

Pest control in storage and processing

January 2016

Organic crops are grown in the field without the use of synthetic inputs. During storage and processing, organic products should never come into contact with synthetic inputs, nor should they ever be contaminated by pest control residues. This information note is directed towards processing and storage operations located outside of Switzerland.

Scope of application

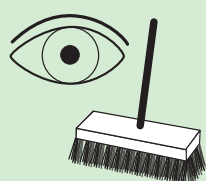
Bio Suisse pest control standards apply to all storage and processing areas and all production areas. The chapter of the Bio Suisse Standards pertaining to pest control governs the following points:

- Prevention and monitoring
- Pest control measures to treat acute infestation in areas used for the storage and processing of "Bud" products
- Which substances may be used to fight and prevent infestations
- Precautions to prevent contamination of "Bud" products by pest control substances
- Responsibility.



For more detailed information, see the Bio Suisse Standards for Imports, Part V, Directives for processing and trade

Requirements



- Prevention instead of treatment
- Preventive measures take absolute precedence over any kind of treatment

Objective



- Minimize the use of synthetic pest control substances!

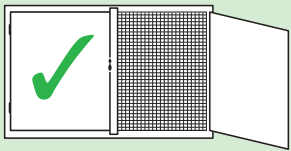
High-risk operations must have a detailed pest control system

Bio Suisse requires operations with a higher than normal risk of pest infestation to use an integrated pest control system. Operations considered to be at high risk include those where organic grain or organic dried products are stored and those on which large-scale pest control treatments are carried out.

Vulnerability analysis and prevention

To prevent infestation, structural, hygienic and organizational vulnerabilities must be detected and, if possible, eliminated prior to the storage of organic products.

Eliminate vulnerabilities



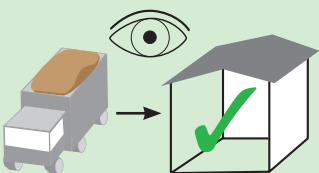
- Install screens on open windows and seal loose-fitting doors

Eliminate vulnerabilities



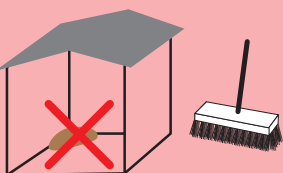
- Seal cracks and other hiding places

Inspections prior to storage



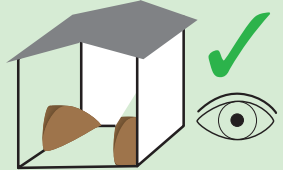
- Check products for signs of pest infestation

Inspections prior to storage



- Remove all traces of previously stored products
- Exclude the possibility of contamination with prohibited substances or non-organic products

Monitor the storage process



- Regularly check stored products for signs of infestation

Monitoring and trapping plan

Early detection is key to the success of pest control. Therefore, regular inspections should be carried out and an appropriate monitoring plan should be devised. The monitoring plan should document who was responsible for inspecting and how often, when, where and how inspections took place.

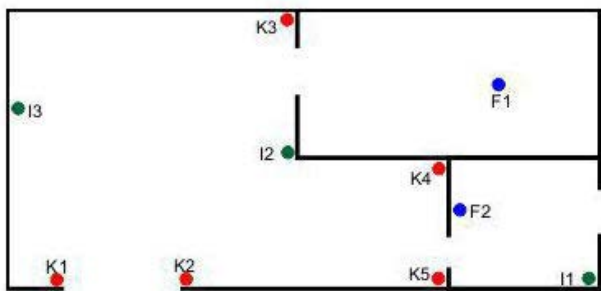
Monitoring plan guideline

- **Who**
was responsible for inspections?
- **How often**
did inspections take place?

- **When**
did inspections take place?
- **Where**
did inspections take place?

- **How**
did inspections take place?

Monitoring should include a currently ongoing trapping plan. Exact records should be kept of what traps were placed where on the grounds of the operation and in production sites.



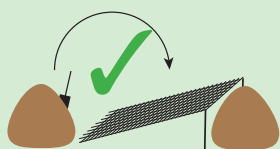
Example of a trapping plan, in which K = rodent bait, I = insect trap and F = UV device

- **Bio Suisse recommends: Carry out pest control inspections on the operation at least 6 times per year. Carry out pest control inspections more frequently when outside temperatures are higher.**

Permitted pest control measures in cases of infestation **(positive list)**

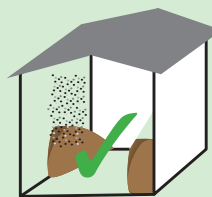
a) Pest control measures applied directly to products

Physical/mechanical measures



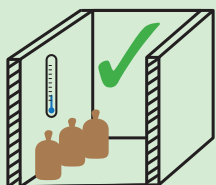
- Re-storage, airing
- Cleaning, sieving, bouncing
- Removal of contaminated products
- Use of pin mills

Diatomaceous earth



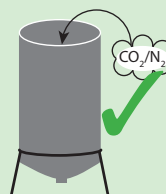
- Diatomaceous earth (silicon dioxide)

Thermal measures



- Deep-freezing products
- Heat treatments of rooms and equipment

Fumigation



- Use of inert gases such as CO₂ and N₂ (only possible in closed rooms)
- Disinfestation

Beneficial organisms

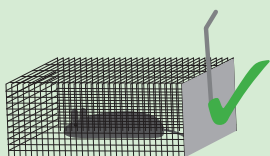


- Use of ichneumon wasps, which parasitize the larvae and eggs of pests

b) Pest control measures that are permitted with restrictions

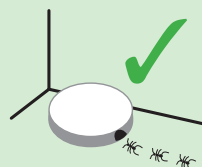
The following pest control substances may not under any circumstances come into contact with organic products and may therefore only be used with restrictions.

Traps and bait



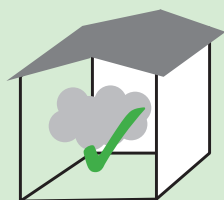
- Traps and stationary bait to control rodents and insects

Treatment of hiding places



- Localized and sporadic treatment of infested areas
- Localized control of ants
- Treatment of hiding places with nonvolatile substances (i.e., not containing organic solvents; spray cans are not permitted)

Fogging or fumigation of empty spaces



- For more detailed information about permitted substances and restrictions, see the Bio Suisse Standards for Imports, part V, section 3.2.n.



Pheromone-based mating disruptors



- Traps to control moths

Documentation of pest control measures

All pest control measures taken on the operation must be documented according to the following scheme, and the records must be submitted to the inspection body.

- | | | |
|---|--|--|
| ■ What pest was controlled? | ■ Who was responsible for the pest control? | ■ How were pests controlled? |
| ■ Where did pest control measures take place? | ■ When did the pest control measures take place? | ■ With what were pests controlled? |

Tips for avoiding contamination

Do not allow dust to accumulate!

- Dust may contain traces of substances (such as phosphine) that might subsequently contaminate organic products.
- Keep dust to a minimum through proper cleaning.
- Dust is especially prevalent in silo facilities: on chutes, conveyors, floors, bins, chambers, filters, equipment, sampling equipment, means of transport, walls, windows, cracks, etc.

Organic and nonorganic products must be stored separately!

Operations that store and/or process other products besides „Bud“ products are advised to:

- designate certain chambers as organic chambers for the storage of grain and ensure that only store organic products are stored there; carefully seal organic storage chambers when other chambers are to be fumigated or fogged;
- ensure that „Bud“ products are only kept in rooms that have never been subjected to large-scale pest control treatments;
- conduct residue analyses to ensure that cleaning measures are sufficient.

■ Thoroughly cleanse the facilities of dust at least 4 times a year!