

Products for crop health, fertilizers and related products

Supplemental admission criteria for the Swedish Input List

Version 3; November 2023

Table of Contents

1. Introduction	1
2. Prohibition of GMOs	2
3. Products for crop health.....	3
3.1 Pesticide registration (KEMI)	3
3.2 Pyrethrum (with or without piperonyl butoxide).....	3
3.3 Copper fungicides.....	4
3.4 Beneficials and natural enemies.....	4
4. Fertilizers, soil conditioners, crop management tools and related products	4
4.1 Guano.....	4
4.2 Leonardite and xylite.....	5
4.3 Humic and fulvic acids	5
4.4 Soft ground rock phosphate	5
4.5 Aluminium-calcium phosphate	6
4.6 Basic slag	6
4.7 Trace elements	6
4.8 Specific processing restrictions for fertilizers.....	7
4.9 Compost and digestate.....	7
4.10 Products or by-products of animal origin	7
4.11 Limitation of heavy metals	8

I. Introduction

The Swedish Input List

The Swedish Input List is a public register of inputs that may be used by certified organic farmers in Sweden. It is generated in a co-operation between [FiBL](#) and [KRAV](#). KRAV is running the project as part of 'national guidelines for organic farming' (NR) with the aim to implement a new platform for inputs to organic stakeholders in Sweden. The Swedish Input List is part of a series of national input lists, which are united under the umbrella of the '[European Input List](#)'.

Organic farmers in Sweden

The great majority of organic farmers in Sweden are certified according to the standard of the private organization [KRAV](#). These farmers must not only fulfil the production rules of the EU organic legislation, but also those of the KRAV standard. There are also some organic farmers who are not certified according to KRAV standard. These farmers must fulfil only the production rules of the EU organic legislation. In this document, these farmers will be referred to as 'EU certified organic farmers'. In consequence, the Swedish Input List contains two kinds of products:

- products that may be used on KRAV certified farms and on EU certified organic farms.
- products that may be used only on EU certified organic farms. These products are listed with a restriction stating that they may not be used on KRAV certified farms.

The basic admission criteria for the European Input List

For all national lists under the umbrella of the European Input List, the '[basic admission criteria](#)' of the [European Input List](#) apply. The basic admission criteria are based on the relevant EU legislation (in particular Reg. 2021/1165), as well as additional requirements and interpretations which were established by FiBL, in order to ensure the compliance with the objectives and principles of organic production.

The supplemental admission criteria for the Swedish Input List

The supplemental admission criteria for the Swedish Input List (=the present document) cover two aspects:

- They take into account relevant Swedish general legislation (e.g. pesticide registration).
- They take into account the KRAV standard.

The following paragraphs provide an overview on the supplemental criteria, applicable to products submitted for the Swedish Input List. For each requirement, it is specified

whether it applies in all cases or only in the context of KRAV certified farms. This document will be updated upon necessity; please refer always to the most recent version. This document is available only in English.

Compliance with general legislation

The Swedish Input List includes only products that comply with the relevant EU and Swedish legislation. Compliance with general legislation is primarily in the responsibility of the applicant companies. However, if FiBL suspects that a product does not comply with the relevant legislation, it may postpone inclusion into the list until the applicant has demonstrated legal compliance.

2. Prohibition of GMOs

The EU organic legislation prohibits the use of food, feed, processing aids, plant protection products, fertilisers, soil conditioners, seeds, vegetative propagating material, micro-organisms or animals in organic production. Any unavoidable presence of GMOs must not exceed 0.9 %.

Implementation in the Swedish Input List

- For all materials, which are known to exist as GMOs, the applicant must provide a declaration of the absence of GMOs, using the dedicated template on the website of the [Swedish Input List](#).
- Upon necessity, FiBL may request companies to effect analyses and/or provide existing analysis reports to verify this point and/or provide samples for analysis.

A GMO declaration is required for all materials, which are considered as 'risk materials' by the Swedish Input List. These are:

- Rapeseed
- Rice
- Sugar beet
- Sugar cane
- Sunflowers
- Peanuts
- Maize
- Soy
- Fishmeal from farmed fish
- Microorganisms and products thereof
- Fermentation products
- Enzymes

3. Products for crop health

3.1 Pesticide registration (KEMI)

Plant protection products may only be marketed in Sweden, if they have been registered for that purpose at the [Swedish Chemicals Agency KEMI](#), or if KEMI has granted a derogation for an emergency situation.

Implementation in the Swedish Input List

Applicants must submit a registration document issued by KEMI. If this is not available, they may provide the PDF excerpt which can be generated on the KEMI online register. Products with a derogation for an emergency situation must be listed on the KEMI website in the section 'Dispens för nödsituation'¹.

This check of KEMI registration is only performed during the first product evaluation. In case that the KEMI registration expires later, the applicant company is obliged to inform FiBL immediately, at the latest one month before the registration expires.

3.2 Pyrethrum (with or without piperonyl butoxide)

Pyrethrum (pyrethrins extracted from plants) is allowed in EU organic production (Reg. 2021/1165, Annex I). However, it is prohibited by the KRAV standard (chapter 4.9.4).

Piperonyl butoxide: The general production rules of the EU organic regulation (Reg. (EU) 2018/848, Art. 9.3(a)) allow the use of synergists as components of plant protection products. For piperonyl butoxide, however, the Basic Admission Criteria of the European Input List follow the recommendations of EGTOP and exclude it. The KRAV standard also excludes piperonyl butoxide (chapter 4.9.5).

Implementation in the Swedish Input List

- Products containing pyrethrum with or without piperonyl butoxide will be included in the Swedish Input List.
- However, the listing will state that the product may not be used on KRAV certified farms.

¹ access via <https://www.kemi.se/bekampningsmedel/vaxtskyddsmedel/aktuellt-om-vaxtskyddsmedel>

3.3 Copper fungicides

The EU organic regulation 2021/1165 *allows* the use of copper fungicides. By contrast, the KRAV standard *prohibits* the use of copper hydroxide, copper oxychloride, copper sulphate and cupric oxide, Bordeaux mixture (chapter 4.9.4). At present (August 2021), no copper fungicides are registered for use in Sweden.

Implementation in the Swedish Input List

- Products containing copper compounds such as copper hydroxide, copper oxychloride, copper sulphate and cupric oxide, Bordeaux mixture will be included in the Swedish Input List, provided that they are registered by KEMI.
- However, the listing will state that the product may not be used on KRAV certified farms.

3.4 Beneficials and natural enemies

Natural enemies, such as nematodes, insects or arachnids must be approved by the Swedish Environmental Protection Agency.

Implementation in the Swedish Input List

For products based on natural enemies, the species must be shown on the list of the website 'Naturvardsverket'².

4. Fertilizers, soil conditioners, crop management tools and related products

4.1 Guano

The EU organic regulation 2021/1165 *allows* the use of Guano. By contrast, the KRAV standard *prohibits* its use of (chapter 4.8.6).

Implementation in the Swedish Input List

- Products containing guano will be included in the Swedish Input List.
- However, the listings will state that such product may not be used on KRAV certified farms.

² see <https://www.naturvardsverket.se/amnesomraden/miljofororeningar/biologiska-bekampningsmedel>

4.2 Leonardite and xylite

The EU organic regulation 2021/1165 *allows* the use of leonardite and xylit if the materials have been obtained as a by-product of mining activities (e.g. by-product of brown coal mining). By contrast, the KRAV standard *prohibits* the use of leonardite and xylit (chapter 4.8.6).

Implementation in the Swedish Input List

- Products containing leonardite or xylit will be included in the Swedish Input List.
- However, the listings will state that such products may not be used on KRAV certified farms.

4.3 Humic and fulvic acids

The EU organic regulation 2021/1165 *allows* the use of humic and fulvic acids if they have been obtained by inorganic salts/solutions excluding ammonium salts or from drinking water purification. By contrast, the KRAV standard *exclusively allows* humic and fulvic acids obtained from drinking water purification (chapter 4.8.6).

Implementation for humic and fulvic acids obtained from drinking water purification

- Products containing humic or fulvic acids obtained from drinking water purification will be included in the Swedish Input List.

Implementation for humic and fulvic acids obtained by inorganic salts/solutions

- Products containing humic or fulvic acids obtained by inorganic salts/solutions excluding ammonium salts will be included in the Swedish Input List;
- However, the listings will state that such products may not be used on KRAV certified farms.

4.4 Soft ground rock phosphate

The EU organic regulation 2021/1165 *allows* the use of soft ground rock phosphate with several restrictions. Regarding the cadmium content of rock phosphate, Sweden has a maximum value of 100 mg Cd/kg P, which is equivalent to 44 mg Cd/kg P₂O₅. The KRAV standard sets a maximum value for the cadmium content of 12 mg/kg P, which is equivalent to 27.5 mg/kg P₂O₅ (chapter 4.8.6). In autumn 2023, however, this threshold was temporarily raised to 100 mg/kg P, which is equivalent to 44 mg/kg P₂O₅. This temporary value applies until the end of 2025.

Implementation in the Swedish Input List

- Products with Cd contents <44 mg/kg P₂O₅ will be included into the Swedish input list.

4.5 Aluminium-calcium phosphate

The EU organic regulation 2021/1165 *allows* the use of aluminium-calcium phosphate on basic soils (pH >7.5) provided that the cadmium content is less than or equal to 90 mg/kg of P205. By contrast, the KRAV standard *prohibits* the use of aluminium-calcium phosphate (chapter 4.8.9).

Implementation in the Swedish Input List

- Products containing aluminium calcium phosphate will be included in the Swedish Input List.
- However, the listings will state that such products may not be used on KRAV certified farms.

4.6 Basic slag

The EU organic regulation 2021/1165 *allows* the use of basic slag. By contrast, the KRAV standard *prohibits* its use (chapter 4.8.9).

Implementation in the Swedish Input List

- Products containing basic slag will be included in the Swedish Input List.
- However, the listings will state that such products may not be used on KRAV certified farms.

4.7 Trace elements

The EU organic regulation 2021/1165 *allows* the use of trace elements as specified in Part E of Reg. 2003/2003. The KRAV standard (chapter 4.8.10) requires farmers to use trace element fertilizers only if there is a clear deficiency. In addition to that, the KRAV Standard *prohibits* the use of micronutrient fertilisers that contain nitrogen in amounts that have significance for the plants' nitrogen supply.

Implementation in the Swedish Input List

- Products containing micronutrients will be included in the Swedish Input List.
- For products *additionally containing significant amounts of nitrogen* (≥ 5 kg/ha N when used according to instructions on the label), the listing will state that the product may not be used on KRAV certified farms.
- For products *containing little or no nitrogen* (< 5 kg/ha N when used according to instructions on the label), the listing will state 'KRAV certified farms may use this product only when there is a clear deficiency for ...' (here, the micronutrient(s) of the product will be shown).

4.8 Specific processing restrictions for fertilizers

Art. 5 (g)(iii) of Reg. 2018/848 limits the use of fertilizers to low solubility mineral fertilizers. Implementing this principle, the KRAV Standard (chapter 4.8.8) sets the requirement that products *must not* have been subjected to processes for the purpose of increasing the solubility of its nutrients, with the exemption of milling.

Implementation in the Swedish Input List

- Methods for fertilizer processing will be assessed individually. If FiBL suspects that a process (other than milling) increases nutrient solubility, it may request analytical reports for the intermediate products of the different process steps in order to assess whether this requirement is met. A final decision on organic acceptability will be taken case by case.

4.9 Compost and digestate

The EU organic regulation 2018/848 *allows* the use of certain composts and digestates. The KRAV standard imposes a certification requirement for certain products, depending on the raw materials used (chapter 12.3). The first step for a company is to determine whether to apply with FiBL or with a CB (see also the Application Guidance). This depends on the raw materials used.

- Compost and digestate made from raw materials containing *source-separated household waste*: apply with a CB.
- Compost and digestate made from raw materials containing *animal by-products*: apply with a CB.
- Compost and digestate made from raw materials containing *manure of factory farming origin*: apply with a CB.
- All other composts and digestates: apply with FiBL.

4.10 Products or by-products of animal origin

The EU organic regulation 2021/1165 lists a variety of products or by-products of animal origin that may be used as fertilizers in organic farming. The KRAV standard (chapter 4.8.4 and 12.3.6) imposes a certification requirement.

- All products containing *animal by-products*: apply with a CB.

4.11 Limitation of heavy metals

The KRAV standard (chapter 12.3.2) limits the amounts of heavy metals that are added to arable by the application of fertilisers. Chapters 4.4.8 and 12.3.3 specify how to calculate this addition. To support farmers, KRAV has developed an Excel sheet for calculation of heavy metals, which can be downloaded from the website of the Swedish Input List. Manufacturers or traders of fertilisers are required to fill in this sheet for each product and make it available to KRAV farmers. This sheet has to be submitted to FiBL with every application for a fertiliser.