

Unauthorized glufosinate found in organic products

We are writing to you to inform you that glufosinate has been found in several organic products. Glufosinate is a non-selective, broad-spectrum herbicide similar in structure and mode of action to glyphosate.

Glufosinate can be applied as a herbicide to increase yields in the cultivation of cocoa beans, coffee beans, and citrus fruits, and potentially in other products such as seeds, cereals, rice, soya, maize, rapeseed, avocados, passionfruit, grapes, nuts, etc.

As glufosinate is an input that is unauthorized in the cultivation of organic products, we are eager to inform about this situation you so that you can take this risk into account in your sampling and analysis.

Background information

Skal is working on several cases in which glufosinate has been found in various imported products. The herbicide glufosinate is the successor to glyphosate, as many weeds have developed a chemical resistance to glyphosate, reducing its efficacy.

Glufosinate is a type of phosphonic acid, and its mode of action is to inhibit glutamine synthetase. This blocks the enzyme responsible for nitrogen in plants, eventually killing weeds.

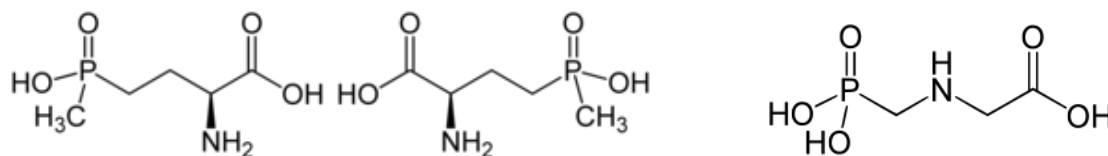


Figure 1: Structural formulas of glufosinate (I) and glyphosate.

Analysis

In a similar fashion to other polar pesticides such as bromide, chloride, chlorate, phosphoric acid, and glyphosate, commercial laboratories may select glufosinate as a single residue method (SRM) to determine levels in organic products.

The analysis is therefore **not part** of the standard multiresidue analyses that use liquid chromatography and gas chromatography with mass spectrometry detection (LC/MS and GC/MS), and must be requested separately. The current limit of quantification (LOQ) is 0.01 mg/kg for glufosinate. The analysis of glufosinate determines the main degradation products in addition to glufosinate: 3-methylphosphinonic-propionic acid (MPPA) and N-acetyl-glufosinate. These degradation products may indicate active use of glufosinate.

The use of glufosinate in the cultivation of organic produce is **not** authorized under Regulation (EU) 2018/848, and therefore should not be used as an input during the cultivation of such produce.

Skal's advice

Please be aware of the risk that the use of erroneous input lists may lead to the intentional or unintentional application of glufosinate as a herbicide in the cultivation of cocoa beans, coffee beans, and citrus fruits and potentially in other products such as seeds, cereals, rice, soya, maize, rapeseed, avocados, passionfruit, grapes, and nuts. Glufosinate should therefore be included in your risk plan and taken into account when analysing imports.

Reporting

If you find glufosinate and its main degradation products – 3-methylphosphinico-propionic acid (MPPA) and N-acetyl-glufosinate – and you cannot eliminate your suspicion, please follow the stipulations of Article 28 of Regulation (EU) 2018/848 and file a report on Skal Biocontrol's reporting portal.

This will give Skal Biocontrole an insight into the extent to which glufosinate is used as an input in the cultivation of organic products. A positive result in organic products may indicate active use. In such cases, Skal Biocontrole will access the OFIS (Organic Farming Information System) and start an investigation in the country of origin, in cooperation with the certifying organizations. If the investigation does not eliminate suspicion regarding the presence of glufosinate in the product, Skal Biocontrole will revoke the product's organic status.

If you have any questions, please send an e-mail to notifications@skal.nl or jhoesen@skal.nl

Kind regards,

Johan Hoesen
Reporting Specialist