

# EU-Mercosur: Double standards concerning agrottoxics

How the EU and German companies profit from the sale of pesticides detrimental to biodiversity



Brief analysis on pesticides in the context of the EU-Mercosur trade agreement

# EU-Mercosur: Double standards concerning agrottoxics

How the EU and German companies profit from the sale of pesticides detrimental to biodiversity

Brief analysis on pesticides in the context of the EU-Mercosur trade agreement

May 2020

## ➔ No money from industry and government

Greenpeace is international, non-partisan and completely independent of politics, parties and industry.

With non-violent actions, Greenpeace fights for the protection of the basis of life.

It comprises 28 independent national/regional offices in over 40 countries across Europe, the Americas, Africa, Asia and the Pacific, as well as a co-ordinating body, Greenpeace International.

---

### Imprint

Greenpeace e.V., Hongkongstrasse 10, 20457 Hamburg, Germany, phone +49 40 3 06 18-0, mail@greenpeace.de **Press Office** phone +49 40 3 06 18-340, fax +49 40 3 06 18-340, presse@greenpeace.de, www.greenpeace.de **Political Representation Berlin** phone +49 30 30 88 99-0 **Responsible within the meaning of the German Press Law** Jürgen Knirsch **Editorial and content-related cooperation** Vanessa Reithinger **Photo** Titel: Daniel Beltrá/Greenpeace **Graphic Design** Stefan Klein | Klasse 3b

# Contents

- 4 Glossary
- 5 Introduction
- 6 Toxic trade relation
- 7 Pesticide hotspot Brazil – involvement of German companies
- 10 Export of dangerous toxic substances from the EU to Brazil
- 11 Conclusions

# Glossary

## Pesticide

The term pesticide includes plant protection products, agrochemicals and agrotoxics. It refers to pest control agents as well as chemicals for promoting or manipulating plant growth, hormones, and biological active ingredients. The analyses presented in this paper primarily cover synthetic chemical ingredients.

## Pesticide product

This refers to a finished product that is marketed under a pesticide brand (trademark) and consists of a synthetic chemical pesticide formulation that contains an active ingredient or a combination of active ingredients as well as additives. Additives are used to dilute a pesticide or improve its application or adhesion to a plant.

## Active ingredients

Active ingredients are the primary active chemicals in a pesticide formulation, which usually contains additional substances such as extenders or solvents.

## Highly hazardous pesticides (HHPs)

The Pesticide Action Network (PAN) classifies an active ingredient as highly hazardous if it poses great potential risks to human health, animals, or the environment. The categories/criteria are based, among other things, on the pesticide classification of the World Health Organization (WHO), the Globally Harmonized System (GHS), the International Agency for Research on Cancer (IARC), the United States Environmental Protection Agency (US EPA) and the Rotterdam Convention (PIC Convention).<sup>1</sup>

## Pesticide approval in the EU

Commercially available pesticide products contain one or more active ingredients as well as additives. Across the EU, approval of active ingredients is handled by the European Food Safety Authority (EFSA). On the other hand, pesticide products are approved by the member states. For a pesticide product to be authorised in the EU, the active ingredients it contains must be approved for use. It must be shown that the active ingredient does not have any negative effects on human and animal health as well as any impermissible consequences for the environment. While a pesticide product is only allowed to be used in the EU if it is approved in the member state in question, this rule does not apply to pesticide products that are exported to countries outside the EU.<sup>2</sup>

## Active ingredients and pesticides without EU approval

Information on the approval status of an active ingredient and/or a pesticide can be found in the *EU Pesticides database*<sup>3</sup>. The database includes slightly more than 1400 active ingredients and classifies them only into these three categories: “not approved”, “pending” and “approved”. “Not approved” may 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. The last scenario is equivalent to a ban.

1) Pesticide Action Network (2019): PAN International List of Highly Hazardous Pesticides. [http://pan-international.org/wp-content/uploads/PAN\\_HHP\\_List.pdf](http://pan-international.org/wp-content/uploads/PAN_HHP_List.pdf)

2) The member state where a plant protection product is made, stored or transported only needs to ensure by inspection that the product is exported from its territory to a third country. See: Research Services of the German Bundestag (2020): Export of non-approved plant protection products, legal provisions in France and Germany. (WD 5-3000-015/20) [in German]. <https://www.bundestag.de/resource/blob/689790/5d86d62bfff8866bae6864f2d8ea2b977/WD-5-015-20-pdf-data.pdf>

3) European Commission (2020): EU Pesticides database. <https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/public/?event=activesubstance.selection&language=EN>

# Introduction

After 20 years of negotiations, the European Commission announced on 28 June 2019 the conclusion of a „comprehensive free trade agreement“ with the four founding members of the Southern Common Market (Mercosur) – Argentina, Brazil, Paraguay and Uruguay. However, the agreement must still go through various ratification processes (in Europe the EU Council, the European Parliament and the parliaments of the EU member states) before it comes into force. While countries such as France and Austria have been critical of the agreement, with France even explicitly highlighting the lack of consideration for environmental aspects and the increasing deforestation in Brazil, Germany is one of the driving forces and the biggest beneficiary of the trade agreement. The EU Commission confirms that German exports will become more competitive and benefit from this practically as a whole.<sup>4</sup>

In particular, the German automotive industry, electronics and mechanical engineering sectors, and chemical and pharmaceutical industries stand to profit from the proposed lowering of customs duties.<sup>5</sup> The trade agreement plans to lift customs duties on more than 90 per cent of EU chemical exports.<sup>6</sup> Pesticides are currently subject to customs duties of up to 14 per cent.<sup>7</sup> Conversely, customs duties are set to be lowered for agriculture products imported from Mercosur such as beef, chicken, sugar and bioethanol.<sup>8</sup> In South America, large swathes of forest are cleared – directly or indirectly – to make way for their production and large amounts of pesticides are used.<sup>9</sup>

Pesticides are a threat to biodiversity. In its 2019 flagship report<sup>10</sup> on the state of nature worldwide, the renowned global biodiversity organisation IPBES lists environmental pollution through toxic and harmful substances as the fourth out of five main factors<sup>11</sup> responsible for the destruction of natural ecosystems and for placing one million animal and plant species (one in eight) under acute threat of extinction. Agricultural toxic and harmful substances, such as synthetic pesticides, contribute to this form of pollution.

This brief analysis highlights the EU’s role in the trade of pesticides and their active ingredients as well as the effects of these toxic substances on biodiversity, in view of the upcoming ratification process for the EU-Mercosur trade agreement. It complements the latest studies conducted by other non-governmental organisations (NGOs): For decades PAN has been analysing the export of pesticides and in September 2019 published its latest study entitled “Made in Germany: Pesticide export from Germany endangers humans and nature”.<sup>12</sup> In February 2020, Unerthed (Greenpeace UK) and the NGO Public Eye uncovered that five leading agrochemical companies generated one third of their pesticide sales in 2018 through substances that are highly hazardous to humans or the environment.<sup>13</sup> Published in April 2020, the Foodwatch report “Stop the Poison Boomerang!” revealed how these toxic substances are circulated: Exported pesticides end up again on our plates in the form residues found inside imported food.<sup>14</sup> The effects of pesticide export on people who use pesticides or who live close to places with pesticide use were shown – likewise using Brazil as an example – in the study “Hazardous pesticides from Bayer and BASF – a global trade with double standards” by INKOTA, Misereor, Rosa Luxemburg Stiftung et al., which was likewise published in April 2020.<sup>15</sup>

4) EU Commission (2019): Factsheet “The EU-Mercosur trade agreement: Opening up a wealth of opportunities for people in Germany”. [https://trade.ec.europa.eu/doclib/docs/2019/august/tradoc\\_158313.pdf](https://trade.ec.europa.eu/doclib/docs/2019/august/tradoc_158313.pdf)

5) Loc. cit.

6) The European Chemical Industry Council (2020): Concluding A Free Trade Deal With Mercosur Will Benefit Trade In Chemicals Between The Two Regions. <https://cefic.org/media-corner/newsroom/concluding-a-free-trade-deal-with-mercocur-will-benefit-trade-in-chemicals-between-the-two-regions/>

7) Cf. <http://historico.tarifar.com/tarifar/html/temp/1-anexo-i-ncm-2017-vi-enmienda.pdf>

8) Ghiotto, L./Echaide, J. (2019): Analysis of the agreement between the European Union and the Mercosur. <https://www.annacavazzini.eu/wp-content/uploads/2020/01/Study-on-the-EU-Mercosur-agreement-09.01.2020-1.pdf>

9) Ghiotto, L./Echaide, J. (2019): Analysis of the agreement between the European Union and the Mercosur. <https://www.annacavazzini.eu/wp-content/uploads/2020/01/Study-on-the-EU-Mercosur-agreement-09.01.2020-1.pdf>

Greenpeace (2019): Countdown to Extinction, <https://www.greenpeace.org/international/publication/22247/countdown-extinction-report-deforestation-commodities-soya-palm-oil/>, p 46-59 and

Fatheuer, T./FDCL (2020): Zuckerträume, [https://www.fdcl.org/wp-content/uploads/2020/03/FDCL\\_Zuckertra%CC%88ume\\_web.pdf](https://www.fdcl.org/wp-content/uploads/2020/03/FDCL_Zuckertra%CC%88ume_web.pdf), [in German] p 21, Unerthed (2020).

<https://unearthed.greenpeace.org/2020/02/20/brazil-pesticides-soya-corn-cotton-hazardous-croplife/>

10) Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (2019): The global assessment report on Biodiversity and Ecosystem Services. Summary for Policymakers. S. 12/13.

[https://ipbes.net/sites/default/files/2020-02/ipbes\\_global\\_assessment\\_report\\_summary\\_for\\_policymakers\\_en.pdf](https://ipbes.net/sites/default/files/2020-02/ipbes_global_assessment_report_summary_for_policymakers_en.pdf)

11) Five main reasons for the destruction of natural ecosystems 1) direct destruction or clearing of natural habitats to make way for farmland, pastures, roads and residential land; 2) overexploitation and depletion of individual species, such as fish in oceans or trees in forests; 3) climate crisis; 4) environmental pollution through toxic and harmful substances and 5) invasive species that have spread on a very large scale and disrupted or even completely eliminated the native flora and fauna in many places.

12) Pesticide Action Network (2019): Toxic Exports – The export of highly hazardous pesticides from Germany into the world [Executive summary].

<https://pan-germany.org/download/toxic-exports-the-export-of-highly-hazardous-pesticides-from-germany-into-the-world-executive-summary/>

13) Public Eye (2020): Pesticide giants make billions from bee-harming and carcinogenic chemicals.

[https://www.publiceye.ch/en/topics/pesticides/pesticide-giants-make-billions-from-bee-harming-and-carcinogenic-chemicals?fbclid=IwAR2taZgrGV9B7\\_5XaRruXv3h6GIFWULtt\\_cJc-nVEJ4WuLnaNbycl564X1WM](https://www.publiceye.ch/en/topics/pesticides/pesticide-giants-make-billions-from-bee-harming-and-carcinogenic-chemicals?fbclid=IwAR2taZgrGV9B7_5XaRruXv3h6GIFWULtt_cJc-nVEJ4WuLnaNbycl564X1WM)

14) Foodwatch (2020): Stop the Poison Boomerang! Background paper 2020.

[https://www.foodwatch.org/fileadmin/INT/transparency\\_and\\_food\\_safety/documents/Foodwatch\\_background\\_paper-22-April\\_2020-Stop\\_the\\_poison\\_boomerang.pdf](https://www.foodwatch.org/fileadmin/INT/transparency_and_food_safety/documents/Foodwatch_background_paper-22-April_2020-Stop_the_poison_boomerang.pdf)

15) INKOTA et al. (2020): Hazardous pesticides from Bayer and BASF – a global trade with double standards.

[https://www.rosalux.de/fileadmin/ris\\_uploads/pdfs/Studien/Hazardous\\_20pesticides\\_ENG\\_final\\_20200422.pdf](https://www.rosalux.de/fileadmin/ris_uploads/pdfs/Studien/Hazardous_20pesticides_ENG_final_20200422.pdf)

# Toxic trade relation

Behind China and the US, Brazil and Argentina are two of the countries with the highest pesticide use worldwide.<sup>16</sup> As a trade partner, the EU benefits from selling the toxic substances to these countries. EUROSTAT<sup>17</sup> reported that the EU28 exported an average of 56,600 tonnes of pesticides per year to Mercosur between 2015 and 2019. In 2018, companies from the EU28 held a 19 per cent market share of all pesticide imports into Mercosur in terms of product value. Approximately 56,000 tonnes of pesticides, worth around 793 million USD, originated from the EU28 in the same year. The following year in 2019, 16 EU member states exported pesticides worth at least 915 million EUR to Mercosur; Germany was one of the top exporters behind the UK and France (see Table 1).<sup>18</sup>

**Table 1: EU pesticide exports to Mercosur (2019)**

Country	Value (in €)	Share
France	341,841,580	37.4 %
UK	163,650,136	17.9 %
Germany	146,582,159	16.0 %
Belgium	114,855,110	12.6 %
Spain	96,747,764	10.6 %
Italy	15,601,011	1.7 %
Hungary	13,425,109	1.5 %
Portugal	7,135,313	0.8 %
Denmark	6,851,532	0.7 %
Bulgaria	3,158,543	0.3 %
Austria	2,532,159	0.3 %
Netherlands	2,195,144	0.2 %
Greece	244,323	0.0 %
Ireland	189,066	0.0 %
Sweden	13,024	0.0 %
Poland	980	0.0 %
<b>Total</b>	<b>915,022,953</b>	<b>100.0 %</b>

16) Food and Agriculture Organization of the United Nations (2017): Database: Pesticide Use. <http://www.fao.org/faostat/en/#data/RP>

17) Eurostat (2015-2019) Database: International Trade > EU Trade Since 1988 by HS2, 4, 6 and CN8 > Exports of HS code 3808 (pesticides) from the EU to Mercosur, last five years (2015 - 2019) <http://epp.eurostat.ec.europa.eu/newxtweb/>

18) Loc. cit. The export figures provided apply to the commodity group 3808 „Insecticides, rodenticides, fungicides, herbicides, ...“; pesticide active ingredients can be additionally exported in other commodity groups.

# Pesticide hotspot Brazil – involvement of German companies

Brazil's agriculture model is based mainly on large-scale monoculture systems producing agriculture commodities. This agriculture business model is dominated by large corporations and is closely linked to the destruction of natural ecosystems such as forests. It requires large amounts of natural resources, emits greenhouse gases and is especially dependent on the use of pesticides that pose great risks to humans and the nature.<sup>19</sup> According to the Food and Agriculture Organization (FAO)<sup>20</sup>, around 380,000 tonnes of toxic substances ended up on Brazil's farmland in 2017 (around 634,000 square kilometres at that time<sup>21</sup>). To meet the high demand for pesticides, Brazil imports large quantities of pesticide active ingredients, which are subsequently further processed in the country (see Figure 1).

German companies such as BASF and BAYER are also involved in the business of selling these toxic substances in Brazil. BASF and BAYER Crop Science (incl. Monsanto) own around 12 per cent of all products approved in Brazil.<sup>23</sup> In the country, both companies market pesticide products that are highly hazardous to humans and the environment. Especially at risk are people who use pesticides or those living close to places where these toxic substances are used or produced.<sup>24</sup> Environmental risks include the contamination of groundwater and the direct effects on mammals, birds and insects.<sup>25</sup>

BASF and BAYER manufacture active ingredients and pesticide products both directly in Brazil and within Europe, which are imported into Mercosur and other regions. The following sections will evaluate pesticide products sold by the two companies in Brazil as well as the active ingredients inside these products.

**Figure 1: Brazil's dependence on imports<sup>22</sup>**

2017	Active ingredients		Pesticide products
Domestic production	71,669 t	Turned into	438,181 t
Imports	199,376 t	Turned into	128,065 t
Exports	8,504 t		8,838 t

19) Greenpeace (2019): Countdown to Extinction. <https://www.greenpeace.org/international/publication/22247/countdown-extinction-report-deforestation-commodities-soya-palm-oil/>, p 46-59 und <https://unearthed.greenpeace.org/2020/02/20/brazil-pesticides-soya-corn-cotton-hazardous-croplife/>

20) Food and Agriculture Organization of the United Nations (2017): Database: Pesticides Use. (Mercosur states, 2017, agricultural use). [www.fao.org/faostat/en/#data/RP](http://www.fao.org/faostat/en/#data/RP)

21) Food and Agriculture Organization of the United Nations (2017): Database: Land Use. (Mercosur states, 2017) [www.fao.org/faostat/en/#data/RL](http://www.fao.org/faostat/en/#data/RL). The Brazilian statistics authority now indicates 802,788 km<sup>2</sup> of arable land for 2020 (<https://sidra.ibge.gov.br/tabela/1618#resultado>), an increase of almost 27% in three years. The use of pesticides has probably increased accordingly

22) Portal de Dados Abertos Sobre Agrotóxicos > Comercialização IBAMA 2017 > Produção, importação, exportação e vendas. Químicos e Bioquímicos. (contraosagrototoxicos\_ibama-2017.xlsx) <https://dados.contraosagrototoxicos.org/dataset/comercializacao-ibama-2017>

23) Internal research/analysis based on data obtained from: Agência Nacional de Vigilância Sanitária – ANVISA (undated):

<http://portal.anvisa.gov.br/registros-e-autorizacoes/agrototoxicos/produtos/monografia-de-agrototoxicos/autorizadas/> Agrolink (2020). <https://www.agrolink.com.br/agrolinkfito/produto/lista/>

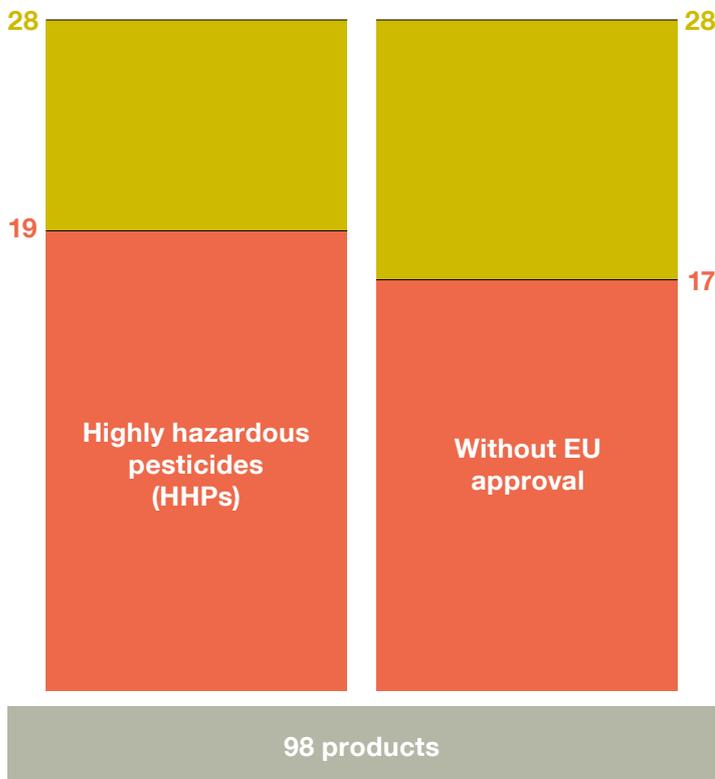
24) INKOTA et al. (2020): Hazardous pesticides from Bayer and BASF – a global trade with double standards. [https://www.rosalux.de/fileadmin/rls\\_uploads/pdfs/Studien/Hazardous\\_20pesticides\\_ENG\\_final\\_20200422.pdf](https://www.rosalux.de/fileadmin/rls_uploads/pdfs/Studien/Hazardous_20pesticides_ENG_final_20200422.pdf)

25) Greenpeace (2016): The EU Pesticide Blacklist. [https://www.greenpeace.de/sites/www.greenpeace.de/files/publications/20160727\\_schwarze\\_liste\\_pestizide\\_greenpeace\\_final.pdf](https://www.greenpeace.de/sites/www.greenpeace.de/files/publications/20160727_schwarze_liste_pestizide_greenpeace_final.pdf)

## BASF

According to the Brazilian website Agrolink, BASF owns 98 products containing a total of 28 different active ingredients.<sup>26</sup> Among these ingredients, 19 are listed by PAN as highly hazardous pesticides,<sup>27</sup> with 17 of them not approved in the EU.<sup>28</sup>

**Figure 2: BASF pesticides and active ingredients that have been approved in Brazil (as of February 2020)**



Among them are active ingredients such as Fipronil and Cyanamide, whose approval application was rejected in the EU due to the great risk they pose to humans and the environment (Box 1).

## Box 1: Hazardous BASF active ingredients and their use in Brazil

### Fipronil

The highly toxic Fipronil has received the most product approvals: in Brazil, BASF holds approval for 19 products containing this ingredient.<sup>29</sup> It is approved for use on crops such as potatoes, sugar cane, corn, cotton, soya beans, peanuts, rice, beans, sunflowers and wheat and is applied to leaves, seeds or soil.<sup>30</sup> In Brazil, the insecticide was linked to the mass deaths of more than 400 million bees in early 2019 and is applied using methods that include spraying from a plane over large swathes of agricultural land (e.g. soya bean fields).<sup>31</sup> The EU approval was revoked in 2016, with the decision taking effect in 2017,<sup>32, 33</sup> after the EFSA had classified the active ingredient as a threat to bees when used in certain situations.<sup>34</sup> PAN categorises the ingredient as a HHP.<sup>35</sup> Its LD<sub>50</sub><sup>36</sup> by contact is 0.0059 micrograms per bee.<sup>37</sup> This means that just one gram of Fipronil is theoretically sufficient to kill around 84 million bees<sup>38</sup> – 1,689,708 kilograms of Fipronil was sold in Brazil in 2018.<sup>39</sup>

### Cyanamide

One BASF product containing this highly toxic herbicide has received approval in Brazil.<sup>40</sup> The country allows the herbicide to be used on crops such as apples, grapes and peaches via foliar application.<sup>41</sup> In 2018, the EU Commission already rejected the approval application for this ingredient because, among other things, it was assessed to be harmful to human health, especially to those applying it.<sup>42</sup> PAN classifies the active ingredient as hazardous to health due to its endocrine-disrupting properties.<sup>43</sup>

26) Internal research/analysis based on data obtained from Agrolink (2020): <https://www.agrolink.com.br/agrolinkfito/produto/lista/>

27) Pesticide Action Network (2019): PAN International List of Highly Hazardous Pesticides [http://pan-international.org/wp-content/uploads/PAN\\_HHP\\_List.pdf](http://pan-international.org/wp-content/uploads/PAN_HHP_List.pdf)

28) European Commission (2020): EU Pesticides database. <https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/public/?event=activesubstance.selection&language=EN>

29) Ministério da Agricultura, Pecuária e Abastecimento – Coordenação-Geral de Agrotóxicos e Afins/DFA/SDA: Consulta de Ingrediente Ativo “Fipronil”. [http://agrofit.agricultura.gov.br/agrofit\\_cons/ap\\_ing\\_ativo\\_detalhe\\_cons?p\\_id\\_ingrediente\\_ativo=112](http://agrofit.agricultura.gov.br/agrofit_cons/ap_ing_ativo_detalhe_cons?p_id_ingrediente_ativo=112)

30) Agência Nacional de Vigilância Sanitária – ANVISA (no date): F43 – Fipronil. <http://portal.anvisa.gov.br/documents/111215/117782/F43+%E2%80%93+Fipronil/cee42727-46ab-44a2-b88e-10ea4e8faab9>

31) British Broadcasting Corporation – BBC (2019): O agrotóxico que matou 50 milhões de abelhas em Santa Catarina em um só mês. <https://www.bbc.com/portuguese/brasil-49657447>

32) European Commission (2016): Implementing Regulation: (EU) 2016/2035. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R2035&from=DE>

33) European Commission (2013): Implementing Regulation (EU) No. 781/2013. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R0781&from=DE>

34) European Food Safety Authority (2013): Conclusion on the peer review of the pesticide risk assessment for bees for the active substance fipronil (27 May 2013). <http://www.efsa.europa.eu/en/efsajournal/pub/3158>

35) Pesticide Action Network (2019): PAN International List of Highly Hazardous Pesticides. [http://pan-international.org/wp-content/uploads/PAN\\_HHP\\_List.pdf](http://pan-international.org/wp-content/uploads/PAN_HHP_List.pdf)

36) Lethal dose, 50%: The LD<sub>50</sub> value indicates the dose of a substance or radiation required to cause death to 50 per cent of a certain population of living organisms. This value is obtained through animal testing. See for definition and use [https://www.who.int/ipcs/publications/pesticides\\_hazard\\_rev\\_3.pdf](https://www.who.int/ipcs/publications/pesticides_hazard_rev_3.pdf) footnote 1.

37) University of Hertfordshire (2019): PPDB: Pesticide Properties Database. fipronil (Ref: BAS 350). <https://sitem.herts.ac.uk/aeru/ppdb/en/Reports/316.htm>

38) 0.5/0.0059 \* 1000 \* 1000 Note: The calculation is based on a similar example: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6054864/> and on the assumption that all bees come into contact with the entire toxic substance. This cannot be applied to the use in open air.

39) Brazilian Institute of Environment and Renewable Natural Resources – IBAMA (2018): Boletim 2018 Vendas de ingredientes ativos por UF (XLS - 53 KB) [http://www.ibama.gov.br/phocadownload/qualidadeambiental/relatorios/2018/Vendas\\_ingredientes\\_ativos\\_UF\\_2018.xls](http://www.ibama.gov.br/phocadownload/qualidadeambiental/relatorios/2018/Vendas_ingredientes_ativos_UF_2018.xls)

40) Internal research/analysis based on data obtained from: Agrolink (2020). <https://www.agrolink.com.br/agrolinkfito/produto/lista/>

41) Agência Nacional de Vigilância Sanitária - ANVISA (without a date): C39 – Cianamida. <http://portal.anvisa.gov.br/documents/111215/117782/c39.pdf/7f344dd7-509e-4677-8ed2-fc5f6059f42c>

42) European Commission (2008): L 251/45. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008D0745&from=EN>

43) Pesticide Action Network (2019): PAN International List of Highly Hazardous Pesticides. [http://pan-international.org/wp-content/uploads/PAN\\_HHP\\_List.pdf](http://pan-international.org/wp-content/uploads/PAN_HHP_List.pdf)

## BAYER Crop Science

According to the Brazilian website Agrolink, BAYER Crop Science owns 71 products containing a total of 27 different active ingredients.<sup>44</sup> Among these ingredients, 22 are listed by PAN as highly hazardous pesticides<sup>45</sup>, with 17 of them not approved in the EU.<sup>46</sup> The active ingredients and products of the Bayer Monsanto are not included here.

**Figure 3: BAYER Crop Science pesticides and active ingredients that have been approved in Brazil (as of February 2020)**



Among them are active ingredients such as Imidacloprid and Chlorpyrifos, which are not allowed to be used in open spaces or whose approval application was rejected in the EU due to the great risk they pose to humans and the environment (see Box 2).

## Box 2: Hazardous BAYER active ingredients and their use in Brazil

### Imidacloprid

The highly toxic Imidacloprid, which is a systemic insecticide from the neonicotinoid family, has received the most product approvals. Bayer has registered eleven products containing this active ingredient in Brazil.<sup>47</sup> In the country, products containing Imidacloprid are allowed for use on crops such as rice, sugar cane, soya beans, wheat and cotton and are applied to leaves, seeds, stems or soil.<sup>48</sup> However, the application requirements prohibit its use during the flowering season regardless of the application method.<sup>49</sup> In the EU, the active ingredient is only allowed to be used in greenhouses due to its high toxicity to bees.<sup>50</sup> PAN classifies the ingredient as a HHP for bees.<sup>51</sup> Likewise, the Greenpeace Pesticide Blacklist categorises it as highly toxic to bees and beneficial organisms and also as highly persistent.<sup>52</sup> Its LD<sub>50</sub><sup>53</sup> by contact is 0.081 micrograms per bee.<sup>54</sup> This means that just one gram of Imidacloprid is theoretically sufficient to kill around 6 million bees<sup>55</sup> – 10,021,221 kilograms of Imidacloprid was sold in Brazil in 2018.<sup>56</sup>

### Chlorpyrifos

In Brazil, this active ingredient is approved for the Bayer product Astro<sup>57</sup> in the country, it is allowed to be used on crops such as cotton, potatoes, coffee, barley, citrus fruits, beans, apples, corn, soya beans, tomatoes, bananas and wheat.<sup>58</sup> The pesticide is applied to leaves or soil.<sup>59</sup> Due to the ingredient's potential genotoxicity and the associated risks to human health, an application for renewal of approval was rejected by the European Commission in January 2020.<sup>60</sup> PAN classifies the ingredient as a HHP for bees.<sup>61</sup> Furthermore, Chlorpyrifos is categorised as hazardous to mammals, Daphnia/fish, bees and beneficial organisms in the Greenpeace Pesticide Blacklist.<sup>62</sup> Its LD<sub>50</sub><sup>63</sup> by contact is 0.059 micrograms per bee.<sup>64</sup> This means that just one gram of Chlorpyrifos is theoretically sufficient to kill around 8 million bees<sup>65</sup> – 7,157,956 kilograms of Chlorpyrifos were sold in Brazil in 2017.<sup>66</sup>

44) Internal research/analysis based on data obtained from: Agrolink (2020): <https://www.agrolink.com.br/agrolinkfito/produto/lista/>

45) Pesticide Action Network (2019): PAN International List of Highly Hazardous Pesticides. [http://pan-international.org/wp-content/uploads/PAN\\_HHP\\_List.pdf](http://pan-international.org/wp-content/uploads/PAN_HHP_List.pdf)

46) European Commission (2020): EU Pesticides database. <https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/public/?event=activesubstance.selection&language=EN>

47) Internal research/analysis based on data obtained from: Agrolink (2020): <https://www.agrolink.com.br/agrolinkfito/produto/lista/>

48) Agência Nacional de Vigilância Sanitária – ANVISA (without a date): I13 – Imidacloprido. <http://portal.anvisa.gov.br/documents/111215/117782/I13+%E2%80%93+Imidacloprido/9d08c7e5-8979-4ee9-b76c-1092899514d7>

49) Agência Nacional de Vigilância Sanitária – ANVISA (without a date): I13 – Imidacloprido. <http://portal.anvisa.gov.br/documents/111215/117782/I13+%E2%80%93+Imidacloprido/9d08c7e5-8979-4ee9-b76c-1092899514d7>

50) European Commission (2018): Imidacloprid SANCO/10590/2013 rev 8 27 April 2018. <https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/public/?event=activesubstance.detail&language=EN&selectedID=1473>

51) Pesticide Action Network (2019): PAN International List of Highly Hazardous Pesticides. [http://pan-international.org/wp-content/uploads/PAN\\_HHP\\_List.pdf](http://pan-international.org/wp-content/uploads/PAN_HHP_List.pdf)

52) Greenpeace (2016): THE EU PESTICIDE BLACKLIST 2016. <https://www.greenpeace.de/presse/publikationen/eu-pesticide-blacklist-2016>

53) Lethal dose, 50%: The LD<sub>50</sub> value indicates the dose of a substance or radiation required to cause death to 50 per cent of a certain population of living organisms. This value is obtained through animal testing.

See for definition and use [https://www.who.int/ipcs/publications/pesticides\\_hazard\\_rev\\_3.pdf](https://www.who.int/ipcs/publications/pesticides_hazard_rev_3.pdf) footnote 1.

54) University of Hertfordshire (2020): PPDB: Pesticide Properties Database imidacloprid (Ref: BAY NTN 33893). <https://sitem.herts.ac.uk/aeru/ppdb/en/Reports/397.htm>

55) 0.5/0.081 \* 1000 \* 1000 Note: The calculation is based on a similar example: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6054864/> and on the assumption that all bees come into contact with the entire toxic substance.

This cannot be applied to the use in open air.

56) Brazilian Institute of Environment and Renewable Natural Resources – IBAMA (2018): Boletim 2018 Vendas de ingredientes ativos por UF (XLS - 53 KB).

[http://www.ibama.gov.br/phocadownload/qualidadeambiental/relatorios/2018/Vendas\\_ingredientes\\_ativos\\_UF\\_2018.xls](http://www.ibama.gov.br/phocadownload/qualidadeambiental/relatorios/2018/Vendas_ingredientes_ativos_UF_2018.xls)

57) Internal research/analysis based on data obtained from: Agrolink (2020): <https://www.agrolink.com.br/agrolinkfito/produto/lista/>

58) Agência Nacional de Vigilância Sanitária – ANVISA (without a date): <http://portal.anvisa.gov.br/documents/111215/117782/C20%2B%2BClorpirif%25C3%25B3s.pdf/f8ddca3d-4e17-4cea-a3d2-d8c5babe36ae>

59) Agência Nacional de Vigilância Sanitária – ANVISA (without a date): <http://portal.anvisa.gov.br/documents/111215/117782/C20%2B%2BClorpirif%25C3%25B3s.pdf/f8ddca3d-4e17-4cea-a3d2-d8c5babe36ae>

60) European Commission (2020): Official Journal of the European Union: L 7/14 13.01.2020. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020R0018&from=EN>

61) Pesticide Action Network (2019): PAN International List of Highly Hazardous Pesticides. [http://pan-international.org/wp-content/uploads/PAN\\_HHP\\_List.pdf](http://pan-international.org/wp-content/uploads/PAN_HHP_List.pdf)

62) Greenpeace (2016): The EU Pesticide Blacklist. [https://www.greenpeace.de/sites/www.greenpeace.de/files/publications/20160727\\_schwarze\\_liste\\_pesticide\\_greenpeace\\_final.pdf](https://www.greenpeace.de/sites/www.greenpeace.de/files/publications/20160727_schwarze_liste_pesticide_greenpeace_final.pdf)

63) Lethal dose, 50%: The LD<sub>50</sub> value indicates the dose of a substance or radiation required to cause death to 50 per cent of a certain population of living organisms. This value is obtained through animal testing. See for definition and use [https://www.who.int/ipcs/publications/pesticides\\_hazard\\_rev\\_3.pdf](https://www.who.int/ipcs/publications/pesticides_hazard_rev_3.pdf) footnote 1.

64) University of Hertfordshire (2020): PPDB: Pesticide Properties Database. chlorpyrifos (Ref: OMS 971). <https://sitem.herts.ac.uk/aeru/ppdb/en/Reports/154.htm>

65) 0.5/0.059 \* 1000 \* 1000 Note: The calculation is based on a similar example: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6054864/> and on the assumption that all bees come into contact with the entire toxic substance.

This cannot be applied to the use in open air.

66) Brazilian Institute of Environment and Renewable Natural Resources – IBAMA (2018): Boletim 2018 Vendas de ingredientes ativos por UF (XLS - 53 KB).

[http://www.ibama.gov.br/phocadownload/qualidadeambiental/relatorios/2018/Vendas\\_ingredientes\\_ativos\\_UF\\_2018.xls](http://www.ibama.gov.br/phocadownload/qualidadeambiental/relatorios/2018/Vendas_ingredientes_ativos_UF_2018.xls)

# Export of dangerous toxic substances from the EU to Brazil

Current trade information obtained from the PANJIVA database<sup>67</sup> illustrates the export of active ingredients from the EU to Brazil. Some of the ingredients are considered highly hazardous to humans and the environment; therefore, they are not approved

in the EU or are included by PAN in the list of highly hazardous pesticides.<sup>68</sup> In 2019, the highly hazardous active ingredients mentioned above – Fipronil, Cyanamide and Chlorpyrifos – were among those exported from the EU to Brazil (see table 2).

**Table 2: Export of highly hazardous active ingredients\* from the EU to Brazil in 2019<sup>69</sup>**

Active ingredient*	Export in tonnes	Exporter in the EU	Recipient in Brazil	PAN HHP	EU approval
Carbendazim (fungicide)	0.015	Thor GmbH	Thor Brazil Ltda		not approved
Chlorthalonil (fungicide)	205	several companies (shipment from Italy & Belgium)	several companies		application rejected in part due to significant concerns with regard to groundwater contamination
Chlorpyrifos (insecticide)	734	Ascenza Agro SA (shipment from Portugal)	Tradecorp Do Brasil Comercio De Insu-mos Agricolas Ltda	highly toxic to bees	application rejected in part due to potential genotoxicity
Cyanamide (herbicide)	414	Alzchem AG in Trostberg, Bavaria	BASF in Guaratinguetá		application rejected in part because it is harmful to human health
Ethiprole (insecticide)	126	Bayer Industries Pvt., Ltd., India (via Hamburg)	BAYER Belford Roxo		not approved / not listed
Fenpropimorph (fungicide)	890	BASF Group (Germany / France)	main recipient BASF Brazil		expired
Fipronil (insecticide)	90	BASF France	BASF Brazil	highly toxic to bees	expired (to avoid that the application would be rejected in part because it is harmful to bees)
Flufenoxuron (insecticide)	2.1	only the shipping company is named (shipment from Belgium)	only the shipping company is named	highly toxic aquatic organisms	application rejected in part due to risk to consumers
Glufosinate (ammonium) (herbicide)	939	BASF Group and Bulkhaul Ltd (shipment from the Netherlands and Belgium)	main recipient BASF Brazil		expired
Indaziflam (herbicide)	138	Bayer Industries Pvt., Ltd., India (via Hamburg)	main recipient BAYER Brazil		not approved
Propiconazole (fungicide)	~1127	Chiefly Syngenta Switzerland (shipment from Rotterdam & Antwerp)	main recipient Syngenta		application rejected in part due to significant concerns with regard to groundwater contamination
Propineb (fungicide)	316	BAYER Germany	BAYER Brazil		application rejected in part because it is harmful to bees
Teflubenzuron (insecticide)	345	BASF Group (shipment from Rotterdam & Antwerp)	BASF Brazil		not approved
Thidiazuron (plant growth regulator)	59	Cjsc August Bel, Belarus (shipment from Belgium)	Avgust Crop Protec-tion Importacao & Exportacao Ltda		application rejected in part due to termination of the task force

\*In Brazil, all these active ingredients are approved for and sold by BAYER and/or BASF, alongside other companies.

67) PANJIVA – Database with export/import information from various countries (in English, login required): <https://panjiva.com/>

68) Pesticide Action Network (2019): PAN International List of Highly Hazardous Pesticides. [http://pan-international.org/wp-content/uploads/PAN\\_HHP\\_List.pdf](http://pan-international.org/wp-content/uploads/PAN_HHP_List.pdf)

69) Data analysis based on: PANJIVA – Database with export/import information from various countries (in English, login required): <https://panjiva.com/> / Pesticide Action Network (2019): PAN International List of Highly Hazardous Pesticides: [http://pan-international.org/wp-content/uploads/PAN\\_HHP\\_List.pdf](http://pan-international.org/wp-content/uploads/PAN_HHP_List.pdf) / EU Commission (2020) EU – Pesticides database. <https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/public/?event=homepage&language=EN>

# Conclusions

**This brief analysis has shown that companies in the EU, including German chemical giants BAYER and BASF, stand to benefit from the proposed lowering of tariffs as part of the trade agreement between the EU and Mercosur countries – at the cost of biodiversity, humans and the environment.**

Furthermore, it is especially alarming that the sale of pesticides by German companies in Mercosur countries is based on double standards, as revealed by the examination of export and sale of several active ingredients that are prohibited in the EU. Looking at quantities alone would lead to an erroneous assessment of the situation, because some of the active ingredients are so toxic that minute amounts of them are all it takes to cause irreparable damage to humans and nature. In addition, the EU is fostering a farming system that relies on monoculture, genetic engineering, antibiotics and copious amounts of pesticides.

**The EU-Mercosur trade agreement runs contrary to the EU's goals of stopping species extinction and biodiversity loss.**

It is at odds with European efforts to ensure agriculture products sold in the EU, such as soya beans and beef, originate from supply chains that are legally obligated to be deforestation-free.<sup>70</sup> Moreover, it is incompatible with the concept of agroecology. The agreement is going to reinforce an obsolete form of industrialised farming, whereas on an international level there is gradually shifting away from this environmentally unsound and climate-damaging agriculture system. The Committee on World Food Security (CFS) of the Food and Agriculture Organization (FAO) of the United Nations widely promotes “agroecological approaches and other innovations for sustainable agriculture and food systems that enhance food security and nutrition”<sup>71</sup> as an innovative and economic way of dealing with increasing food requirements and malnutrition as well as helping farmers adapt to climate change.

**Trade must be fair to humans and nature.** The proposed lowering of tariffs on pesticides is part of a list of other problematic aspects of the EU-Mercosur trade agreement with regard to climate and biodiversity, such as reduction of customs duties on meat or cars. By contrast, a reasonable trade agreement must ensure that production and trade are compatible with the environment and society. This is the only way that our trade partners would be able to ensure the safeguarding of biodiversity, climate, and the environment as well as adherence to core labour standards and human rights throughout supply chains.

**In light of the extinction of species and the global biodiversity crisis, the EU-Mercosur trade agreement must be stopped.**

Germany will play a crucial role in the subsequent ratification process when it holds the EU Council Presidency in the second

half of 2020, due in part to the upcoming ratification of the agreement in the EU Council. Instead of accelerating the ratification of the agreement, Germany needs to close ranks with countries such as Austria and France to reject the deal.

Greenpeace engages in promotion of fair trade at a political level and calls, in particular, on German Federal Minister of Economic Affairs Peter Altmaier to place environmental and human protection above economic profit.

**If a pesticide is not permitted, it should not be exported or imported as a residue.** Even beyond the Mercosur countries, EU-based companies export pesticides whose use and sale are not approved in the EU for health and environmental reasons. Residues of these pesticides come back with imported agricultural products. For example, residues of the herbicide Glufosinate, which can damage fertility or fetuses, are permitted in fruits, nuts, soya and meat. Residues of Carbendazim, an active ingredient that can cause genetic defects, are also permitted in cereals, vegetables, fruit and nuts. These pesticides have not been banned by the EU, but were withdrawn from the market by their manufacturers when it became clear that they would not meet the EU approval criteria. This means that a pesticide that does not meet the approval criteria in Europe can be sold to a third country, used on crops and then returned to Europe as a residue. This is why Greenpeace demands: The EU must be consistent.<sup>72</sup> The example of France shows that this is possible. There, from 1 January 2022, the production, storage and movement (i.e. trade and export) of pesticides, containing active substances that have not been approved in accordance with Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 for reasons of protection of human and animal health or the environment, are prohibited. According to a recent paper prepared by the Scientific Services of the German Bundestag, Germany could adopt this law. This is because Article 25(3)(2) of the German Plant Protection Act (PflSchG) “authorises the Federal Ministry of Food and Agriculture (BMEL), in agreement with other federal ministries, in order to avert serious risks to human or animal health or other risks, in particular to the balance of nature, to prohibit by statutory order, with the consent of the Bundesrat, the export of certain plant protection products or of plant protection products containing certain substances to countries outside the EU.”<sup>73</sup>

70) FERN (2019): Protecting Forests, natural ecosystems and human rights: a case for EU action. <https://www.fern.org/de/ressourcen/protecting-forests-natural-ecosystems-and-human-rights-a-case-for-eu-action-2046/>

71) High Level Panel of Experts (2019): Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome. <http://www.fao.org/3/ca5602en/ca5602en.pdf>

72) Greenpeace European Unit: EU must stop importing food treated with banned pesticides, 11/03/2020. <https://www.greenpeace.org/eu-unit/issues/nature-food/2656/eu-must-stop-exporting-and-importing-banned-pesticides/>

73) Research Services of the German Bundestag (2020): Export of non-approved plant protection products, legal provisions in France and Germany. (WD 5–3000–015/20) [in German] <https://www.bundestag.de/resource/blob/689790/5d86d62bfff886bbae6864f2d8ea2b977/WD-5-015-20-pdf-data.pdf>