February 2023

WIR KÄMPFEN FÜR DAS SCHÖNE.

PESTIZIDE TEST –

Banned pesticides on our plates

AK Oberösterreich

CONTENTS

INTRODUCTION 3

HOW WE TESTED 7

WHAT WE HAVE FOUND 8

WHAT CAN CONSUMERS DO? 9

OUR DEMANDS 9

TEST RESULTS 10-13

- GRANATE APPLE 10
- MANGOS 11
- FISOLEN 12
- SUGAR RABBITS 13

IMPRINT
MEDIA OWNER, PROPRIETOR AND PUBLISHER:
Environmental protection organisation GLOBAL 2000, Neustiftgasse 36, 1070 Vienna, Tel. (01) 812 57 30, e-mail: office@global2000.at, www.global2000.at, ZVR: 593514598

RESPONSIBLE FOR THE CONTENT: Waltraud Novak, **LAYOUT:** Caroline Ecker, ce-design
PHOTOS: Cover, page 3: shutterstock.com, page 6: **Global 2000**

FUNDING NOTICE:
The implementation of this pesticide test was supported by the **Chamber of Labour of Upper Austria.**

INTRODUCTION

Banned substances are imported into the EU, quite legally

Almost 500 active pesticide ingredients are authorised in the EU for the treatment of agricultural crops. At the same time, however, hundreds of active substances are no longer authorised because they have been shown in the course of use to have unacceptable effects on human health or the environment.
Now, however, a double game is revealed by the EU in the handling of these banned pesticides: while the active substances may no longer be used in EU agriculture, they can return to us via imports of food from other countries.

When pesticide active substances lose their authorisation in the EU because a risk to farmers, consumers or the environment cannot be ruled out, the EU usually sets the legal maximum levels for all products to a minimum value, the so-called limit of determination (usually 0.01 mg/kg product). However, it is noticeable that a number of foodstuffs are still subject to high legal maximum values, even though the active substances have been banned for a long time.

How can that be?

Third countries where these pesticides are still allowed can apply for so-called import tolerances in the framework of international trade agreements. Such import tolerances can then be granted by the EU to "meet the needs of international trade", provided that a risk assessment shows that the food or feed in question is safe for consumption, even at the maximum residue level applied for.

But this is where the cat bites the tail: pesticides are approved in the EU according to so-called "cut-off criteria". This means that active substances with mutagenic, hormone-damaging, reproductive-damaging or carcinogenic properties may not be authorised per se. This is to prevent substances of particular concern from entering the food chain. The EU thus excludes such chemicals from authorisation as pesticides on the basis of their hazardous properties, or withdraws authorisation if these properties only become apparent at a later stage. The granting of import tolerances on the grounds that the maximum quantities granted are safe thus contradicts the EU's argumentation for the authorisation or non-authorisation of these substances.

One example of these import tolerances is the active ingredient carbendazim, which is classified by the EU as mutagenic and harmful to plants. This substance can cause genetic defects, impair fertility and even harm the child in the womb. Although the substance has no longer been authorised since 2014, citrus fruits, for example, are still subject to maximum levels of up to 0.7 mg/kg, i.e. 70 times higher than the limit of determination. The maximum value for cherries and plums is also considerably higher than the limit of determination, namely 0.5 mg/kg. For okra, the maximum value is even 2.0 mg/kg. For numerous other banned pesticides, examples can be found where alarmingly high limits apply. Such maximum values can be up to 10 mg/kg. (see Table 1).

On the one hand, this practice of import tolerances means that workers in the producing countries have to handle pesticides that are massively harmful to health - often with inadequate protective equipment - and that the environment there is damaged by dangerous active substances, for example by highly bee-toxic pesticides such as the active substance Imidacloprid. On the other hand, it also means that consumers in Europe can be exposed to these banned substances legally, even though the active substances were banned precisely because they are dangerous.

!

In our test, on mangoes and sugar snap peas, we used the Active ingredient **carbendazim** found.

For these products, high maximum values also apply for this **unauthorised pesticide**, namely 0.5 and 0.2 mg/kg.

The mangoes came from Peru, the sugar snap peas from Kenya.

Table1: Examples of non-authorised active substances with high regulatory limits

EFFECTIVE	ADVERSE HEALTH OR ENVIRONMENTAL EFFECTS[1]	PRODUCT	HIGH-VALUE[2]
Carbendazim	May cause genetic defects May affect fertility. May harm the child in the womb. Hormonally active.	Mango	0,5
		Cherries, plums	0,5
		Tangerines, lemons, limes	0,7
		Sugar snap peas	0,2
		Okra	2
Myclobutanil	May probably harm the child in the womb. Hormonally active. Possibly carcinogenic.	Apple, Pear	0,6
		Apricots, cherries, peaches	3
		Plums	2
		Strawberries, grapes	1,5
		Bananas	3
		Paprika	3
		Vogerlsalat	9
		French beans	0,8
Imidacloprid	Harmful to reproduction, possibly neurotoxic. Very toxic to bees and wild bees, birds, mammals and aquatic organisms.	Citrus fruits	0,9
		Grapes	0,7
		Cranberries, blueberries	5
		Paprika	0,9
		Tomatoes, Aubergia	0,3
		Cucumbers	0,5
		Beans, peas	5
Thiophanate-methyl defects	May presumably cause genetic cause.	Citrus fruits	6
		Apricots, peaches	2
		Mango, papaya	1
		Tomatoes, cabbage sprouts, okra	1
		Aubergine	2
Bifenthrin	May probably cause cancer.	Strawberries,	1
		Blueberries	3
		Mango	0,5
		Papaya	0,4
		Paprika	0,5
		Tomatoes, Aubergia	0,3
		Sugar peas	0,9
Phosmet	May probably affect fertility.	Citrus fruits	0,5
		Cherries, Peach	1
		Apples, pears	0,5
		Cranberries, blueberries	10
		Mulberries, elderberries	2
		Figs	2
		Olives	3
		Litchi, prickly pear, star fruit	2
Thiacloprid	May affect fertility. May cause harm to the unborn child. May probably cause cancer. Highly toxic to bees.	Raspberries	6
		Lamb's lettuce	8
		Strawberries, blackberries and other berries	1
		Apples, pears	0,3
		Olives	4
		Paprika	1
		Tomatoes, cucumbers, courgettes	0,5
		Rocket	2

[1] Health/environmental effects according to EU Sanco database and Pesticide Properties Database (PPDB)
[2] Maximum values according to EU Sanco database

European companies export banned substances, legally

Another delicate point is that European companies are still producing these substances, which are banned in our country, and selling them in other countries.

This means that the EU bans substances for reasons of consumer protection, which can then be exported from the EU to other countries, where they can harm people and the environment, and do so quite legally. And from there they return to us via products imported from these countries. That, too, is completely legal.

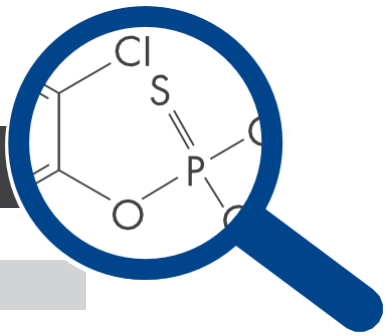
In 2018, for example, a total of over 81,000 tonnes of pesticides that are not permitted in the EU were exported by European companies to third countries. In 2020, more than 300 tonnes of the mutagenic and reproductively harmful active ingredient carbendazim alone were exported. The main pro- viders of these exports are well-known companies such as Syngenta, Bayer, BASF or Corteva (formerly Du Pont and Dow Chemicals). At the expense of the health of producers, consumers and the environment.

On a positive note, the EU has already committed to stopping the export of banned, hazardous chemicals in its 2020 "Chemicals Strategy for Sustainability". But the chemical and pesticide lobbies are active in the background to prevent this goal. Profits are put above the protection of health and the environment. However, following strong pressure from NGOs, trade unions and civil society, the EU has recently agreed to launch a public consultation on the export ban of dangerous chemicals this year.

HOW WE TESTED

26 samples of fresh fruit and vegetable products were analysed in an accredited laboratory for residues of over 500 different pesticide active ingredients.

The samples were purchased in supermarket chains and at weekly markets in Linz and Vienna. Furthermore, the origin of the products was documented. 25 samples were from conventional agriculture, one sample was from organic agriculture, as the product in question was only available in organic quality in the shop (pomegranate).



PRODUCT	NUMBER OF SAMPLES
Mango	8
Pomegranate	8
French beans	5
Sugar peas	5
TOTAL	**26**

The results were fed into the GLOBAL 2000 residue database and evaluated according to the following criteria:

- **Utilisation of the legal maximum values**
- **Number of active substances not approved in the**
- **Number of active pesticide**

WHAT WE FOUND

Pesticide residues were found in over 75% of the samples (20 out of 26), including multiple residues of two to seven active ingredients in 13 samples.

A total of 23 different pesticide active substances were detected (see Table 2). Three of them are **banned in** the **EU**: **Carbendazim** and **Myclobutanil** for health reasons, **Imidacloprid** because it is highly toxic to bees.

It should be noted here that although these pesticides may not be used in the EU, they may very well be used in countries outside the EU. This means that it is not illegal if residues of these active substances are found on imported products.
Because of the highly harmful properties of these substances, we have sought opinions from the sellers of the products concerned as to whether they have specifications or quality assurance concepts in place to ensure that the products they sell do not pose unacceptable risks to workers, consumers or the environment.

Carbendazim, which is mutagenic and damaging to reproduction, was found on **mangoes from Peru** from Hofer and on sugar snap peas from Kenya from Naschmarkt. Hofer has justified in a statement that its suppliers must have certifications for social standards, which prohibit the use of of carbendazim. The statement can be viewed at https://www.global2000.at/publikationen/obst- and-gemuese-im-pestizidtest.
We have not received a statement from Obsteck from Naschmarkt about the residues found.

Myclobutanil is hormonally active and can thus interfere with the hormonal system; it can also probably harm the child in the womb. It was found on runner **beans from** an Aslam market. The origin of the runner beans was not known in the market. We have also not received any statement from the Aslam market.
The neonicotinoid **imidacloprid** was recently banned by the EU because of its high bee toxicity. It led to the **legal maximum level being exceeded on mangoes** from **Peru** by Obsteck with a load factor of 130%. Exceeding the legal maximum values, however, is only objected to by the legislator from a utilisation of 200% due to consideration of the analysis tolerance.

The sugar snap peas from the Naschmarkt (origin Kenya), on which the active ingredient **carbendazim**, which is banned in the EU, was found, also showed an **exceedance of the legal maximum value of** the active ingredient **propamocarb by** 220% (utilisation of 320%). This product was simultaneously contaminated with seven active substances.

On a positive note, **no pesticide residues** were detected on almost a quarter of the products (6 out of 26). Among them were four pomegranates - one of which was organic - and two green beans.

Detailed results can be found in table 3 in the appendix.

WHAT CAN CONSUMERS DO ?

- **Seasonal - regional - organic:**
  Seasonal, regional products are usually less contaminated with pesticides. burdened.

  ▶ With regional products you can be sure that no banned pesticides have been used.

  However, organic is the very best, as no synthetic chemical pesticides may be used in organic farming.
- Take part in the public consultation on banning the export of hazardous chemicals, which the EU will launch later this year under **"Have your say"**/ **"Your Opinion Counts"** will be published:
  ▶ https://ec.europa.eu/info/law/better-regulation/have-your-say_de
- Find out about the pesticide contamination of fruit and vegetables: At www.billa.at/prp the supermarket chain Billa publishes in cooperation with **GLOBAL 2000** regularly publishes the results of its in-house residue controls. Every week, random samples of the entire fresh fruit and vegetable assortment are tested for pesticide residues in accredited laboratories and the results are published on the homepage.
- Join us in demanding pesticide reduction from the EU: Sign **GLOBAL 2000**'s petition for a rapid implementation of the EU's
  Pesticide reduction under:
  ▶ https://www.global2000.at/pestizid-reduktion-fordern

OUR DEMANDS

GLOBAL 2000 and the Chamber of Labour of Upper Austria demand:

- **Health Minister Johannes Rauch** to work at the EU level to ensure that pesticides that are harmful to health do not find their way to the public.
  end up on our plates.
- from the **EU Commission** to ban the export of highly problematic substances banned in the EU.
- from the **EU Commission**, the granting of import tolerances for pesticide active substances which, for health or environmental reasons, have their
  lose authorisation, to be discontinued. All legal maximum levels are to be lowered to the limit of determination when the use-by date expires.

TABLE 2 - Test results: GRANATÄPFEL

PRODUCT	ORIGIN	MARKET	EFFECTIVES	RESIDUE [MG/KG]	HEALTH HAZARDS	ENVIRONMENTAL HAZARDS
Pomegranates	Albania	Etsan	Difenoconazole	0,006	Substitution candidate. Possibly carcinogenic and harmful to reproduction[2]	Very persistent, bio-accumulative, very toxic to mammals, birds (long term), toxic to aquatic organisms[2].
			Spirotetramat	0,01	Suspected of damaging fertility, Suspected of damaging the unborn child, Causes severe eye irritation[1].	Very toxic to aquatic organisms[1] and mammals[2].
			Pyriproxyfen	0,026	Possibly hormonally active[2]	Bio-accumulative, very toxic to mammals, Fish and other aquatic organisms[2]
Pomegranates	Spain	Lidl	-			
Pomegranates	Spain	Spar	Spirotetramat	0,007	Suspected of damaging fertility, Suspected of damaging the unborn child, Causes severe eye irritation[1].	Very toxic to aquatic organisms[1] and mammals[2].
			Flonicamide	0,014	Harmful if swallowed[1], Indications of possible carcinogenicity in humans, possibly harmful to reproduction[2].	Very mobile and water soluble[2], very toxic to mammals[2].
Organic pomegranates	Turkey	Billa	-			
Pomegranates	Turkey	Hofer	-			
Pomegranates	Turkey	Naschmarkt, Kuczera	Boscalid	0,015	Indications of carcinogenic potential[2], possibly harmful to reproduction[2]	Very persistent, bio-accumulative, very toxic to aquatic organisms[2].
Pomegranates	Turkey	Penny	-			
Pomegranates	Spirotetramat	unknownAslam Market	0,007		Suspected of damaging fertility, Suspected of damaging the unborn child, Causes severe eye irritation[1].	Very toxic to aquatic organisms[1] and mammals[2].

Banned pesticides detected

Maximum exceedance >100% (analytical tolerance) and prohibited pesticide

Maximum exceedance >200% and prohibited pesticide

[1] Classification according to EU SANCO Pesticide Database (CLP Regulation)

[2] Classification according to Pesticide Properties Database (PPDB), University of Hertfordshire UK, http://sitem.herts.ac.uk/aeru/ppdb/en/atoz.htm

TABLE 2 - Test results: MANGOS

PRODUCT	ORIGIN	MARKET	EFFECTIVES	RESIDUE [MG/KG]	HEALTH HAZARDS	ENVIRONMENTAL HAZARDS
Mangoes ripe for eating	Brazil	Billa	Azoxystrobin	0,65	Toxic by inhalation[1]. Possible reproductive	Verytoxic to aquatic organisms[1] and mammals[2], harm[2]persistent[2]
			Fludioxonil	0,25	Substitution candidate. PossibleCarcinogenic, possibly toxic for reproduction[2]	Persistentand bio-accumulative[2], very toxic to mammals[2]
			Thiabendazole	4,5	PossibleCarcinogenic, possibleHarmful to reproduction[2]	Verytoxic to aquatic organisms[1] and mammals[2]. Verypersistent[2]
Mangos	Brazil	Etsan	Azoxystrobin	0,091	Toxic by inhalation[1]. Possible reproductive	Verytoxic to aquatic organisms[1] and mammals[2], toxicity[2]persistent[2]
			Fludioxonil	0,039	Substitution candidate. PossibleCarcinogenic, possibly toxic for reproduction[2]	Persistentand bio-accumulative[2], very toxic to mammals[2]
Mangos	Brazil	Lidl	Azoxystrobin	0,079	Toxic by inhalation[1]. Possible reproductive	Verytoxic to aquatic organisms[1] and mammals[2], toxicity[2]persistent[2]
			Fludioxonil	0,023	Substitution candidate. Possibly carcinogenic, possibly toxic for reproduction[2].	Persistent and bio-accumulative[2], very toxic to mammals[2]
Mangos	Brazil	Penny	Azoxystrobin	0,025	Toxic by inhalation[1]. Possible reproductive	Verytoxic to aquatic organisms[1] and mammals[2], toxicity[2]persistent[2]
Mangos	Brazil	Spar	Azoxystrobin	0,23	Toxic by inhalation[1]. Possible risk of reproductive	Verytoxic to aquatic organisms[1] and mammals[2], harm[2]persistent[2].
			Fludioxonil	0,072	Substitution candidate. PossibleCarcinogenic, possibly toxic for reproduction[2]	Persistentand bio-accumulative[2], very toxic to mammals[2]
Mangoes pre-ripened	Peru	Billa	Azoxystrobin	0,23	Toxic by inhalation[1]. Possible risk of reproductive	Verytoxic to aquatic organisms[1] and mammals[2], harm[2]persistent[2].
			Fludioxonil	0,072	Substitution candidate. Possibly carcinogenic, possibly harmful to reproduction[2]	Persistent and bio-accumulative[2], very toxic to mammals[2].
Mangos	Peru	Hofer	Azoxystrobin	0,065	Toxic by inhalation[1]. Possibly harmful to reproduction[2]	Very toxic to aquatic organisms[1] and mammals[2], persistent[2]
			Fludioxonil	0,027	Substitution candidate. Possibly carcinogenic, possibly harmful to reproduction[2].	Persistent and bio-accumulative[2], very toxic to mammals[2].
			Carbendazim*	0,011	Not approved. May cause genetic defects. May affect fertility. May harm the child in the womb. Hormonally active.[1]	Very toxic to aquatic organisms[1], mammals, earthworms, fish[2]. Persistent[2]
Mangos	Peru	Naschmarkt (Obsteck)	Imidacloprid*	0,013	Not approved. Harmful if swallowed[1]. Harmful to reproduction, possibly neurotoxic[2].	Very toxic to aquatic organisms[1], bees & wild bees, birds and mammals[2], persistent and very soluble in water[2].

Banned pesticides detected

Maximum exceedance >100% (analytical tolerance) and prohibited pesticide

Maximum exceedance >200% and prohibited pesticide

[1] Classification according to EU SANCO Pesticide Database (CLP Regulation)

[2] Classification according to Pesticide Properties Database (PPDB), University of Hertfordshire UK, http://sitem.herts.ac.uk/aeru/ppdb/en/atoz.htm

* Not authorised in the EU

TABLE 2 - Test results: FISOLEN

PRODUCT	ORIGIN	MARKET	EFFECTIVES	RESIDUE [MG/KG]	HEALTH HAZARDS	ENVIRONMENTAL HAZARDS
French beans	Kenya	Billa	-			
French beans	Morocco	Billa	Spirotetramat	0,008	Suspected of damaging fertility, Suspected of damaging the unborn child[1], Causes severe eye irritation[1].	Very toxic to aquatic organisms[1] and mammals[2].
			Propamocarb	0,016	Hormonally active, possibly neurotoxic[2]	Very soluble in water[2]
			Spinosad	0,1	Possibly harmful to reproduction[2].	Very toxic to aquatic organisms[1], bees, Wild bees and mammals[2]
French beans / beans wide	Morocco	Hofer	-			
Narrow runner beans	Morocco	Hofer	Boscalid	0,012	Indications of carcinogenic potential[2], possibly harmful to reproduction[2].	Very persistent, bio-accumulative, very toxic to aquatic organisms[2].
			Chlorantraniliprol	0,015	Possibly harmful to reproduction[2]	Very toxic to aquatic organisms[1], Very persistent[2]
			Trifloxystrobin	0,012	Harmful to reproduction[2]	Very toxic to aquatic organisms[1], bio-accumulative[2]
French beans	unknown	Aslam Market	Difenoconazole	0,013	Substitution candidate. Possibly carcinogenic and harmful to reproduction[2]	Very persistent, bio-accumulative, very toxic to mammals, birds (long term), toxic to aquatic organisms[2].
			Bifenazat	0,27	May cause damage to organs, severe eye irritation[1]. Harmful to reproduction[2].	Very toxic to aquatic organisms[1], mammals and birds (long-term)[2]
			Myclobutanil*	0,036	Not permitted. May probably harm the child in the womb.[1] Hormonally active.[2]	Toxic to aquatic organisms[1]. Very persistent[2].

Banned pesticides detected

Maximum exceedance >100% (analytical tolerance) and prohibited pesticide

Maximum exceedance >200% and prohibited pesticide

[1] Classification according to EU SANCO Pesticide Database (CLP Regulation)

[2] Classification according to Pesticide Properties Database (PPDB), University of Hertfordshire UK, http://sitem.herts.ac.uk/aeru/ppdb/en/atoz.htm

* Not authorised in the EU

TABLE 2 - Test results: SUGAR RICE

PRODUCT	ORIGIN	MARKET	EFFECTIVES	RESIDUE [MG/KG]	HEALTH HAZARDS	ENVIRONMENTAL HAZARDS
Sugar peas	Albania	Naschmarkt, Kuczera	Tebuconazole	0,037	Substitution candidate. May probably harm the child in the womb[1]. Hormonally active, probably carcinogenic[2]. Harmful if swallowed[1]	Very toxic to aquatic organisms[1], mammals and birds[2], very persistent[2].
Sugar peas	Kenya	Naschmarkt (Obsteck)	Azoxystrobin	0,023	Toxic by inhalation[1]. Possibly harmful to reproduction[2]	Very toxic to aquatic organisms[1] and mammals[2], persistent[2]
			Carbendazim*	0,022	Not approved. May cause genetic defects. May affect fertility. May harm the child in the womb. Hormonally active.[1]	Very toxic to aquatic organisms[1], mammals, earthworms and fish[2]. persistent[2]
			Difenoconazole	0,01	Substitution candidate. Possibly carcinogenic and harmful to reproduction[2]	Very persistent, bio-accumulative, very toxic to mammals, birds (long term), toxic to aquatic organisms[2].
			Dithiocarbamate	0,018	Possibly carcinogenic and harmful to reproduction[2]	Very toxic to mammals and aquatic organisms[2].
			Tebuconazole	0,13	Substitution candidate. May probably harm the child in the womb[1]. Hormonally active, probably carcinogenic[2]. Harmful if swallowed[1]	Very toxic to aquatic organisms[1], mammals and birds[2], very persistent[2].
			Metalaxyl	0,017	Substitution candidate. Harmful if swallowed[1]	Very toxic to mammals[2]
			Propamocarb	0,032**	Hormonally active, possibly neurotoxic[2]	Very water soluble[2]
Sugar peas	Kenya	Billa	Dithiocarbamate	0,034	Possibly carcinogenic and toxic for	reproduction[2]Very toxic to mammals and aquatic organisms[2]
Sugar peas	Kenya	Spar	Difenoconazole	0,048	Substitution candidate. Possibly carcinogenic and harmful to reproduction[2]	Very persistent, bio-accumulative, very toxic to mammals, birds (long term), toxic to aquatic organisms[2].
Sugar peas	Peru	Billa	Fluopyram	0,21	Possibly carcinogenic and neurotoxic[2].	Very persistent[2], very toxic to birds[2], toxic to aquatic organisms, with long-term effect[1]
			Cyantraniliprole	0,33	Possibly toxic to liver[2]	Persistent, very toxic to bees and aquatic organisms[2]
			Deltamethrin	0,051	Toxic if swallowed or inhaled[1]. Hormonally active, neurotoxin, possibly carcinogenic and harmful to reproduction[2]	Very toxic to aquatic organisms[1], mammals, bees and wild bees[1].
			Pyrimethanil	0,021	Possibly endocrine disrupting, carcinogenic and toxic for reproduction[2].	Toxic to aquatic organisms, with long lasting effects

Banned pesticides detected

Maximum exceedance >100% (analytical tolerance) and prohibited pesticide

Maximum exceedance >200% and prohibited pesticide

[1] Classification according to EU SANCO Pesticide Database (CLP Regulation)

[2] Classification according to Pesticide Properties Database (PPDB), University of Hertfordshire UK, http://sitem.herts.ac.uk/aeru/ppdb/en/atoz.htm

* Not authorised in the EU

** Exceeding of the legal maximum value of 0.01 mg/kg