

## Preventing GMOs and GM derivatives in imported 'Bud' products

October 2019

### The purpose of this information note

This information note is directed toward importers and 'Bud' processing operations that process imported 'Bud' products. It serves as a guide for assessing the risk of 'Bud' products commingling with genetically modified organisms (GMOs) or GM derivatives and for complying with Bio Suisse requirements. This information note contains the following:

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Please note: All requirements given in the Bio Suisse 'Import Manual'<sup>1</sup> and the Bio Suisse Standards<sup>2</sup> also apply and must be strictly complied with.

The following information and documents are available on the [Bio Suisse website](https://www.bio-suisse.ch/en) under 'GMO':

- The document '[Knospe ohne Gentechnik – Die Sicherstellung](#)' / '[Le Bourgeon sans manipulations génétiques-la garantie](#)' (German and French only)
- The information note '[Food and feed components of "Bud" products that are at risk of GMO contamination](#)'
- Interpretation of the ban on the use of genetic engineering in the production and processing of organic foods
- Form to confirm GMO-free agriculture (InfoXgen form)

The organic sector aims to avoid commingling organic or 'Bud' products with GMOs or GM derivatives at every stage. At present it must be assumed that in many areas where GM crops are cultivated, the aims of organic production are ignored. This means that organic producers and organic trading partners must be vigilant to avoid inadvertent commingling of 'Bud' products with GMOs or GM derivatives. The costs of preventive measures are currently borne by the organic sector.

<sup>1</sup> See the Bio Suisse website: [https://www.bio-suisse.ch/en/Import\\_requirements.php](https://www.bio-suisse.ch/en/Import_requirements.php)

<sup>2</sup> Siehe Bio Suisse Webseite: [https://www.bio-suisse.ch/en/Import\\_requirements.php](https://www.bio-suisse.ch/en/Import_requirements.php)

## 1 The legal framework governing the handling of GMOs, GM derivatives and their declaration

The laws and regulations governing the handling of genetically modified organisms, GM derivatives and the declaration of GMOs and GM derivatives are as follows (German, French and Italian only):

- Swiss Federal Act on Non-Human Gene Technology (Gene Technology Act [GTA], SR 814.91)
- Swiss Ordinance on Foodstuffs and Utility Articles (FoodO, SR 817.02) and the explanatory note "GVO – Hinweise zu den Kennzeichnungsbestimmungen im Einzelnen" ("GMOs – Details on Individual Labelling Requirements")<sup>3</sup>
- Swiss FDHA Ordinance on Genetically Modified Foodstuffs (GMFO, SR 817.022.51)<sup>4</sup>
- Swiss FOAG Ordinance on GMO Feed Lists (SR 916.307.11)
- Swiss Ordinance on the Production and Marketing of Feedstuffs (SR 916.307)
- Swiss Ordinance on the Production and Marketing of Plant Propagating Material (SR 916.151)

Details on the legal framework are available in the document '[Knospe ohne Gentechnik – Die Sicherstellung](#)' / '[Le Bourgeon est exempt de manipulations génétiques– la garantie](#)'.

## 2 Bio Suisse requirements for the prevention of GMOs and GM derivatives, and the documents required by Bio Suisse to confirm the prevention of GMOs and GM derivatives

Whenever 'Bud' products are imported or processed, Bio Suisse requirements as per the Bio Suisse Standards<sup>5</sup> must always be complied with, from field to processing.

Section 9 of this information note gives the exact Bio Suisse requirements for the prevention of contamination with GMOs and GM derivatives as well as further recommendations. All operations that have been approved by Bio Suisse are obliged to meet these requirements. They must also follow the recommendations and document all measures taken. In certain cases Bio Suisse may impose additional mandatory conditions or waive conditions. Additives and organic excipients and co-formulants in mineral feeds, premixes and supplementary feeds may be used in non-organic quality according to certain criteria. If the substances are at risk of GMO contamination, an InfoXgen form must be furnished.

## 3 Handling products that are at risk of GMO contamination

Bio Suisse regularly assesses the risk for 'Bud' products of GMO contamination or contamination with GM derivatives. This takes into account that genetically modified plants are not only cultivated, but are also transported, stored and processed worldwide. Therefore, 'Bud' products also risk becoming commingled outside of those areas where genetically modified plants are cultivated.

In order for Bio Suisse to assess residues, the following information is decisive:

- the quality of measures taken to prevent contamination
- laboratory test results
- conformity with current food and animal feed regulations

The information note '[Food and feed components of "Bud" products that are at risk of GMO contamination](#)' contains a list of at-risk components (by countries and products) and serves importers and processors as a guide for assessing the risk of relevant GMOs.

Table 1 shows a range of products of different GMO statuses. The GMO status determines whether a product (for instance, a soy product) may be used in organic agriculture.

<sup>3</sup> <https://www.blv.admin.ch/dam/blv/de/dokumente/lebensmittel-und-ernaehrung/ernaehrung/gvo-hinweise-kennzeichnungsbestimmungen.pdf.download.pdf/gvo-hinweise-kennzeichnungsbestimmungen.pdf>

<sup>4</sup> Details on tolerances for traces are regulated by article 6a.

<sup>5</sup> See the Bio Suisse website: [https://www.bio-suisse.ch/en/Import\\_requirements.php](https://www.bio-suisse.ch/en/Import_requirements.php)

**Table 1: A range of products of different GMO statuses. The GMO status determines whether a product may be used in organic agriculture for food or animal feed. Here soy and soy products are given as an example.**

✗ Not usable for 'Bud' products, ✓ May be used for 'Bud' products.

| Soy: GMO status and usability for organic or 'Bud' products                        |  |  |
|--|--|--|
| Source material  | GMO status   | Use in organic agriculture   |
| Genetically modified (GM) soybeans   | A genetically modified construct has been approved for use in Switzerland.<br>Soy is declared as 'genetically modified'.   | ✗ Not usable for 'Bud' products  |
| Lecithin from GM soybeans  | A genetically modified construct has been approved for use in Switzerland.<br>Lecithin is declared as 'derived from genetically modified soy'.   | ✗ Not usable for 'Bud' products  |
| Up to 0.1% GM soy in organic soy (0.1% is the detection limit)                     | No GM declaration is required.<br>The GM soy content must be declared in accompanying documents or determined via testing.<br>A genetically modified construct has been approved for use in Switzerland. | ✓ Tolerated under the 'Bud' logo.  |
| Between 0.1-0.9% GM soy detected in an imported retail product or finished product | No declaration is required.<br>The GM soy content must be declared in accompanying documents or determined via testing.<br>A genetically modified construct has been approved for use in Switzerland.    | (✓) Bio Suisse will decide whether the product can be traded.<br>This range is tolerated in organic agriculture if evidence can be furnished that the contamination was unavoidable for technical reasons or was adventitious. |

It is particularly challenging to avoid GMOs and GM derivatives in non-organic ingredients (additives and processing aids) and in microorganism and mushroom cultures. In these products, it is often impossible to obtain direct evidence of genetic modification. Furthermore, approval requirements for additives/processing aids have not been clarified in the EU (approval is required in Switzerland), and these products are not subject to declaration in the EU or in Switzerland.

The use of non-organic ingredients, additives and processing aids in 'Bud' products is restricted.<sup>6</sup> Additives that are derived from agricultural products for which there is a risk that genetically modified varieties were used, e.g., soy lecithin, may therefore only be used in 'Bud' products if they are of certified organic quality. An InfoXgen form is required for other additives, e.g., citric acid, lactic acid or vitamins in animal feed.

For further measures to ensure freedom from GMOs, see the Bio Suisse Standards, part III, section 1.6. Further information on at-risk additives and processing aids is available in the information note ['Food and feed components of 'Bud' products that are at risk of GMO contamination'](#).

<sup>6</sup> A list of non-organic additives and processing aids that are permitted in 'Bud' products is available here (in German, French and Italian only): [http://www.bio-suisse.ch/media/VundH/zusatzstoffe\\_d.pdf](http://www.bio-suisse.ch/media/VundH/zusatzstoffe_d.pdf)

#### 4 Mandatory testing of at-risk products

Based on the appendix to part V, section 1.8 of the Bio Suisse Standards.

In general, imported 'Bud' products should be tested if there is any suspicion of contamination with GMOs or GM derivatives. Bio Suisse requires a PCR test for all imported batches of the following products and their derivatives, regardless of their country of origin:

- Maize (corn), maize products
- Soy, soy products
- Rape, rape products

Samples must be taken from imports of the following products and their derivatives to be tested for GMO content.

- Alfalfa: Samples must be taken from every batch imported from the USA.
- Linseed: At least one random sample must be taken per year from batches imported from Canada or the USA.
- Mustard seed: At least one random sample must be taken per year from batches imported from any country.
- Papayas: Samples must be taken from every batch imported from Hawaii. At least one random sample must be taken per year from batches imported from China or Thailand.
- Rice: At least one random sample must be taken per year from batches imported from China.
- Sugarcane: For processed products from Indonesia and Brazil, manufacturing operations must furnish proof that the raw materials are GMO free (see next paragraph).
- sugar beet: from every batch imported from Canada

For imports of highly processed products in which the DNA has been partially or completely degraded due to processing, manufacturing operations must furnish proof that the raw materials are GMO free. This will be checked in conjunction with the manufacturing operation's annual renewal of Bio Suisse certification.

Examples include:

- Refined 'Bud' rapeseed, maize and soybean oil
- Corn waffles
- Maize (corn) starch / waxy maize starch
- Soy lecithin and soy sauce
- Extrudate, glucose, maltose, maize dextrose
- Cane sugar, molasses and instant caramel flavouring derived from sugarcane, and rum

#### 5 Testing requirements

The currently applicable public and private law standards for 'Bud' products govern the manufacturing process. The aim of testing is to detect and eliminate sources of contamination with genetically modified products that may occur along the supply chain or during processing, both within the scope of responsibility of one's own company as well as within that of suppliers. Laboratory testing serves to:

- provide information about the status of GMO contamination
- guarantee process quality
- meet customer requirements.

PCR tests are the most suitable kind, given the low detection limit required for organic agriculture. Please observe the following testing instructions:

- Choose an experienced, accredited laboratory using accredited laboratory methods (if needed, consult your inspection body).
- The quantitative analytical method must have a detection limit at least as low as 0.1%.
- The method of sampling should ensure that samples of each batch are as homogeneous as possible.<sup>7</sup>
- The minimum sample size for maize (corn), soy and rape is 10,000 seeds.

<sup>7</sup> For more details on sampling and testing (German only), see: [http://orgprints.org/34117/1/speiser-2013-Leitfaden\\_Probenahme-Mai-2013.pdf](http://orgprints.org/34117/1/speiser-2013-Leitfaden_Probenahme-Mai-2013.pdf)

## 6 Procedures in the event of a positive test result

If a qualitative PCR test result is positive, then the GM derivative/event must be quantified and identified. Bio Suisse must also be notified immediately so that a decision can be made as to whether the given product is salable as a 'Bud' product.

All parties involved in the supply chain must furnish proof that they have met the Bio Suisse requirements and fulfilled their due diligence obligations. If this is impossible to prove, then Bio Suisse is entitled to block sale of the batch. If positive results > 0.1% were detected for a GMO that is not permitted or is only tolerated in Switzerland, then trade under the 'Bud' logo is not possible.

Forward the following information to Bio Suisse:

- a description of the sampling method and sample amount
- details about the analytical laboratory and the testing methods (incl. the detection limit)
- test results
- information about the detection limit of the testing equipment
- certificate of inspection and delivery notes (incl. lot number). Each test report must clearly pertain to a specific imported product, for instance by naming the lot number.

## 7 At-risk countries and crops

A list of countries and crops that are deemed to be at risk due to the cultivation of genetically modified crops has been compiled based on information from the Biosafety Clearing House (BSCH), ISAAA, and local experts. The list is available in the information note ['Food and feed components of "Bud" products that are at risk of GMO contamination'](#).

## 8 Precautions that Bio Suisse takes to avoid commingling of 'Bud' products with GMOs and GM derivatives

Table 2 (below) gives Bio Suisse precautions and requirements in detail.<sup>8</sup> This list is not complete. Further information is available on the [Bio Suisse website](#) (under GMO), in the [Bio Suisse Standards](#) and in the [Bio Suisse Import Manual](#) (German French and Italian only)

**Table 2: List of Bio Suisse precautions and requirements**

| Precautions and requirements for 'Bud' products |   |  |
|---|---|--|
| Segment   | Situation/Risks   | Measures/Requirements  |
| <b>Animal husbandry</b>                         |   |  |
| Livestock                                       | <p>There are no genetically modified livestock on the market. In Switzerland genetically modified livestock are prohibited as per the Gene Technology Act.<sup>9</sup></p> <p>The development of GM fish is well advanced. GM salmon are traded in Canada, but are not approved for sale in the EU.</p> | <p>As of January 2001 all bought livestock must come from certified organic farms<sup>10</sup> (with a few exceptions that are subject to derogations).</p> <p>Genetic engineering is prohibited for livestock and fish.<sup>9</sup></p> |

<sup>8</sup> Further information is available in [the best practice guide 'Bio-Produkte ohne Gentechnik'](#) (German only) and in the FiBL dossier ['Organic Farming and Genetic Engineering: How to Keep Organic Farming GMO-free'](#). Dossier No. 3, published by FiBL, Frick.

<sup>9</sup> Gene Technology Act (GTA): <https://www.admin.ch/opc/en/classified-compilation/19996136/index.html>

<sup>10</sup> Bio Suisse Standards, part II, section 4.4

|                        |   |  |
|------------------------|---|--|
| Animal feed            | <p>In Switzerland several genetically modified maize (corn) and soy lines and their follow-on products are permitted for animal feed.<sup>11</sup></p> <p>At-risk products for 'Bud' operations include maize gluten, brewer's yeast, vitamins and excipients and co-formulants in mineral feeds and supplementary feeds.</p> | <p>Trade with imported 'Bud' maize, 'Bud' soy and 'Bud' rape is checked for GMOs (chain of custody, testing).</p> <p>Bio Suisse strictly limits the use of non-organic components in 'Bud' animal feed.</p> <p>Bio Suisse requires an InfoXgen declaration of assurance for trade with components that are at risk of GMO contamination (maize gluten, brewer's yeast, mineral feeds and supplementary feeds, incl. excipients). FiBL checks the certificates.</p> |
| Pharmaceuticals        | <p>In Switzerland GM pharmaceuticals and two GM vaccines are permitted for domestic animals.<sup>12</sup></p>   | <p>Bio Suisse prohibits the use of veterinary medicines, vaccines and other immunological veterinary medicinal products which contain genetically modified organisms for 'Bud' animals.</p> <p>On organic farming operations, the first priority for veterinary care is prevention, followed by gentle treatments and the use of complementary medicine.</p>   |
| <b>Crop production</b> |   |  |
| Seed                   | <p>Genetically modified seed maize (corn), rapeseed, soy seed and cottonseed are traded around the world.</p> <p>Of these, only GM seed maize is traded in the EU.<sup>12</sup></p>   | <p>Bio Suisse and the Swiss Ordinance on Organic Farming (SR 910.18) restrict the use of non-organic seed. Farmers are obliged to use organic seed if it is available on the market. The organicXseeds database shows what is currently available.<sup>13</sup></p> <p>If the use of non-organic seed is permitted, then the seed supplier must furnish a declaration of assurance that the prohibition of the use of genetic engineering was complied with.</p>   |

<sup>11</sup> A list of permitted and tolerated GM animal feed components is available on the homepage of the Swiss Federal Office for Agriculture (German, French and Italian only):

<https://www.blw.admin.ch/dam/blw/de/dokumente/Nachhaltige%20Produktion/Pflanzliche%20Produktion/Getreide%20und%20Futtermittel/Zugelassene%20und%20tolerierete%20GVO%20als%20Futtermittel.pdf.download.pdf/GVO%20Futtermittel%202019%20de.pdf>

<sup>12</sup> Saatgut - Wer die Saat hat, hat das Sagen (Anja Banzhaf, 2016)

<sup>13</sup> Database for organic seed ([www.organicxseeds.com](http://www.organicxseeds.com))

|                                  |  |  |
|----------------------------------|--|--|
|                                  |  | <p>Organic seed breeding and propagation are promoted.</p> <p>Should any incidents of GMO contamination of imported seed occur, information on the given seed (producer, propagator, variety) must be furnished.</p>   |
| Auxiliary inputs <sup>14</sup>   | Auxiliary input components can consist of GMOs or be derived from GMOs (e.g., compost, vegetable oils and premixes).   | Bio Suisse strictly limits the use of auxiliary inputs. Bio Suisse/ Agroscope/FiBL maintain a regularly updated list of approved auxiliary inputs (positive list). When applying for this list of approved auxiliary inputs, InfoXgen forms can be requested or ordered.   |
| Pollen drift / cross-pollination | For 'Bud' products that are imported from countries where GM crops are grown (e.g., the USA, Canada, Argentina, Spain) there is a risk that harvested crops contain GM pollen. | Isolation distances should be kept to minimize pollen drift. Completely segregating product flows (e.g., by using silo bags) should minimize cross-pollination.<br>PCR tests for checking purposes.  |
| Food processing                  |  |  |
| Non-organic ingredients          | Only a few non-organic ingredients, e.g., pea protein (not at risk of GMO contamination), are permitted <sup>15</sup> in processed organic products.                           | Bio Suisse requires that manufacturers replace/refrain from using non-organic products in their recipes or use products of organic quality, e.g., lecithin in chocolate.   |
| Additives and processing aids    | For certain additives and processing aids (e.g., organic acids, microorganisms, yeasts and enzymes) there is a risk of genetic modification.                                   | The Swiss Ordinance on Organic Farming (SR 910.18) greatly restricts the use of additives and processing aids. It is prohibited to add vitamins, colouring or flavouring agents to food. Bio Suisse requires that manufacturers replace/refrain from using non-organic products in their recipes. A declaration of assurance is required confirming that the product contains no GMOS and that no GMOs were used during manufacturing. |

<sup>14</sup> The [list of approved auxiliary inputs](#) (positive list; German and French only) gives all of the fertilizers and substrates, plant protection products, cleaning agents, disinfectants, hygiene products, antiparasitic agents, supplementary feed components and silage additives that have been approved for use in organic agriculture in Switzerland. This list is binding for Bio Suisse producers.

<sup>15</sup> Swiss EAER Ordinance on Organic Farming (SR 910.181), appendix 3: <https://www.admin.ch/opc/de/classified-compilation/19970387/index.html>

|                                 |  |  |
|---------------------------------|--|--|
| Contamination during processing | Contamination with GMOs and GM derivatives is possible at every stage from farm to processing due to technical circumstances. Maize (corn) and soy are especially at risk. <sup>16</sup> | <p>Processing operations must keep organic products strictly segregated from products that are at risk of GMO contamination throughout the entire chain (sowing and harvesting machines, collection points, closed transport containers, separate transloading facilities and processing facilities).</p> <p>Where spatial segregation is not possible, thorough cleaning and staggering the timing (between processing organic, non-organic and GMO products) must take place. Purge batches made between two different kinds of batches (e.g., in mills) must be tested and adjusted as appropriate.</p> <p>Laboratory tests are conducted to check whether the prohibition of the use of genetic engineering as per the Bio Suisse standards has been duly complied with.</p> <p>In the case of imported products, GMO test results must be furnished for every batch containing at-risk crops.</p> |
|---------------------------------|--|--|

## 9 Requirements and recommendations for the supply chain

### 9.1 Seed propagation

#### Bio Suisse requirements:

During seed production and propagation, the following points must additionally be observed for the purpose of quality assurance:

- Non-organic source material / basic seed of at-risk crops must be tested for GMO contamination.
- Where seed for fodder beets and sugar beets or seed potatoes are produced, the distance to GMO fields in which the same crop is grown (as listed in table 4) should be increased by a factor of 100.

#### Bio Suisse recommendations:

- Keep samples of the source material.
- Only produce (organic) seed for at-risk crops in regions/countries that are free of GMOs.

### 9.2 Production

#### Bio Suisse requirements for farmers who produce in a country where GM crops are cultivated:

- As soon as a GM crop is commercially grown in a given country, the use of certified organic propagating material becomes mandatory in that country in order for the crop in question to be certified according to Bio Suisse standards.

<sup>16</sup> A study published by the Swiss Federal Office of Public Health (FOPH) shows that commingling can occur during processing in the range of 0.1 to 1%: <https://www.admin.ch/gov/de/start/dokumentation/medienmitteilungen.msg-id-4276.html>

- A map of the vicinity must be furnished showing where GM crops are grown and which GM crops are being cultivated.
- If genetically modified crops of the same species are grown in the vicinity, then the distances given in table 4 must be maintained. Organic production in direct proximity to GM crops is prohibited.
- For plots on which GM crops were grown prior to conversion to organic agriculture, confirmation must be furnished that the waiting period was observed (table 3).
- If sowing, harvesting or transport equipment belonging to a third party is used, proof must be furnished that the equipment is thoroughly cleaned before use or that it is exclusively used on farming operations that do not cultivate GM crops.

**Bio Suisse recommendations for farmers who produce in a country where GM crops are cultivated:**

- If the use of non-organic seed is permitted, then the results of a (PCR) test for the presence of GMOs must be submitted in addition to the declaration of assurance that the prohibition of the use of genetic engineering was complied with.
- Keep samples of seed.
- Keep samples of the harvested crop.
- Only purchase organic seed from GMO-free regions/countries of origin.
- Purchase seed from suppliers who do not offer GM seed of the same crop.
- Producers who breed their own seed should regularly check their seed for GM content.
- Producers should use their own machines or only machines that are exclusively used by other organic producers or on operations that are free of GMOs (for sowing/harvesting/transport).
- Do not produce crops with compost, manure or slurry from operations that grow GM plants or use GM feed.
- Check for escaped populations of GM crops (e.g., rape) in the vicinity.

**Table 3: Waiting periods for newly acquired plots on which GM crops were previously sown. These are also subject to the general Bio Suisse requirements for conversion (Sources: Schimpf, 2006;<sup>17</sup> Beck et al., 2003<sup>18</sup>).**

| Waiting periods     |   |   |
|---------------------|---|---|
| Crop                | Waiting period  | Reason  |
| Maize (corn)        | Dependent on locality; not required in central and northern Europe<br>Elsewhere: 2 years                | Risk of second-generation or volunteer crops in regions with mild winters (southern Europe).  |
| Rape                | 15 years if no specific control occurs<br>2 years if specific control of second-generation crops occurs | Rapeseed is hardy and remains germinable for a long time (15 years).<br>Volunteer and second-generation rape crops frequently occur |
| Soy                 | 2 years   |   |
| Cotton              | 2 years   |   |
| Sugar/ fodder beets | 10 years if no specific control occurs<br>1 year if specific control occurs                             | Seeds can survive in the ground for more than 10 years. However, seeds are only produced by bolters or in the second year.          |

<sup>17</sup> Schimpf, M. (2006) Koexistenz im landwirtschaftlichen Alltag - Bericht zur Verbreitung von gentechnisch verändertem Material durch Landmaschinen. Abl-Verlag.

<sup>18</sup> Beck, A., Brauner, R., Hermanowski, R., Mäder, R., Nowack, K., Tappeser, B., Wilbois, K. (2003): Bleibt in Deutschland bei zunehmendem Einsatz der Gentechnik in Landwirtschaft und Lebensmittelproduktion die Wahlfreiheit auf GVO-unbelastete Nahrung erhalten?

**Table 4: Isolation distances between organic and GM crops with the aim of limiting contamination to less than 0.1%****(Source: Beck et al. 2003<sup>18</sup>)**

| Isolation distances |  |
|---------------------|--|
| Crop                | Isolation distance   |
| Maize (corn)        | 600m   |
| Potatoes            | 30m  |
| Rape                | 4,000m for male sterile varieties; 600m for male fertile varieties |
| Soy                 | 100m   |
| Sugar/ fodder beets | 10 m (without flower)  |

Derogations to reduce isolation distances may only be issued in consultation with Bio Suisse and under the following conditions:

- Fields where Bio Suisse crops are cultivated must be large (5ha or more).
- In the case of maize (corn) in southern Europe, the sowing time must be postponed until at least 3 weeks after GM crops are sown; confirmation must be furnished.
- Fields where Bio Suisse crops are cultivated must be geographically well isolated/secluded (e.g., bordered by woods, along lakes or rivers, situated in a valley).
- Non-GM seed is available, and test results have been furnished.
- Producers use only their own sowing and harvesting equipment.

When derogations are issued, the results of GMO tests must be furnished before products are delivered to the collection point.

### 9.3 Field cultivation

#### Bio Suisse requirements:

- All auxiliary inputs used (fertilizer, plant protection products, etc.) must be approved for use in organic farming (approved by the inspection body and included in the Bio Suisse/Agroscope/FiBL/OMRI list of approved auxiliary inputs).

### 9.4 Harvesting

#### Bio Suisse requirements for custom farming operations / machinery rings that work in regions where GMOs are grown:

- When third-party machines are used, it must be documented that the machines were thoroughly cleaned before use and the organic crop was harvested first, or that the machine was thoroughly cleaned before use and a GMO-free crop was harvested prior to harvesting organic crops. A cleaning certificate must be furnished.

#### Bio Suisse recommendation:

- Use only harvesters that are exclusively used on organic operations.

### 9.5 Collection, transport, storage

#### Bio Suisse requirements for collection points, purchasers and exporters:

- Collection and transport containers must be thoroughly cleaned (certificate of the three prior loads). In addition, the containers must be lined with plastic foil.
- Shipments overseas / by rail may only be made in containers used solely for organic products.
- GMO tests are required for at-risk products in addition to the shipping documents (cf. the appendix to part V, section 1.8 of the Bio Suisse Standards<sup>19</sup>).

<sup>19</sup> See the Bio Suisse website: [https://www.bio-suisse.ch/en/Import\\_requirements.php](https://www.bio-suisse.ch/en/Import_requirements.php)

**Bio Suisse recommendations for collection points, purchasers and exporters:**

- Receive deliveries of organic products within limited time periods or at clearly designated times separate from deliveries of non-organic products.
- Train employees about contamination issues and about product flow segregation.
- Clearly designate entrances to organic storage bins.
- Reserve certain transloading sites for organic products only.
- Use closed shipping units (containers, big bags, sacks) from the harvesting site to the Swiss border or beyond.
- Use closed shipping units that are used exclusively for organic products from the collection point onwards.
- Take samples from every delivery.
- Reserve separate storerooms for organic products only (ideally, these should include separate loading and unloading equipment).

**9.6 Processing****Bio Suisse requirements for processors and exporters (applies to all 'Bud' production):**

- Strict spatial segregation of organic and non-organic (including GM) products must be guaranteed during storage and processing.
- Where there is temporal segregation, thorough cleaning and generous purge batches are mandatory, and the first batches to be processed following cleaning/purge batches must be of 'Bud' products.
- Take samples.
- Upon delivery of approved at-risk processed products, suppliers must furnish a declaration of assurance that the prohibition of the use of genetic engineering was complied with (the form is available at: [www.infoxgen.com](http://www.infoxgen.com)). For an overview, see the list of non-organic additives, processing aids and microorganisms in the information note '[Food and feed components of 'Bud' products that are at risk of GMO contamination](#)'.
- Processing must take place without the use of GMOs or GM derivatives. This especially applies to processing aids, additives and enzymes.

**Bio Suisse recommendations:**

- Only accept products from suppliers who verifiably strive to avoid GMOs.
- Only process 'Bud' products with equipment that is reserved exclusively for organic products.
- Organic products should not be processed by companies which also process GM products.
- Conduct GMO tests regularly.