kg of  $P_2O_5$  (Requirement of Reg. 889/2008).
- 2: Product obtained from crude potassium salt by a physical extraction process.
- 3: Calcium chloride is only allowed for foliar treatment of apple trees.
- 4: The term 'Calcium carbonate of natural origin' includes products such as chalk, ground limestone, maerl, sludge obtained from gravel washing, egg shells etc. Note that burnt lime (calcium oxide) and slaked lime (calcium hydroxide) are not allowed.
- 5: The term 'Magnesium and calcium carbonate of natural origin' includes products such as magnesian chalk, ground magnesium, limestone, dolomite.

### 3.7 Trace elements

All inorganic micronutrients listed in part E of Annex I to Regulation 2003/2003 are allowed, except that mineral nitrogen salts are not allowed (see 3.6). Registration is not strictly required for such fertilisers. However, to improve transparency towards organic farmers, registration is encouraged.

### 3.8 Potting soils

Potting soils may contain the following components:

- All materials listed in Annex I of Reg. 889/2008, such as compost, peat, wood fibre, coconut fibre, cocoa shells, bark, etc.
- Coconut fibre is only allowed, if it has not been treated with synthetic substances such as nitrogen compounds (e.g. calcium nitrate).
- Inert mineral components such as clay, sand, pumice, lava, perlite, vermiculite, expanded clay and soil.
- Commercial fertilisers listed in the Dutch Inputs List.

### 3.9 Other components of fertilisers and soil conditioners

The following materials are also allowed according to Reg. 889/2008:

- Sodium chloride (only mined salt, rock salt and sea salt allowed)
- Stone meal and clays
- Leonardite (only if obtained as a by-product of mining activities).
- Chitin (only if obtained from sustainable fisheries or organic aquaculture)
- Organic rich sediment such as sapropel (conditions: see Reg. 889/2008)
- Guano in the true sense of the word (i.e. accumulated excrement of seabirds, seals, or cave-dwelling bats) is allowed. Because non-permitted materials such as Chilean nitrate are sometimes also traded under the denomination 'guano', companies have to confirm that the material is indeed accumulated excrement of seabirds, seals, or cave-dwelling bats.

#### Humic and fulvic acids

Consistent with the policy described in chapter 3.3 of the EGTOP report in fertilizers (III), humic and fulvic acids are allowed under the following conditions:

- if obtained with inorganic salts/solutions excluding ammonium salts, or
- from drinking water purification.

### **Materials from filtering beds**

Materials such as sand, zeolite, perlite, vermiculite and clinoptilolith may be used in filtering beds. In case that such materials should be re-used as raw materials for inputs, the companies must disclose this fact during submission. If there is no mentioning of such an earlier use, the evaluation team will assume that the declared materials are virgin materials previously unused. Companies should be aware that for used materials ('wastes'), the Dutch fertiliser legislation (Uitvoeringsregeling Meststoffenwet, Annex Aa) has special registration requirements.

### **Synthetic nanoparticles**

Synthetic nanoparticles are not allowed at the moment. Although nanomaterials are not mentioned in Reg. 889/2008, the EGTOP report on fertilisers (II) states that they are not implicitly authorized, but would require a separate listing in order to be authorized.

## **3.10 Co-formulants in fertilisers**

As a general rule, fertilisers should normally contain no co-formulants, but exceptions are possible when there is a clearly demonstrated need (see EGTOP report on fertilisers and soil conditioners II, chapter 4.9). This rule is implemented as follows:

- In liquid fertilisers, there may be a need to use preservatives in order to prevent decay by microbial growth. However, the preservative must be present in the lowest possible amounts. A decision will be taken case by case.
- In trace element fertilisers, all chelating and complexing agents listed in part E 3.1 and 3.2 of Annex I to Regulation 2003/2003 are allowed.
- In all other cases, the applicant must provide evidence for the need to use a co-formulant. Where a co-formulant must be used, natural substances should be used in preference to synthetic substances. FiBL reserves the right to request additional information, particularly on residues in soil and/or crops.
- If the applicant fails to prove the need to use a co-formulant, or if he fails to demonstrate that the co-formulant does not cause residues in crops and has no unacceptable effects on human health and the environment, the product will be rejected.
- For details on acceptable and unacceptable substances, see also chapter 4.8.

## 4. Evaluation criteria for plant protection products and related products

Plant protection products and related products shall be based on the active substances listed in Annex II of reg. 889/2008. The following sections (4.1 – 4.8) explain in more detail how this rule is implemented in different cases and for different materials. Products are only included in the list, if the product as a whole and each component fulfil the specific criteria.

### 4.1 Compliance with relevant legislation for plant protection products and related products

Products in the chapter ‘plant protection products and related products’ must fulfil one of the following criteria:

- It is a plant protection product registered in The Netherlands by Ctgb<sup>1</sup>.
- It is a biocidal product registered in The Netherlands by Ctgb<sup>2</sup>.
- It is a basic substance authorized at EU-level<sup>3</sup>.
- Invertebrate biocontrol agents must comply with the Dutch legislation on nature protection. In particular, the species must be listed on Bijlage 8 of the Regeling Natuurbescherming<sup>4</sup>.
- Insects sold in combination with banker plants must be listed on Bijlage 9 of the Regeling Natuurbescherming<sup>5</sup>.
- It is a pruning agent / wound sealing product.
- It is listed under RUB legislation<sup>6</sup>.
- A derogation for an emergency situation has been granted for the product.  
**Please note:** If a derogation for an emergency situation has been applied for a product, the applicant should state this in the application. For such products, the evaluation team will search for individual solutions to ensure timely listing. Products will only be listed when the derogation has been granted. Thus, companies have to notify FiBL as soon as they receive the emergency derogation.

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<sup>1</sup> see <http://www.ctgb.nl/toelatingen>

<sup>2</sup> see [www.ctgb.nl/biociden](http://www.ctgb.nl/biociden)

<sup>3</sup> see <http://ctgb.nl/toelatingen/basisstoffen>

<sup>4</sup> see <http://wetten.overheid.nl/BWBR0038668/2017-03-17>

<sup>5</sup> see <http://wetten.overheid.nl/BWBR0038668/2017-03-17>

<sup>6</sup> see <http://wetten.overheid.nl/BWBR0003172/2006-09-01>

## 4.2 Plant protection products and biocides

The following criteria apply:

- For products classified as plant protection products and for biocides (e.g. products against pests of stored products) the active substance must be listed in Annex II of Reg. 889/2008.
- For basic substances, see 4.4.

## 4.3 Trapping and mating disruption systems

Pheromone products for trapping or mating disruption are pooled in one chapter of the Dutch inputs list. The following criteria apply:

- All pheromones are acceptable according to Annex II of Reg. 889/2008, when used in traps or dispensers.
- Hydrolysed proteins (excluding gelatine) may be used as attractant. Other attractants can be authorized case by case, if they are not classified as pesticides.
- Traps for monitoring, as well as other components of trapping systems such as coloured panels, sticky traps, glues etc. are not restricted by Reg. 889/2008. However, they can be included in the Dutch inputs list, if a company requests it.

## 4.4 Basic substances

Basic substances are included in the Dutch inputs list. They are not placed in a separate chapter, but are allocated either to the chapter of fungicides and bactericides, or to the chapter of insecticides, acaricides and molluscicides. The following criteria apply:

- Basic substances which are food and which are of plant or animal origin, are automatically allowed by Reg. 889/2008. Their use is specified by the authorisation under pesticide legislation, but the use as herbicide is excluded by Reg. 889/2008. For the moment, this group comprises lecithins, sucrose, fructose, vinegar, chitosan, sweet whey and extract of *Equisetum arvense*.
- Other basic substances are only allowed, if they are explicitly mentioned in Annex II of Reg. 889/2008.

Note: Basic substances are authorized generically, and may thereafter be marketed by any distributor. Therefore, FiBL will include for each basic substance a 'default entry' which does not specify the distributor. However, if a distributor wishes to be mentioned explicitly in the Dutch inputs list, a separate listing under the company's name is possible.



## 4.5 Microbial biocontrol agents

Microbial biocontrol agents such as bacteria, fungi and viruses are considered as plant protection products under EU and Dutch legislation. They are not pooled in a separate chapter, but allocated either to the chapter of fungicides and bactericides, or to the chapter of insecticides, acaricides and molluscicides, according to their use.

For all microbial biocontrol agents, it must be documented that the product is not a GMO (see 2.4). There are no requirements from the Dutch inputs list concerning the identity, human or animal health and environmental impact, because these aspects are addressed during pesticide registration.

## 4.6 Invertebrate biocontrol agents ('beneficial organisms')

Invertebrate biocontrol agents are pooled in one chapter of the Dutch inputs list. This category includes the following organisms:

- Nematodes
- Parasitic and predatory insects and mites

Note that these products are not considered as plant protection products under EU and Dutch legislation, and are therefore listed separately from the microbial biocontrol agents (see 4.5). They are subject to the Dutch Flora and fauna legislation (see 4.1).

## 4.7 Co-formulants

Co-formulants are components of plant protection products (see Reg. 1107/2009, Art. 27), and are not sold separately. A guidance for 'unacceptable co-formulants' is in preparation at EU level. In the Dutch inputs list, the following criteria apply:

- Co-formulants may only be present in concentrations at which they have no activity against pests or diseases on their own (e.g. conservation agents might act against fungal diseases).
- Co-formulants must not act as foliar fertilisers (e.g. nitrogen compounds).
- Co-formulants must be biodegradable. Substances which are not biodegradable (e.g. micro-silver) are not acceptable.
- Co-formulants must not be harmful to the user or the environment. Endocrine disruptors (including potential endocrine disruptors) are not accepted. This applies to all alkylphenols and their ethoxylates, including nonylphenol and dodecylphenol. EDTA is not allowed as co-formulant in plant protection products.
- FiBL and Skal reserve the right to reject products which contain excessive numbers or amounts of synthetic co-formulants. As the need for co-formulants may differ greatly in different product types, no fixed threshold values can be given in this document.

## **5. Evaluation criteria for cleaning and disinfection agents**

Under discussion.

## **6. Evaluation criteria for products for ectoparasite control in animal husbandry**

Under discussion.

## **7. Evaluation criteria for other products**

For other products, the evaluation criteria are adapted case by case.

- In all cases, the raw materials may not be derived from GMOs (see 2.4).

### **Sprouting inhibitors; seed treatments with a plant protection claim; products for the protection of stored products**

- For products classified as plant protection products or as biocidal products, the active substance must be listed in Annex II of Reg. 889/2008.

### **Spreaders/stickers; dust binders and other products with a comparable use (i.e. in combination with authorised products); wound sealings**

- The main ingredient(s) must be listed in Annex I or Annex II of Reg. 889/2008.
- Exceptionally, other natural materials may be accepted.
- Co-formulants are evaluated according to the principles given in section 4.7.
- Spreaders/stickers will only be included in the list, if they are registered for use in combination with a product authorized for organic farming (i.e. products for use in combination with herbicides only are not included).

### **Biodegradable products (e.g. pots, mulching sheets)**

- Such products must comply with DIN EN 13432-200-12.
- Such products are only included, if they do not contain peat.

### **Seed treatments**

The following criteria apply:

- Components with an effect as fertilisers must comply with the criteria of chapter 3.
- Components with an effect as pesticides must comply with the criteria of chapter 4.

- Compulsory treatments required by EU phytosanitary legislation are allowed. A claimed obligation will be checked with the Dutch Ministry.

#### **Co-formulants for seed treatments**

- The need for co-formulants is recognised.
- Preferably, they should be listed in Annex I or Annex II of Reg. 889/2008.
- Other natural materials are also acceptable.
- Synthetic components may be accepted under the following conditions:
  - (i) the applicant can demonstrate that they are necessary to achieve the desired function, and that they are used in the lowest possible amounts.
  - (ii) They comply with the principles given in section 3. 10 and 4.7.

#### **Auxiliaries used in seed operations / processing, but later removed from the seeds**

- The need for auxiliaries is recognised.
- Preferably, they should be listed in Annex I or Annex II of Reg. 889/2008.
- Other natural materials are also acceptable.
- Synthetic components may be accepted under the following conditions:
  - (i) the applicant can demonstrate that they are necessary to achieve the desired function, and that they are used in the lowest possible amounts.
  - (ii) They comply with the principles given in section 3. 10 and 4.7.
  - (iii) according to the wishes of the Dutch organic seed sector, the use of synthetic solvents such as hexane and chloroform for seed grading is not allowed.
- They are removed from the seeds after the operation, and leave no residues.

#### **Auxiliaries used in seed priming**

- Soluble nitrogen used as signalling compounds during the priming process are allowed.
- Synthetic substances acting as plant hormones are not allowed (with the exception of ethylene).

## 8. Annex: Scope of the Dutch inputs list

The current scope of the Dutch inputs list is shown in table 1. Please note that the scope may be widened in the future.

<b>Materials</b>	<b>In scope</b>
Fertilisers, soil conditioners and related products	included
Biodegradable products and other technical materials	included
Seed additives and seed treatments	included
Potting soils with a brand name (usually pre-packaged in bags)	included
Farm-specific mixes of potting soils (usually sold in bulk)	not included
unprocessed manure, slurry, compost and digestate (materials of agricultural origin which are sold directly to farms in bulk)	not included
mushroom growing media	not included
plant protection products, products for protection of stored products, pheromones and pheromone traps	included
adjuvants	included
basic substances	included
natural enemies ('beneficials')	included
pruning agents; wound protectants	included
mechanical traps	not included