

# A toxic Cocktail: the EU-Mercosur Deal

**Limes reveal how European Pesticides travel around the World  
(and back)**



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# 1. Executive Summary

The proposed trade agreement between the European Union (EU) and the Mercosur countries of Brazil, Argentina, Paraguay and Uruguay is a stark example of the EU's double standards. While the European Commission has set internal targets to reach climate neutrality,<sup>1</sup> reduce pesticide use,<sup>2</sup> and phase out internal combustion engine cars,<sup>3</sup> it is also pushing for ratification of a trade agreement that will prevent the achievement of these very objectives.

The EU-Mercosur trade deal runs counter to these goals by promoting trade in beef, pesticides, and high-polluting cars, which entails increasing both the production and consumption of products that fuel the climate and environmental crises. Drafted in 1999, the EU-Mercosur agreement is outdated and perpetuates an economic model that is destroying our planet and exacerbating global social injustices where the few profit at the expense of many.

This study assesses the "toxic cycle" that the EU-Mercosur trade agreement would significantly worsen if implemented.<sup>4</sup> For this, Greenpeace\* ran pesticide contamination tests on Brazilian limes sold in supermarkets in eight EU countries. The limes, bought in Austria, Belgium, France, Germany, Italy, the Netherlands, Spain and Sweden, were examined in an accredited and certified laboratory.

The laboratory found residues of numerous pesticides that are produced in the EU and exported to Brazil. These findings are further evidence that toxic substances, some of which are not approved for use in the EU, are being exported to Brazil and returned to Europe in the form of residues on food. This is happening even without the free trade agreement, and can only be expected to increase with EU-Mercosur. Already, pesticides have been found to cause the deaths of millions of bees<sup>5</sup> and poison thousands of people each year in Brazil,<sup>6</sup> to name just two of the many consequences.

## Key findings of this study

- All but one of the 52 samples contained pesticide residues.
- Six of the active ingredients found on the limes are either not approved or banned in the EU.
- More than 90 percent of the samples containing residues showed a toxic cocktail of up to seven different pesticides.
- The probably carcinogenic herbicide glyphosate was found in one third of the samples.
- One third of the active ingredients detected are also found in pesticides sold in Brazil by the European companies BASF and Bayer.

Trade agreements that increase the production, trade and use of pesticides should be consigned to history. The EU-Mercosur agreement would increase both the amount of pesticides used and the amount of pesticide-contaminated produce sold in the EU. Greenpeace is therefore calling on policymakers to reject the EU-Mercosur agreement. Trade policy must not put countries in the Global South at a disadvantage by exacerbating trade asymmetries.



**Greenpeace purchased Brazilian limes from supermarkets and wholesale markets in eight European countries**

\* Unless otherwise mentioned, the references to Greenpeace findings are legal responsibility of Greenpeace Germany.

# 2. The EU's Double Standard: Pesticides banned at Home are sold abroad

In December 2019, the European Commission presented its plan to achieve its climate and sustainability goals: the European Green Deal.<sup>7</sup> The Green Deal includes a target to "reduce the overall use and risks of chemical pesticides and the use of more hazardous pesticides by 50 percent by 2030." The reduction target has been included in several subsequent EU strategies,<sup>8</sup> including the Farm to Fork strategy, which states:

**"The EU will engage actively with trading partners, especially with developing countries, to accompany the transition towards the more sustainable use of pesticides to avoid disruptions in trade and promote alternative plant protection products and methods."**<sup>9</sup>

The EU-Mercosur agreement is incompatible with these goals. It would reduce tariffs on EU exports of pesticides to South America, thereby encouraging an increase in their production, trade and use. This includes pesticides that are not approved by the EU or are banned within its territory, because they are too dangerous for human health or the environment.<sup>10</sup>

Supporters of the EU-Mercosur agreement are turning a blind eye to the devastating effects the agreement would have on people and nature in the Mercosur countries. Already, pesticides are contributing to the loss of lives and livelihoods in South America, an increase in endangered species, and polluted rivers. The EU-Mercosur agreement would make this worse.<sup>11</sup>

European citizens are also affected, as they consume fruit and vegetables imported from South American countries that use pesticides originating, but

unapproved for use, in the EU. And by overshooting planetary boundaries, the destruction of nature resulting from the massive use of pesticides puts everyone at risk.

## The EU-Mercosur agreement

The European Union (EU) and the Mercosur countries of Brazil, Argentina, Paraguay, and Uruguay began negotiating the EU-Mercosur trade agreement more than two decades ago. In 2019, far-right populist Jair Bolsonaro became president of Brazil, and during his tenure he actively promoted the widespread destruction of the Amazon rainforest. Under Bolsonaro's reactionary leadership, an agreement was reached on the trade part of the EU-Mercosur deal. But the political negotiations are far from over, as governments, parliaments and civil societies on both sides of the Atlantic continue to raise serious concerns about the agreement.

The agreement is a neo-colonial, extractivist instrument designed to secure EU imports of certain commodities and raw materials from South America. It favours large chemical companies based in Europe by boosting their exports of chemical products, and threatens to increase pollution in South America and chemicals on EU plates.<sup>12</sup>

## EU-Mercosur and pesticides

Naturally, chemical giants like BASF and Bayer are keen on this deal,<sup>13</sup> as EU pesticide exports to the Mercosur region currently face tariffs of up to 14 percent.<sup>14</sup> The trade agreement would eliminate tariffs on more than 90 percent of EU chemical exports, including pesticides.<sup>15</sup> This means that the pesticide industry can expect to sell higher quantities at tariff-free prices. In addition, import controls would be reduced, and exporters would be allowed to self-certify that they comply with EU policies on issues such as pesticide residue levels.<sup>16</sup>

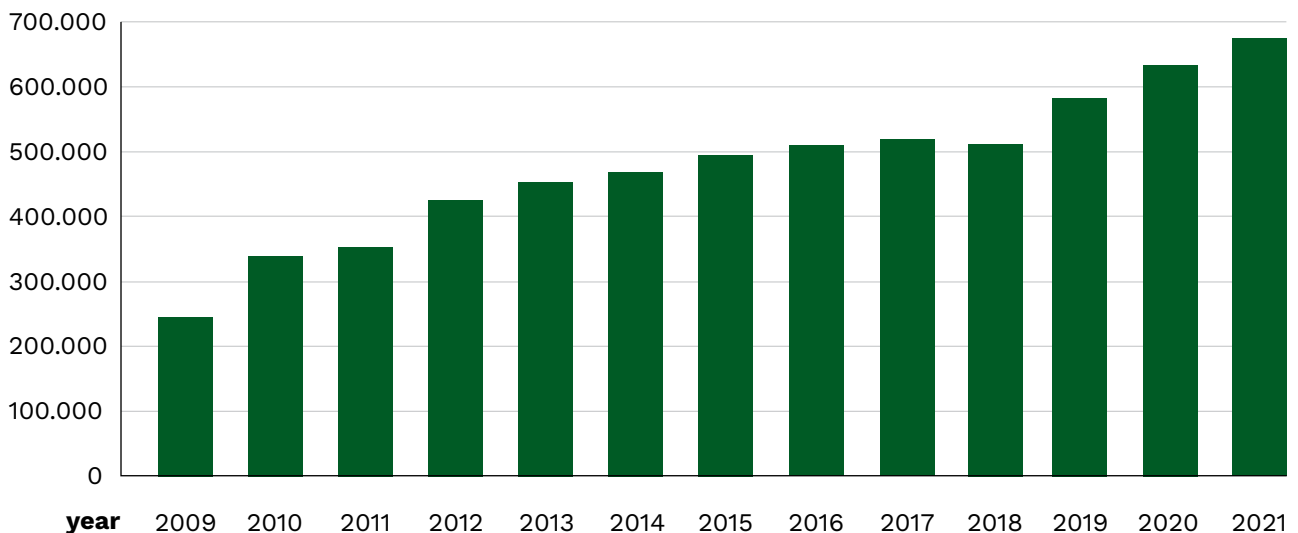
Brazil has long been recognised as one of the top three pesticide users in the world.<sup>17</sup> According to the

agricultural content portal Agrolinkfito,<sup>18</sup> more than 3,000 commercial pesticide products were registered for use in Brazil as of the end of March 2023.<sup>19</sup> During Bolsonaro's four years in office alone, more than 2,100 commercial pesticide products were reportedly approved<sup>20</sup> and pesticide use went up (see Figure 1). While Brazil's new president Luiz Inácio Lula da Silva announced his intention to promote pesticide-free agriculture, his government reportedly approved 48 new pesticides in his first two months in office.<sup>21</sup>

Many pesticides with active ingredients not authorised in the EU are used in Brazilian agriculture. **As of February 2023, 63 percent of the active ingredients authorised in Brazil had no corresponding authorisation in the EU.**<sup>22</sup> Nevertheless, the EU allows them to be produced within its borders and exported to Brazil. This benefits the German chemical companies BASF and Bayer, which are among the world's largest pesticide producers.

**Figure 1: Pesticide use in Brazil 2009 – 2021**

tons of active ingredients



Source: IBAMA (2022): Quantidade de agrotóxico comercializado por classe de periculosidade ambiental em toneladas de IA – em toneladas de ingrediente ativo (2009 – 2021)



## **An EU-wide ban on the production and export of hazardous pesticides is urgently needed**

In its 2020 Chemicals Strategy for Sustainability, the European Commission committed to "ensure that hazardous chemicals banned in the European Union are not produced for export".<sup>23</sup> Almost three years later, no legislative initiative has been presented. Reports suggest that, due to lobbying by the chemical industry, legislation has been severely delayed.<sup>24</sup>

In France, a law banning the export of pesticide products containing substances banned in the EU came into force at the beginning of 2022. However, an investigation by Unearthed found that major loopholes allow manufacturers to continue exporting large quantities of banned pesticides from France.<sup>25</sup> Germany is currently working on a legislative proposal that appears to incorporate some of the French loopholes: only the export of finished pesticide products are banned, while active ingredients are not, circumventing the trade in banned substances. In addition, Germany intends to ban only the export of pesticides that are highly hazardous for human health, not those that are considered hazardous to the environment and biodiversity, such as bees.<sup>26</sup>

Moreover, the Unearthed investigation suggests that chemical companies may simply relocate their export sites to other EU countries in order to circumvent the French ban, highlighting the ample opportunities for circumvention as long as there is no EU-wide ban on the export of hazardous pesticides. Civil society organisations have put forward detailed proposals for an EU-wide ban.<sup>27</sup>

The main EU exporters of pesticides to the Mercosur region are France and Belgium (see Figure 2), although these two countries, unlike Germany, no longer have national global player in the pesticide market. According to an industry research report, subsidiaries of German, Swiss, Indian, US and Danish pesticide companies make up large shares of the French market.<sup>28</sup> The situation is similar in Belgium, from where, according to research by Belgian NGOs, UPL (India), Syngenta (Switzerland) and BASF (Germany) currently export highly hazardous pesticides outside Europe.<sup>29</sup> BASF has its second largest production site in the port of Antwerp.<sup>30</sup> Thus, non-EU companies will also benefit from the EU-Mercosur trade agreement, disproving the notion that trade deals are about geographic competition or advantage. They are corporate deals made at the expense of people and the planet.



**A toxic cocktail of up to seven pesticides was found on some of the lime samples.**

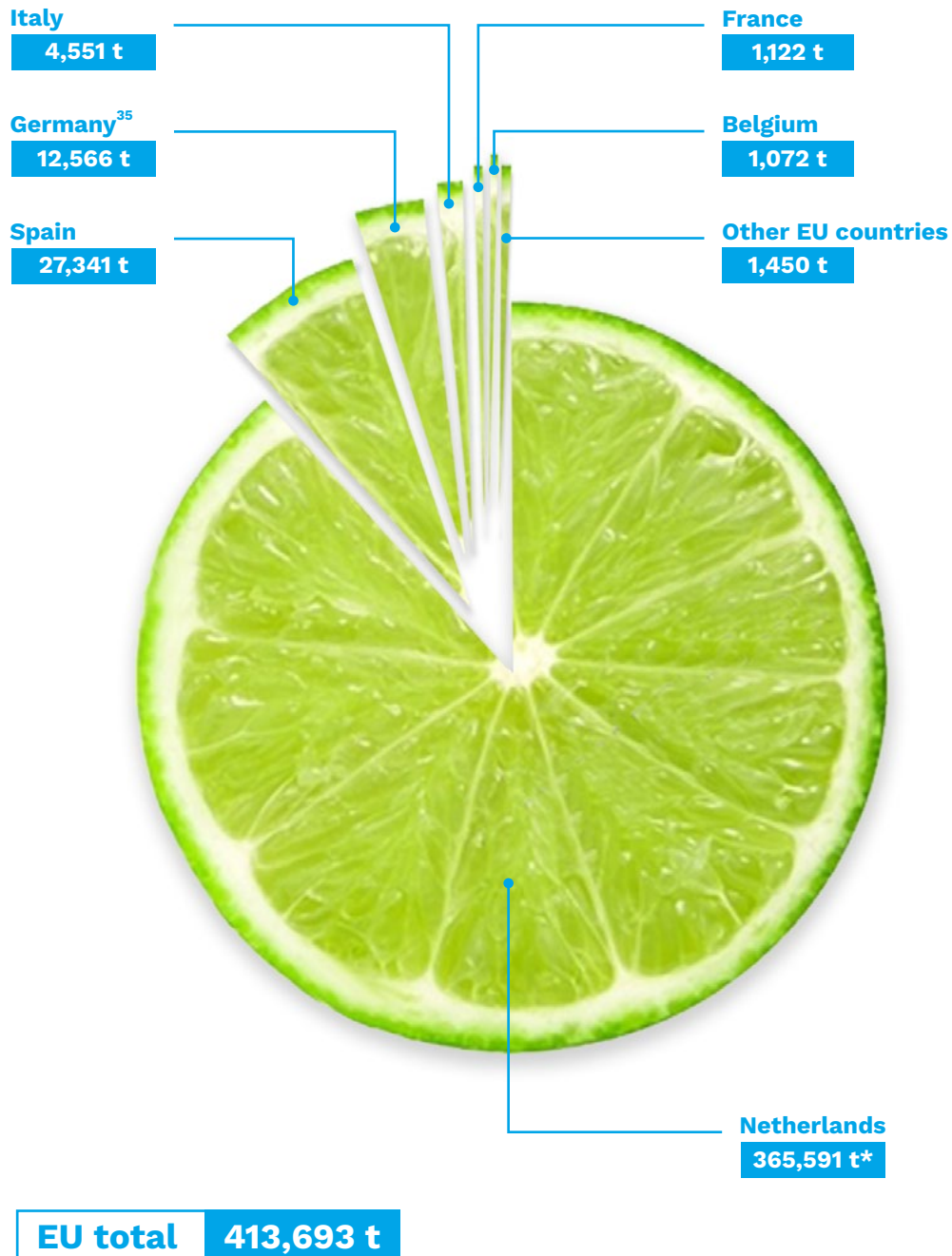
**Figure 2: Top five EU countries exporting pesticides to Mercosur, including Brazil's share, 2018 – 2022 by weight<sup>31</sup> and value<sup>32</sup>**

	France	Belgium	Germany	Spain	Italy	EU total
<b>pesticides exports to Brazil by weight</b>	57,861 t	44,896 t	40,044 t	17,774 t	11,101 t	188,194 t
<b>pesticides exports to Mercosur<sup>33</sup> by weight</b>	69,656 t	50,504 t	48,192 t	23,775 t	15,350 t	229,669 t
<b>pesticides exports to Brazil by value</b>	1152 million €	698 million €	614 million €	387 million €	73 million €	3090 million €
<b>pesticides exports to Mercosur by value</b>	1354 million €	733 million €	752 million €	457 million €	100 million €	3665 million €

To trace the pesticides' journey from Europe to Brazil and back, Greenpeace's analysis focused on Brazilian limes, a fruit that is popular in food and drinks,

especially in the restaurant sector. Figure 3 displays the lime imports of the countries represented in this study.

**Figure 3: Direct import of limes from Brazil by EU countries<sup>34</sup> (2017-2021) in t**



\* The Netherlands is the largest importer not because of its own consumption of limes. Rather, it serves as an import hub for significant quantities of fruit destined for other EU countries.<sup>36</sup>

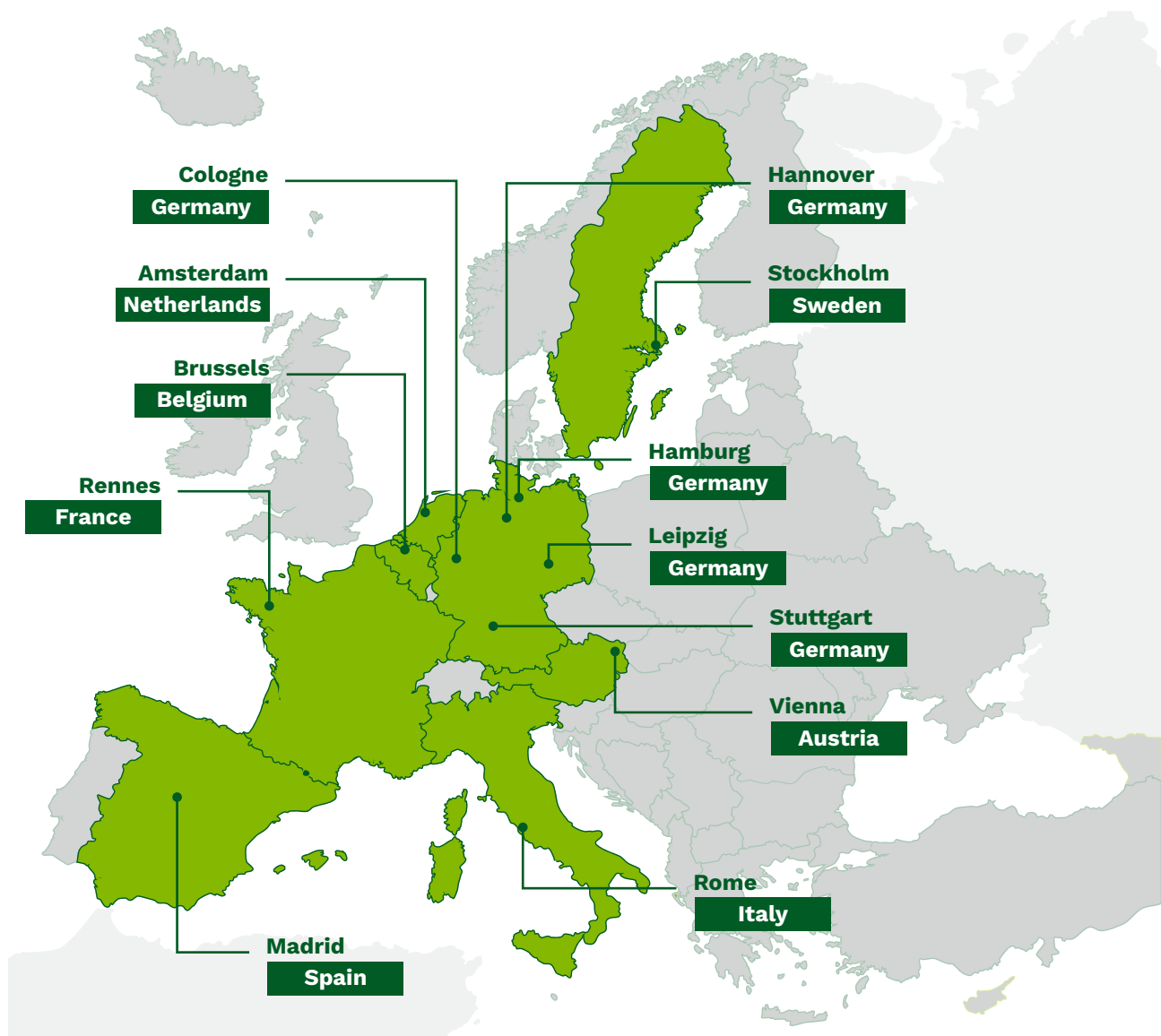


# 3. Pesticide Test and Results

Greenpeace purchased Brazilian limes from supermarkets and wholesale markets<sup>37</sup> in eight European countries (see Figure 4) between March 3 and March 10, 2023.<sup>\*</sup> The limes were sent to an accredited and certified laboratory to be tested for pesticide residues. Only conventional, i. e. non-organic, limes were purchased and the purchases were documented by receipts, photos, videos and

sampling protocols. In wholesale markets, up to three samples were purchased from different distributors, depending on availability. In Germany, two samples per supermarket chain were purchased from two different stores of the same chain. In the other countries, one sample per supermarket was purchased. In total, 52 samples of at least 1 kg each were purchased and tested in the laboratory.

**Figure 4: Locations of the purchased lime samples**



\* Note: in Spain, Greenpeace cooperated with the NGO Ecologistas en Accion for this activity.

## 3.1 Findings and Evaluation

The laboratory contracted by Greenpeace Germany found pesticide residues in 51 of the 52 samples.<sup>38</sup> Only one sample was free of pesticide residues.<sup>39</sup> In the 51 samples with residues, a **total of 27 different pesticide active substances were detected**. While none of these exceeded the legal limits or Maximum Residue Levels (MRLs), it is important to note that there is no safe level of pesticide intake.<sup>40</sup>

### Areas of application of the 27 active substance found:

- one biocide (disinfectant chlorate)
- three herbicides
- ten fungicides
- 13 insecticides

Of the 27 active substances, six were found at very low concentrations below the reporting limit (RL).<sup>41</sup> These substances were nevertheless included in the our analysis for two reasons. First, as noted above, there is no acceptable or safe level of intake, and a very low concentration does not mean that there is no effect. Second, low levels of pesticide residues are not the same as little or no use of pesticides. It is common practice to wait after applying pesticides, and only after the pesticide's active ingredients have degraded, the plants are sold or exported.<sup>42</sup>

Although the product itself is marketed as low residue, the people working in the fields or living in the vicinity where the pesticide was applied, and the environment, are affected.

Of the 21 pesticides with residue levels above the reporting level, six are fungicides used as post-harvest treatments.<sup>43</sup> Another seven pesticides are known as systemic, meaning that they are inside the plant rather than on the surface, and can be found in the fruit pulp.<sup>44</sup> Of particular concern among these seven pesticides is the **herbicide glyphosate, which was found in a total of 17 samples**.

**Imidacloprid**, found in one sample, is one of the best-selling insecticides worldwide.<sup>45</sup> It belongs to the group of neonicotinoids, and is no longer approved in the EU because of the danger it poses to bees.<sup>46</sup>

A recent scientific study examined the effect of imidacloprid on two tropical bee species from Brazil. In both species, bees' learning and memory were impaired after exposure to low doses of this insecticide.<sup>47</sup>

Residues of the insecticide cypermethrin were also found in one sample.<sup>48</sup> In Brazil, there are currently 41 commercial products on the market from different manufacturers containing variants of cypermethrin.<sup>49</sup> While alpha-, beta- and zeta-cypermethrin are no longer authorised in the EU, the same is not true for the cypermethrin itself.<sup>50</sup> This is despite the fact that the European Food Safety Authority (EFSA) recommended that it be ineligible for authorisation in 2018.<sup>51</sup> This was due to its endocrine disrupting and genotoxic properties, as well as its environmental effects (e. g. high toxicity to aquatic organisms and bees, even at very low concentrations).<sup>52</sup>

### According to the EU Pesticides Database, six pesticides found in this test are "not approved" under EU Regulation 1107/2009. "Not approved" can mean one of the following:

- A) the active ingredient has never been approved,
- B) an approval has expired, or
- C) the ingredient was previously approved, but the approval was revoked because the substance has been classified as hazardous (equivalent to a ban).

The aspects mentioned under B) and C) above are relevant for the six active substances found. For three of the six substances, the renewal of the approval was either deliberately broken off (as in the case of bifenthrin) or simply not continued (as in the case of fenpropathrin and teflubenzuron). There may be several reasons for this, such as a lack of economic interest in bringing the active substance to the market, the expiry of patent protection and the end of monopoly marketing, or the assessment that approval could not be obtained. For the other three active ingredients, alpha-cypermethrin and phosmet lost their approval altogether, and imidacloprid lost its approval for outdoor use due to its effects on bees in 2018, and the remaining derogation for use in

greenhouse seed treatment in greenhouses ended on 1 December 2020, as the application for renewal of the authorisation was withdrawn.<sup>53</sup>

**Glyphosate** is the world's most widely used total herbicide<sup>54</sup> with a wide range of applications in the field, in gardens, in public places and even in nature protected areas.<sup>55</sup> Only genetically modified crops are "immune" to this applied herbicide.<sup>56</sup> In Brazil, 122 herbicides containing glyphosate are approved, including the 15 products from Bayer CropScience.<sup>57</sup> Glyphosate has been found to have numerous negative effects on the environment including bees.<sup>58</sup> The International Agency for Research on Cancer classified it as "probably carcinogenic to humans"<sup>59</sup> and breast cancer cases in Brazil have been linked to the massive use of glyphosate.<sup>60</sup> Nevertheless, glyphosate is authorised in the EU until 15 December 2023, and a renewal process for continued authorisation has been started.<sup>61</sup>

**Half of all of the pesticides found in this analysis are Highly Hazardous Pesticides (HHPs)**

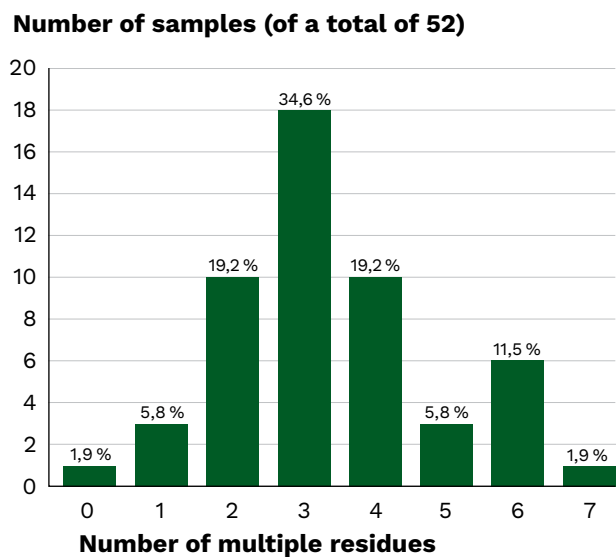
according to the Pesticide Action Network (PAN) classification – including five of the six active ingredients that are not approved in the EU. PAN classifies an active ingredient as highly hazardous if it poses a high potential risk to human health, animals or the environment. The criteria are based in part on the World Health Organization's pesticide classification. The latest version of PAN's HHP list is from 2021.<sup>62</sup>

The three active ingredients – imidacloprid, cypermethrin and glyphosate – found in the tests are also present in commercial pesticide products sold in Brazil by the two German companies Bayer and BASF.<sup>63</sup> Bayer has 108 pesticides (commercial products) registered in Brazil.<sup>64</sup> BASF has 147.<sup>65</sup> Using the Agrolinkfito database to compare the active ingredients contained in these commercial products with those found in the residue test, further overlaps are found. The active ingredients for Bayer are fosetyl-al, pyrimethanil, tebuconazole and trifloxystrobin, and the active ingredients

for BASF are acetamiprid, pyraclostrobin and teflubenzuron.<sup>66</sup> This means that, theoretically, of the active ingredients found in the residue test, six are from Bayer and four are from BASF. We cannot prove that the residues found on the tested limes originate from Bayer or BASF products as the corresponding active substances are also found in pesticides sold by other companies. However, as both companies are major players in the Brazilian pesticide market, they may contribute to the pesticide residue burden in imported limes. If the EU-Mercosur trade agreement comes into force, Bayer, BASF and other pesticide companies operating in the EU will benefit from tariff reductions that will make their products cheaper and more competitive, which is likely to increase their use even further.

The residues found are alarming in many ways, including the fact that only three of the contaminated samples contained only one residue. The other 48 samples showed **multiple residues** with up to seven different pesticides (see Figure 5). It is important to note that the European Union and national institutions that set maximum residue levels for pesticides and test agricultural products only consider each active ingredient and its residues in isolation, and not how these pesticides interact with each other. The toxic cocktail in the 48 samples is alarmingly overlooked by the very agencies meant to protect health and the environment.

**Figure 5: Number of samples with multiple pesticide residues**



## 3.2 Country by Country Results

**Table 1: Results of the lime testing in eight European countries (March 2023)**

Countries	Number of samples	Average number of pesticides per sample	Number of Samples with multiple residues***								Samples with no EU approval*	Number of HHPs** in the samples
			0	1	2	3	4	5	6	7		
Austria	5	3,6		1		1	2		1		0	11
Belgium	5	2,2		1	2	2					2	7
France	4	4,0				2	1		1		0	3
Germany	19	3,1	1		5	7	3	2	1		4	42
Italy	5	4,2				2	1	1	1		3	13
Netherlands	5	4,2			1	1	1		2		1	5
Spain	5	2,6		1	1	2	1				1	11
Sweden	4	4,0			1	1	1			1	0	10
<b>Sum</b>	<b>52</b>	<b>3,4****</b>	<b>1</b>	<b>3</b>	<b>10</b>	<b>18</b>	<b>10</b>	<b>3</b>	<b>6</b>	<b>1</b>	<b>11</b>	<b>102</b>
<b>Percentage</b>			<b>1,9 %</b>	<b>5,8 %</b>	<b>19,2 %</b>	<b>34,6 %</b>	<b>19,2 %</b>	<b>5,8 %</b>	<b>11,5 %</b>	<b>1,9 %</b>		

\* number of samples that contain one active substance without EU approval (= not approved)

\*\* number of samples with Highly Hazardous Pesticides (HHPs), a single sample can contain up to five HHPs

\*\*\* Residues below the reporting limit were not considered

\*\*\*\* Average of pesticides for all samples

There are some differences in the residue loads found on the limes from each of the eight countries examined (see Table 1).

The test results do not have the necessary sample size and methodological rigour to provide a statistically relevant picture of food consumption in these EU countries. However, they are relevant as indicators of this problem, and are widely reported in other studies. Complementary to other studies, this analysis illustrates the situation of food from conventional agriculture and the situation of pesticide residue intake by the population.

On average, each sample from the eight EU countries contained a cocktail of 3.4 different active ingredients. More than 90 percent of the samples containing residues had a cocktail of up to seven different pesticides. Seventy-three percent of samples contained between two and four active ingredients. Unauthorised active ingredients were most commonly found in limes purchased in Germany (four times) and Italy (three times). Limes from Germany and Italy also contained the most highly hazardous pesticides (HHPs) according to the PAN classification, with Germany clearly in the lead due to the higher number of samples.

## What's to worry about when multiple exposures are involved?

Imagine a fruit salad: A single lime contaminated with one pesticide poses a risk. But the limes we tested contained up to seven different pesticides. If you add conventional papayas and mangoes to the lime, the risk multiplies again and the salad could turn into a toxic cocktail containing up to twenty different pesticide residues. This was the result of a study conducted by Greenpeace Germany in 2021.<sup>67</sup> Yet, the EU only sets maximum limits for individual pesticides on a piece of food, and there is no limit for the sum of all pesticides. Based on the precautionary principle, a solution could be a cumulative limit, which Greenpeace has been calling for since 2005.<sup>68</sup>



**In total, 52 samples of at least 1 kg each were purchased, weighed, and sent to the laboratory.**

Among the active ingredients not authorised in the EU, the insecticide bifenthrin stands out. It was found six times in samples from Belgium, Germany, Italy, the Netherlands and Spain. Phosmet and teflubenzuron were found once each in samples from Germany. In Italy, fenpropathrin and (alpha-) cypermethrin were found in one sample each. One sample from Belgium contained imidacloprid.

Among the HHPs, the fungicide imazalil is number one on the list, detected in 44 samples (85 percent of all samples). This is probably because it is used as a post-harvest treatment and has not had time to degrade. In second place is the herbicide glyphosate, which was found in 17 samples. The insecticide malathion comes in third with ten detections.

### **14 pesticides that are either not authorised in the EU and/or considered by PAN to be highly hazardous were found in European lime samples from Brazil.**

1. 2,4-d
- 2. bifenthrin**
- 3. alpha-cypermethrin**  
(found as **Cypermethrin**)
4. *etofenprox*
- 5. fenpropathrin**
6. *fenpyroximate*
7. *glyphosate*
8. *imazalil*
- 9. imidacloprid**
10. *malathion*
- 11. phosmet**
12. *tebuconazole*
- 13. teflubenzuron**
14. *thiabendazole*

Note: all pesticides except teflubenzuron are classified as HHP. Active substances in bold: no authorisation in the EU. Active substances in italics: the levels found were below the reporting limit (RL).



# 4. Harm to People and Nature

Brazil's large-scale agriculture, focused on commodity exports, is now highly dependent on herbicides, fungicides and insecticides, which are applied with little oversight.<sup>69</sup> In Brazil, pesticides are reportedly often sprayed on monocultures by airplanes.<sup>70</sup> These substances can travel in the wind, sometimes over 1,000 kilometres.<sup>71</sup>

Pesticides cause serious damage to biodiversity as they are often also toxic to "non-target-species". By reducing populations of various organisms, they can contaminate water and soil and have serious effects on ecosystems, including disrupting food webs and habitats, from reducing natural predators of species that attack crops up to animals at high trophic levels, such as birds of prey.<sup>72</sup> It has been reported that spraying pesticides on parts of the Amazon rainforest in Brazil has facilitated deforestation, as the pesticides used, such as glyphosate, caused trees to defoliate.<sup>73</sup>

Pesticides are equally devastating to bees.<sup>74</sup> In the state of Minas Gerais, millions of bees reportedly died between September 2022 and February 2023 in one city alone. An investigation revealed that their deaths were due to pesticides, with residues of the insecticide chlorpyrifos, glyphosate and other pesticides found.<sup>75</sup>

Pesticides also pose significant health risks, particularly to the people who apply them and to marginalised rural communities nearby.<sup>76</sup> Due to the extensive use of pesticides in Brazil, residues have been found in everything from drinking water,<sup>77</sup> rivers and fish,<sup>78</sup> to the blood of farm workers and in breast milk<sup>79</sup>.

The potential effects on human health are manifold, including changes in the immune, nervous, respiratory, circulatory, endocrine and reproductive systems.<sup>80</sup> According to Dr Larissa Bombardi, 20 percent of pesticide victims in Brazil are children and adolescents.<sup>81</sup> Recent studies show a correlation between the use of pesticides in Brazil's agricultural regions and an increase in childhood and adolescent cancers.<sup>82</sup> Research estimates that

between 2010 and 2019, 56,000 people in Brazil suffered from pesticide poisoning, and on average, one person died every two days as a result of poisoning from agricultural chemicals used on Brazilian farms.<sup>83</sup> This number reflects only reported cases.

## Toxic money making

A few companies dominate the global pesticide market. According to AgroPages, the market grew in 2021 despite the COVID-19 pandemic. AgroPages' market assessment shows that total pesticide sales of the top 20 companies will reach \$72.6 billion in 2021, an increase of 18.7 percent from the previous year, when sales were \$61.1 billion. The global market is dominated by four leading agrochemical giants, which alone account for 54.7 percent of top 20 sales in 2021.<sup>84</sup> Three of these are European companies: Syngenta,<sup>85</sup> Bayer CropScience and BASF have a combined market share of 44.7 percent.<sup>86</sup> They are based in Switzerland and Germany, respectively, have subsidiaries in various EU countries, and are present in the Brazilian market.

# 5. Solutions and Alternatives in Brazil

While the prevailing agricultural model in Brazil is based on monocultures with heavy use of pesticides, the country has a rich tradition of family and small-scale farmers producing food according to the principles of agroecology, which does not rely on the use of pesticides. In addition, agroecology aims to distribute income and increase social equity, favouring thousands of small and family farmers spread throughout the country.

In Brazil, agroecological production has been supported by previous governments through federal policies and instruments, leading to visible improvements for small farmers and vulnerable groups.<sup>87</sup> Agroecological agriculture is capable of replacing current food production, ensuring healthy food for all families, thus tackling issues such as hunger. It is present all over Brazil, proving

that it is possible to have an agricultural model that respects people and nature.

The Landless Workers' Movement (MST in Portuguese),<sup>88</sup> one of the largest social movements in the world, has a history of more than four decades in Brazil. It includes some 450,000 families who have created communities, farms, small food processing businesses, and farmers' markets throughout Brazil. MST is the largest producer of organic rice in Latin America and trains its members in sustainable agricultural practices and agroecology.<sup>89</sup>



In 2021, Greenpeace activists demonstrated in front of the Ministry of Economics in Berlin and demanded: "Detox Trade - Stop EU-Mercosur Deal".

# 6. Conclusion and Demands

This research provides further evidence that toxic substances banned in the EU are exported to Brazil and returned to Europe in the form of residues in food. Testing limes for pesticide residues revealed six active substances that are either not authorised or banned in the EU. Pesticide residues were found in all but one of the 52 samples. And more than 90 percent of the samples containing residues showed a toxic cocktail of up to seven pesticides.

This research is a stark warning: ratifying the EU-Mercosur agreement would further fuel a vicious cycle by encouraging more production, sale and use of hazardous substances. While the EU has set pesticide reduction targets, this trade agreement will lead to more pesticides in other parts of the world, and increase the asymmetry between the Global North and the Global South. Policymakers should not turn a blind eye to the devastating impacts of this neo-colonial deal on people and nature in the Mercosur countries.

## **Greenpeace therefore calls on policymakers to**

- Reject the EU-Mercosur agreement. Do not ratify trade agreements that promote the trade, production and use of pesticides.
- Develop a fundamental reform of EU trade policy. Trade policy must respect the Earth's planetary boundaries, ensure the equitable, sustainable and responsible use of natural resources and uphold the basic principles of environmental justice (polluter pays, precaution, prevention and remediation at source).<sup>90</sup>
- Adopt effective and comprehensive export bans at national and EU levels to prohibit the export of all pesticides and other chemicals that are hazardous to human health, the environment, and biodiversity.
- Adopt an effective and comprehensive international pesticide standard capable of addressing asymmetries among different regions of the world.

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