# Highly Hazardous Profits

## How Syngenta makes billions by selling toxic pesticides

Public Eye

29. Mai 2019

# Public Eye…

EvB
Erklärung von Bern
Dichiarazione di Berna
Déclaration de Berne

… was founded in 1968 based on the Berne Declaration manifesto

… has currently 25,000 members

… 2 offices with around 35 members of staff

… numerous volunteers all over Switzerland (9 regional volunteer groups)



Public Eye is an independent association dedicated to the **worldwide respect of human rights**. We shed light on human rights violations perpetrated by **Swiss companies** and conduct investigations about illegal and illegitimate business models that prejudice the populations of other countries. We are committed to fair economic relations in Switzerland through **research, campaigns and lobbying**.

# Worldwide use of pesticides

- 3 million tons of pesticide active ingredients per year

= 25 million bathtubs
= 1200 Olympic swimming pools

- Twofold increase since 1990

- Massive increase in Low and Middle Income Countries (LMICs)

- 25% of these countries lack effective pesticide legislation and 80% lack resources to implement the law



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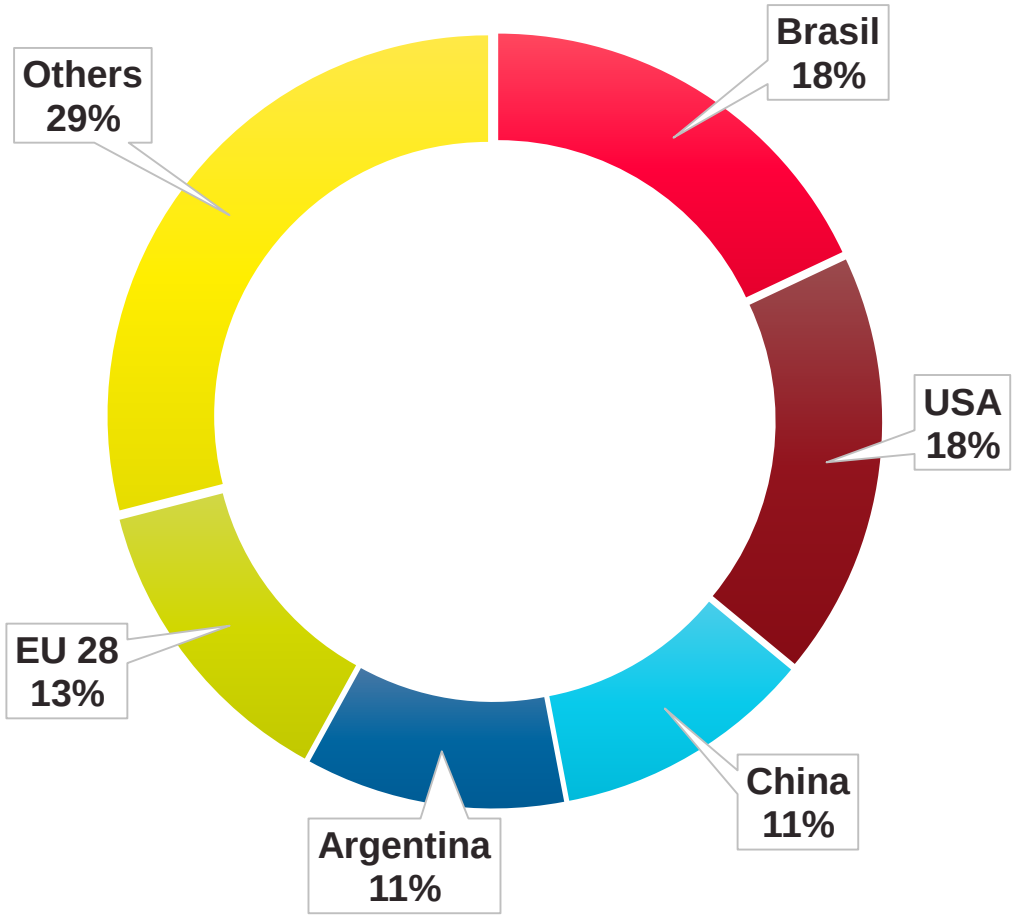
# Share of global pesticide use (2017)






Source: Public Eye estimate, based on official country statistics and industry estimates

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# A Public Health Crisis

- 25 million cases of acute poisoning resulting in 220,000 deaths a year, 99% in LMICs, 2/3 suicides (WHO 1990)

- “Grave concern” over the impact of chronic exposure to pesticides, including cancer, Alzheimer’s and Parkinson’s diseases, hormone disruption, developmental disorders, sterility and neurological health effects (UN experts 2017)

- Pesticides have a “catastrophic impact” on the environment, human health and society as a whole

- “We must act urgently to prevent impacts on those most at risk from exposure to toxic pesticides” (SR on toxics 2019)



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# Pesticide Risk Reduction

FAO (2010) three-step approach to risk reduction:

1. Reduce reliance on pesticides

2. Select pesticides with the lowest risk to humans and env.

3. Ensure proper use of the selected products

# Phasing out most toxic pesticides

- FAO Council recommends a “progressive ban on highly hazardous pesticides” (FAO 2006)
- Exposure to highly hazardous pesticides is “a major public health concern” (WHO 2010)
- ICCM recognize HHPs as “an issue of concern” and supports “concerted action” (ICCM 2015)
- FAO/WHO Guidelines on HHPs recommend as first mitigation option “ending use” (FAO/WHO 2016)
- UN experts call for a worldwide phase-out on use of highly hazardous pesticides (UN HR experts 2017)



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# Highly Hazardous Pesticides (HHPs)

- Hazard means the inherent property of a substance, agent or situation having the potential to cause undesirable consequences

- Not all pesticides are equally hazardous

- WHO and GHS classification of pesticides by hazard

- “Pesticides that are acknowledged to present particularly high levels of acute or chronic hazards to health or environment according to internationally accepted classification systems such as WHO and the GHS” (WHO/FAO 2016)



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# FAO/WHO Criteria for HHPs

- **Criterion 1**: Pesticide formulations that meet the criteria of classes Ia or Ib of the *WHO Recommended Classification of Pesticides by Hazard*;
  or
- **Criterion 2**: Pesticide active ingredients and their formulations that meet the criteria of carcinogenicity Categories 1A and 1B of the *Globally Harmonized System of Classification and Labelling of Chemicals* (GHS);
  or
- **Criterion 3**: Pesticide active ingredients and their formulations that meet the criteria of mutagenicity Categories 1A and 1B of the *Globally Harmonized System of Classification and Labelling of Chemicals* (GHS);
  **or**
- **Criterion 4**: Pesticide active ingredients and their formulations that meet the criteria of reproductive toxicity Categories 1A and 1B of the *Globally Harmonized System of Classification and Labelling of Chemicals* (GHS);
  or
- **Criterion 5**: Pesticide active ingredients listed by the *Stockholm Convention* in its Annexes A and B, and those meeting all the criteria in paragraph 1 of Annex D of the Convention;
  or
- **Criterion 6**: Pesticide active ingredients and formulations listed by the *Rotterdam Convention* in its Annex III;
  or
- **Criterion 7**: Pesticides listed under the *Montreal Protocol*;
  or
- **Criterion 8**: Pesticide active ingredients and formulations that have shown a high incidence of severe or irreversible adverse effects on human health or the environment.

# WHO/FAO 2006 list of HHP?

9. The Panel discussed priority activities related to a progressive ban on HHPs and **recommended** that:

27

a) FAO and WHO, as a first step, prepare a list of HHPs based on the criteria above, update it periodically in cooperation with UNEP, and make it widely known;

b) FAO, in collaboration with WHO, invite governments and the pesticide industry to develop plans of action for progressively phasing out HHPs, either at the national or the regional level as appropriate, taking into account work undertaken in existing MEAs such as the Stockholm Convention, Rotterdam Convention and the Montreal Protocol;

c) FAO, in collaboration with WHO, collect information on alternatives for HHPs, both reduced risk pesticides and other pest management approaches, in cooperation with all relevant stakeholders, and share experiences among countries;

d) FAO, in collaboration with WHO, seek assistance from donors for countries which wish to phase out HHPs with the aim of preparing, implementing and enforcing phase-out plans and search for alternatives;

e) FAO mobilize internal and external resources in order to implement, as a priority, the recommendations of the FAO Council with respect to HHPs.



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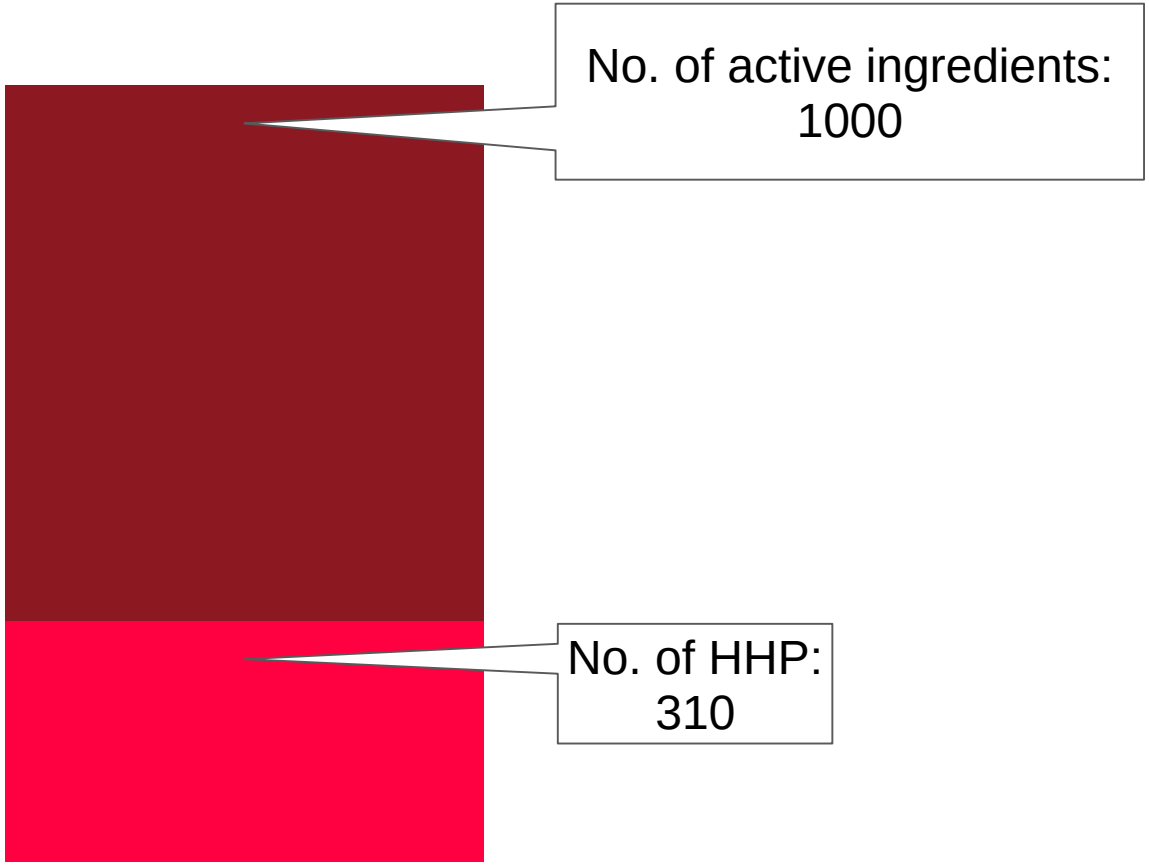
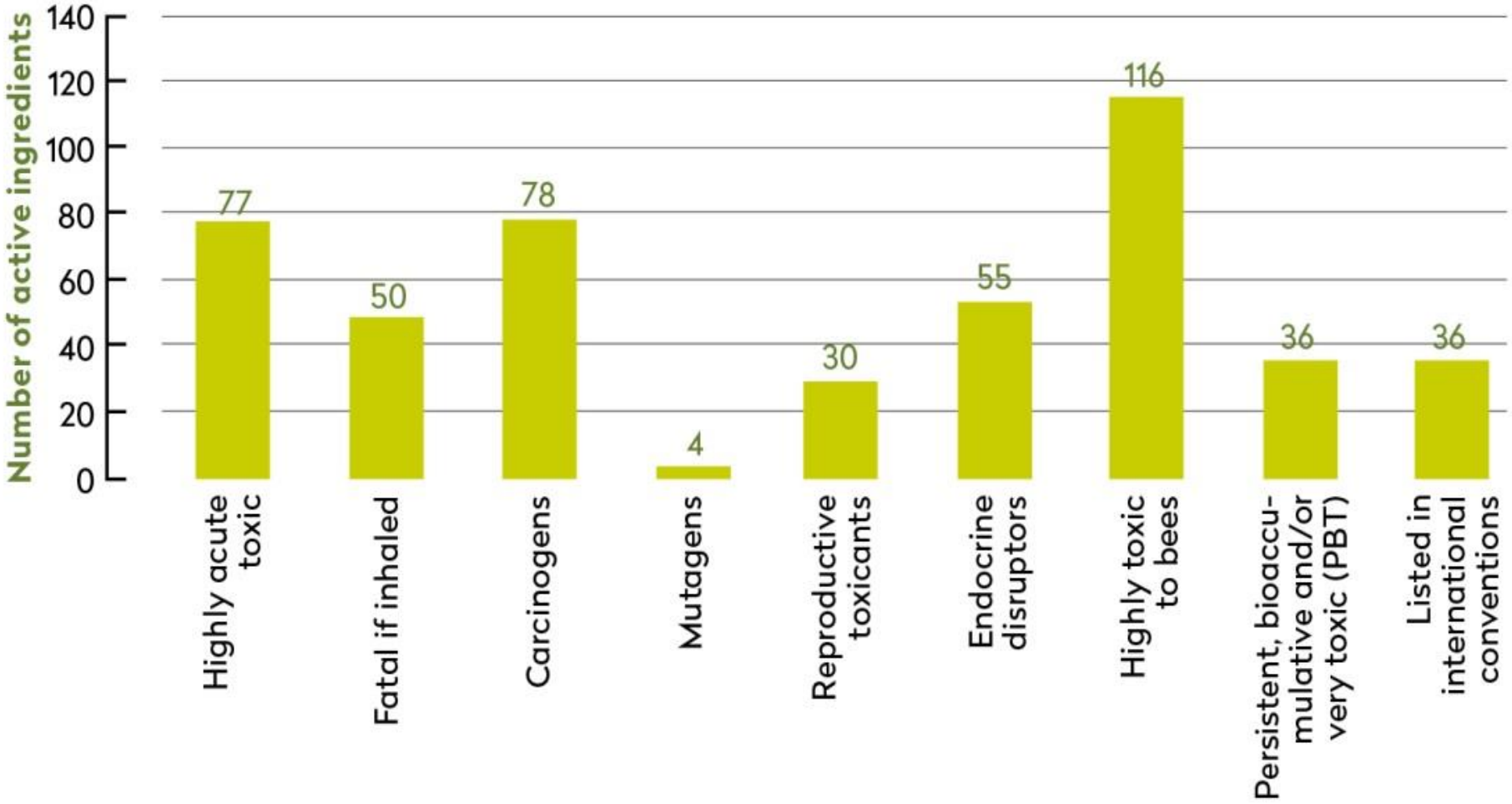
# The PAN list of HHP



## Number of pesticide active ingredients in each hazard category included in the PAN list of highly hazardous pesticides (HHP)




Source: PAN 2019 list of HHPs.

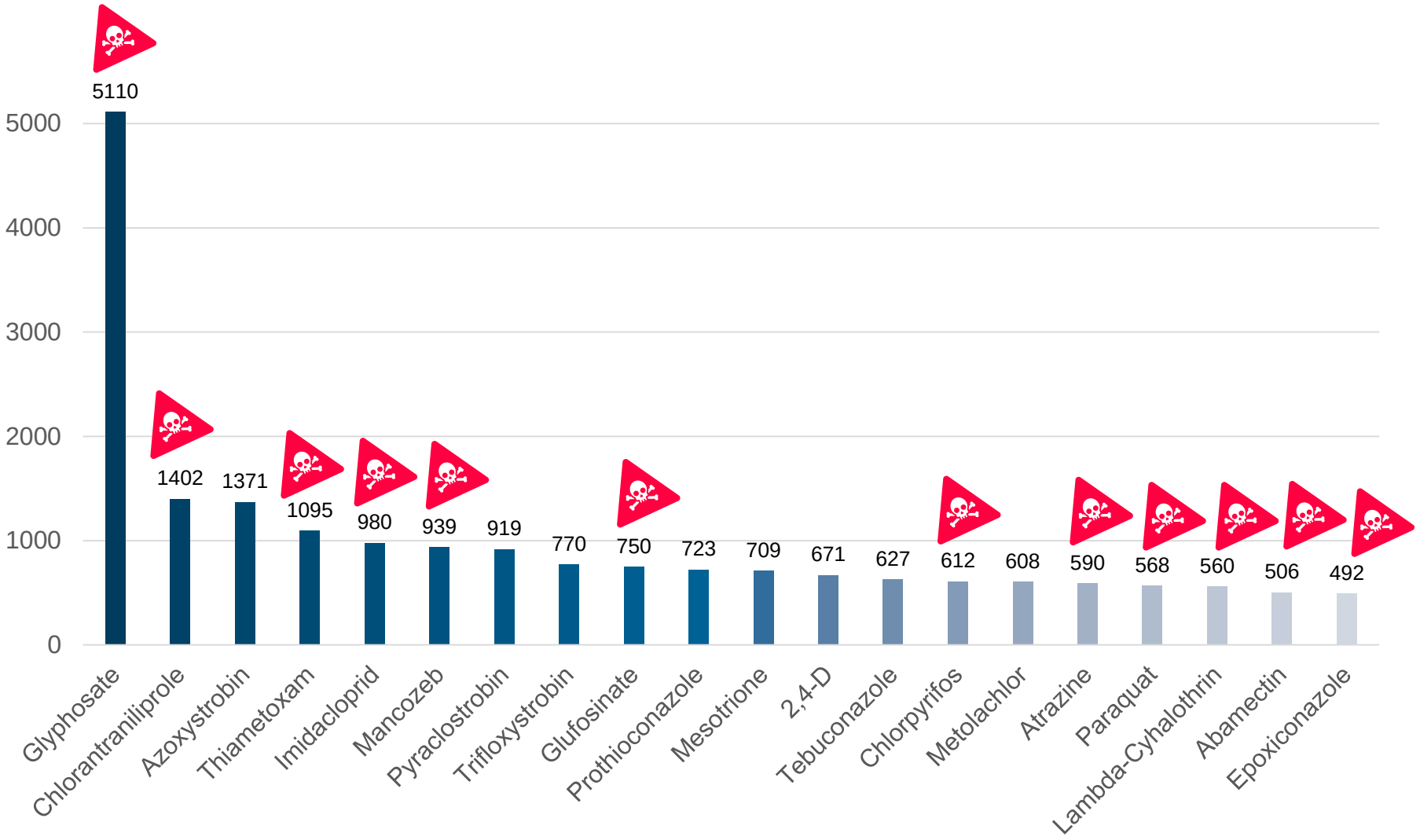
# Highly hazardous pesticides and the role of Syngenta

# Methodology

**PAN International List of Highly Hazardous Pesticides – March 2019**

| | | | | | Group 1: Acute Toxicity | | | | Group 2: Long term effects | | | | | | | | | Group 3: Environmental toxicity | | | | | Group 4 Conventions | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CAS number | Pesticide | Grouped (see page 21) | Sum of max=1 in Groups 1-4 | WHO Ia | WHO Ib | H330 | max = 1 | EPA carc | IARC carc | EU GHS carc (1A, 1B) | IARC prob carc | EPA prob likel carc | EU GHS muta (1A, 1B) | EU GHS repro (1A, 1B) | EU EDC (1) or C2 & R2 GHS | max = 1 | very bio acc | very pers water, soil or sediment | very toxic to aq. organism | highly toxic bees | max = 1 | Montr Prot | PIC | See note below the table | POP | max = 1 |
| | | | | | 28 | 49 | 50 | 103 | 1 | 3 | 13 | 7 | 70 | 4 | 30 | 55 | 141 | 22 | 18 | 30 | 116 | 148 | 1 | 32 | | 9 | 36 |
| 1 | 542-75-6 | 1,3-dichloropropene | | 1 | | | | 0 | | | | | 1 | | | | 1 | | | | | 0 | | | | | 0 |
| 2 | 94-82-6 | 2,4-DB | | 1 | | | | 0 | | | | | | | | 1 | 1 | | | | | 0 | | | | | 0 |
| 3 | 71751-41-2 | Abamectin | | 2 | | | 1 | 1 | | | | | | | | | 0 | | | | 1 | 1 | | | | | 0 |
| 4 | 30560-19-1 | Acephate | | 1 | | | | 0 | | | | | | | | | 0 | | | | 1 | 1 | | | | | 0 |
| 5 | 34256-82-1 | Acetochlor | | 1 | | | | 0 | | | | | | | | 1 | 1 | | | | | 0 | | | | | 0 |
| 6 | 101007-06-1 | Acrinathrin | | 1 | | | | 0 | | | | | | | | | 0 | | | | 1 | 1 | | | | | 0 |
| 7 | 107-02-8 | Acrolein | | 1 | | 1 | 1 | 1 | | | | | | | | | 0 | | | | | 0 | | | | | 0 |
| 8 | 15972-60-8 | Alachlor | | 2 | | | | 0 | | | | | | | | 1 | 1 | | | | | 0 | | 1 | | | 1 |
| 9 | 83130-01-2 | Alanycarb | | 1 | | | | 0 | | | | | | | | | 0 | | | | 1 | 1 | | | | | 0 |
| 10 | 116-06-3 | Aldicarb | | 3 | 1 | | 1 | 1 | | | | | | | | | 0 | | | | 1 | 1 | | 1 | | | 1 |
| 11 | 319-84-6 | alpha-BHC; alpha-HCH | | 1 | | | | 0 | | | | | | | | | 0 | | | | | 0 | | | | 1 | 1 |
| 12 | 96-24-2 | Alpha-chlorohydrin | | 1 | | 1 | | 1 | | | | | | | | | 0 | | | | | 0 | | | | | 0 |
| 13 | 20859-73-8 | Aluminum phosphide | | 2 | | | 1 | 1 | | | | | | | | | 0 | | | | 1 | 1 | | | | | 0 |
| 14 | 348635-87-0 | Amisulbrom | | 1 | | | | 0 | | | | | | | | | 0 | | 1 | 1 | | 1 | | | | | 0 |
| 15 | 61-82-5 | Amitrole | | 1 | | | | 0 | | | | | | | | 1 | 1 | | | | | 0 | | | | | 0 |
| 16 | 90640-80-5 | Anthracene oil | | 1 | | | | 0 | | | 1 | | | | | | 1 | | | | | 0 | | | | | 0 |
| 306 | 52315-07-8z | zeta-Cypermethrin | | 2 | | 1 | | 1 | | | | | | | | | 0 | | | | 1 | 1 | | | | | 0 |
| 307 | 1314-84-7 | Zinc phosphide | | 1 | | 1 | | 1 | | | | | | | | | 0 | | | | | 0 | | | | | 0 |
| 308 | 12122-67-7 | Zineb | | 1 | | | | 0 | | | | | | | | 1 | 1 | | | | | 0 | | | | | 0 |
| 309 | 137-30-4 | Ziram | | 1 | | | 1 | 1 | | | | | | | | | 0 | | | | | 0 | | | | | 0 |
| 310 | 23783-98-4 | Z-Phosphamidon | | 0 | 1 | | | 0 | | | | | | | | | 0 | | | | | 0 | | | | | 0 |

# Top 20 pesticides by sales 2017



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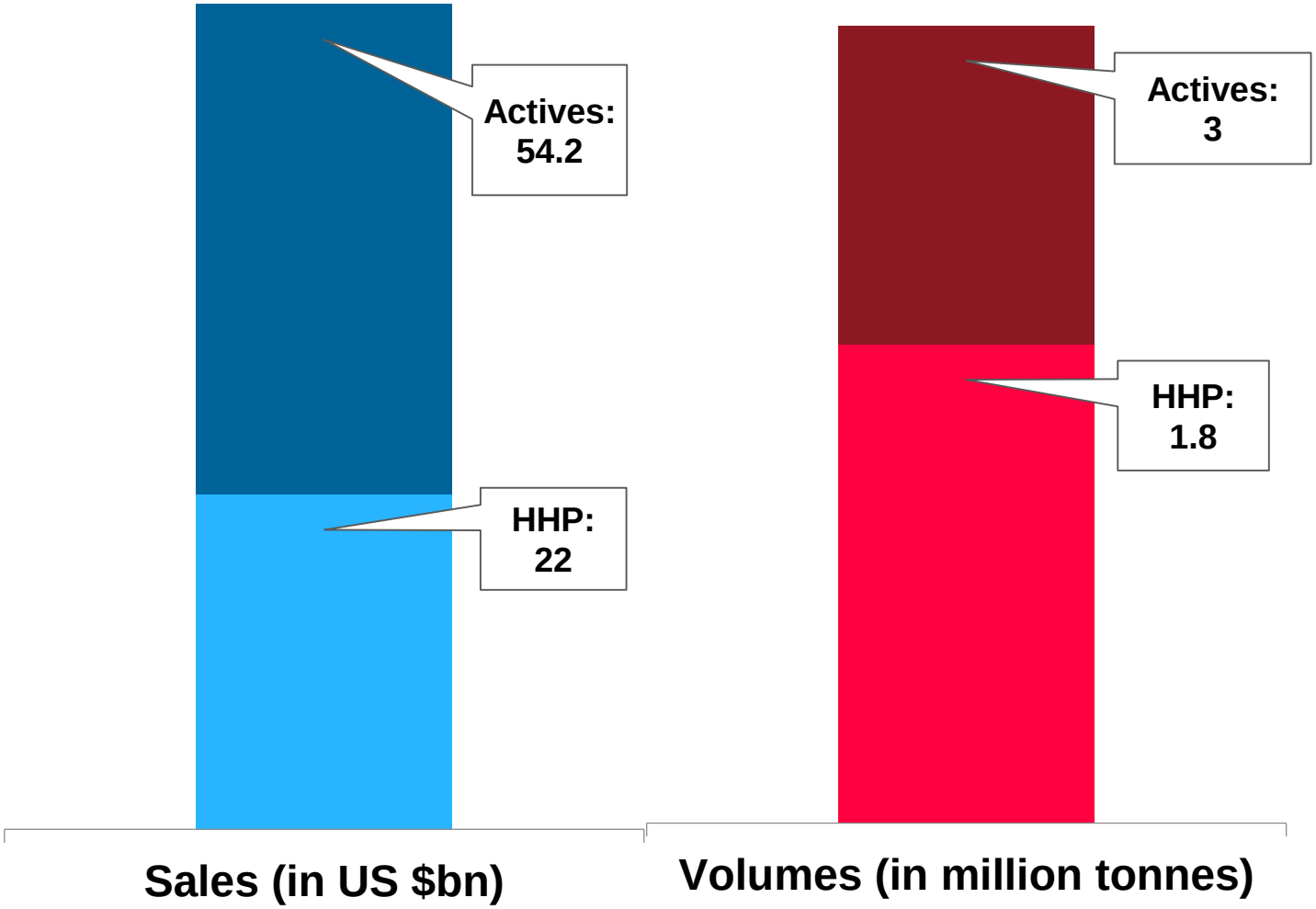
# A Multibillion Dollar Market



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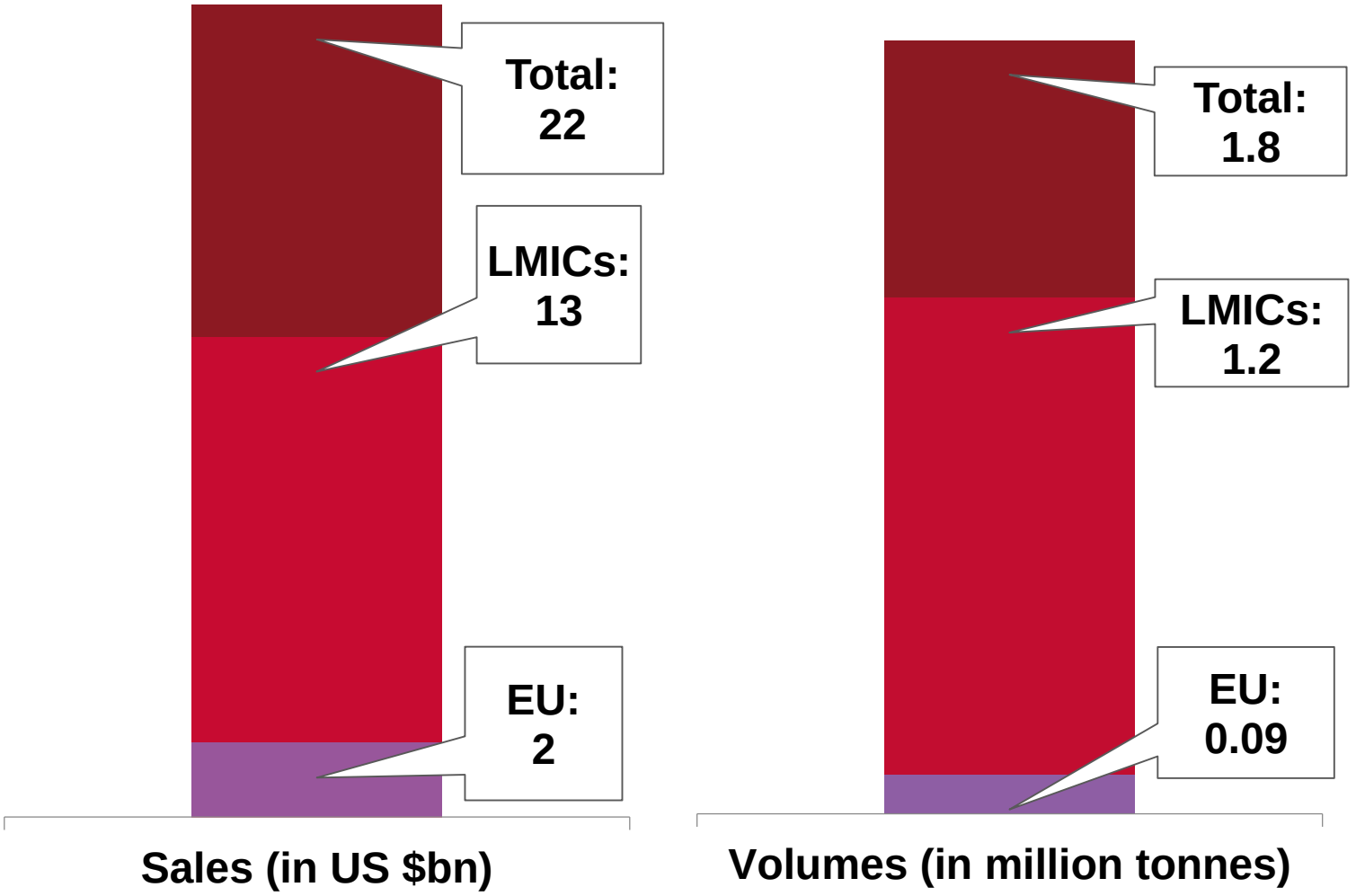
# Lower income, Higher Toxicities



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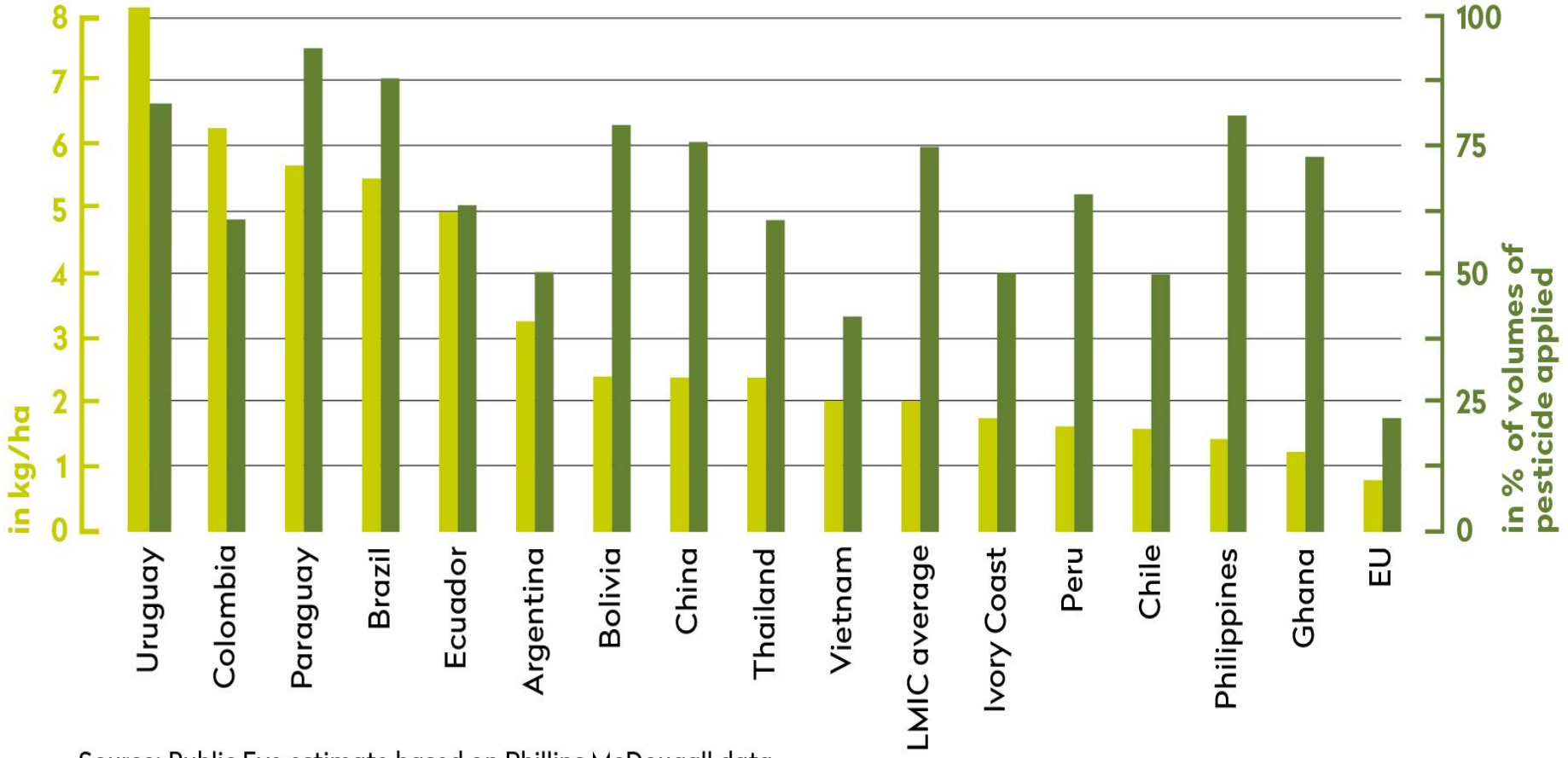
## Highly hazardous pesticides (HHP) use in selected LMICs




Source: Public Eye estimate based on Phillips McDougall data

# Companies behind the HHP industry


**Syngenta**
@Syngenta

We're helping #farmers to sustainably feed the world. Our Sustainable Business Report 2017 looks at policies & actions we've taken to reach our business & corporate responsibility goals. Learn more: syngenta.com/~/media/Files/… #SustainableBiz #Sustainability

♡ 10 18:45 - 17 juil. 2018



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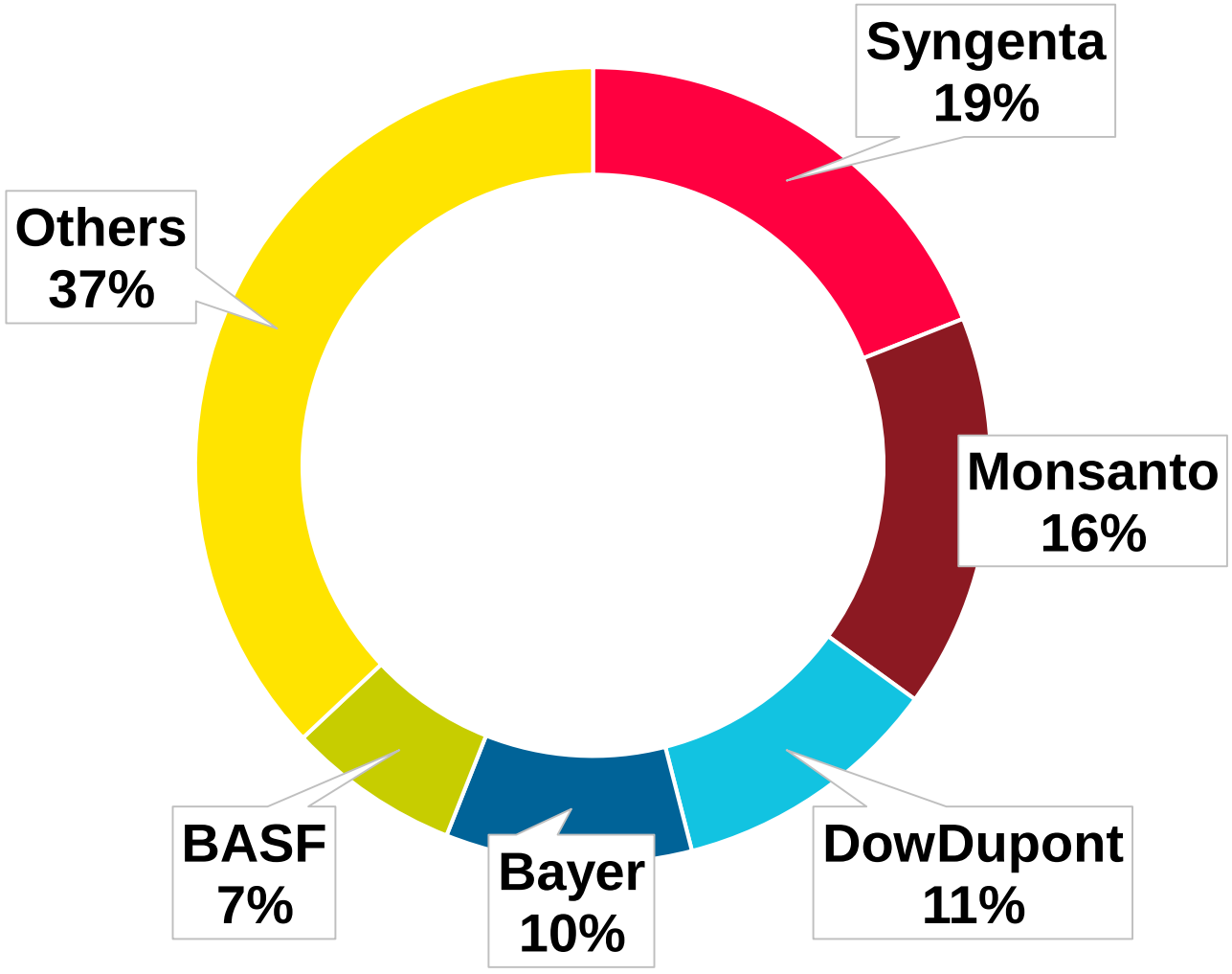
# Market share in HHP sales 2017



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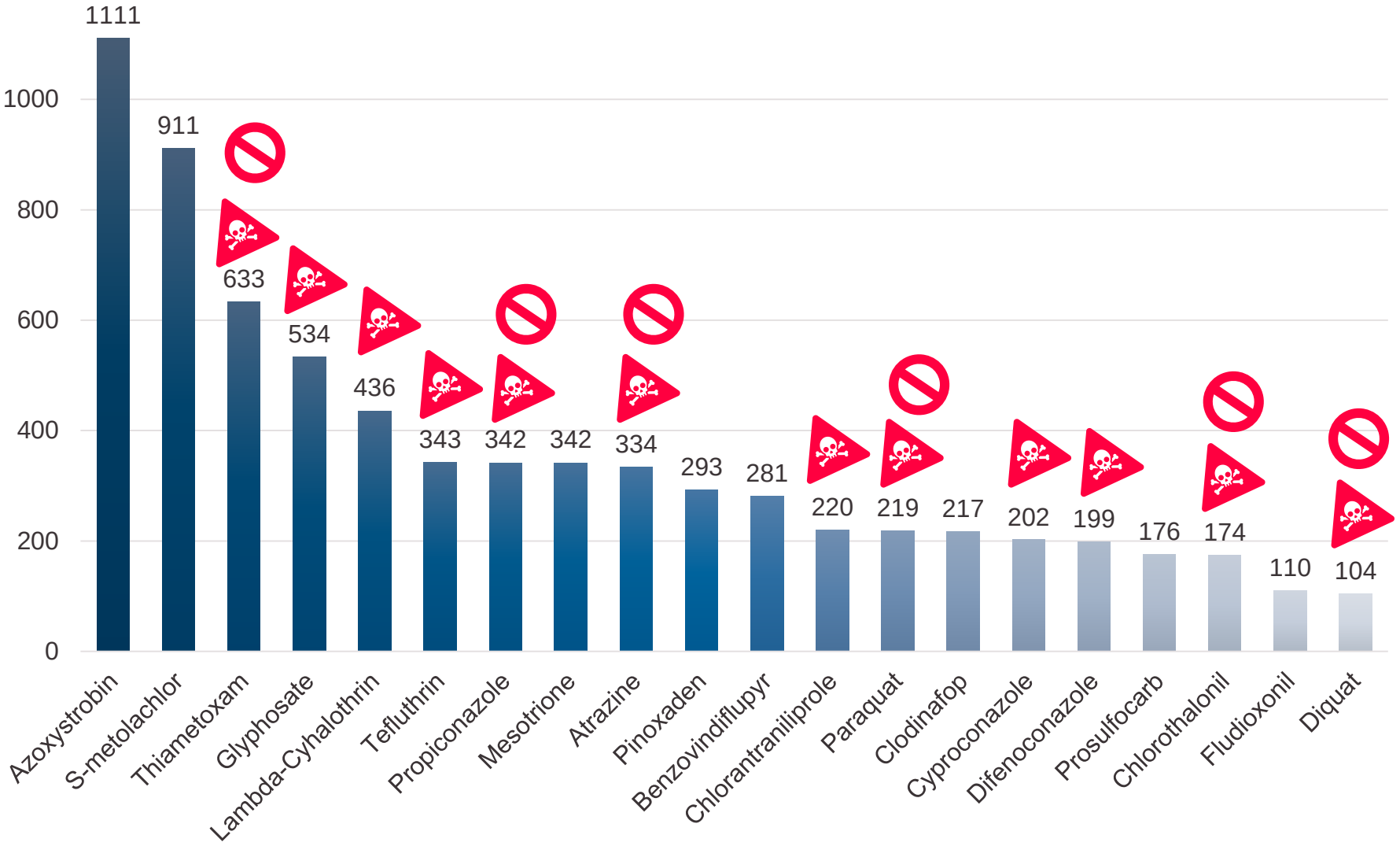
# Syngenta top20 pesticide sales 2017



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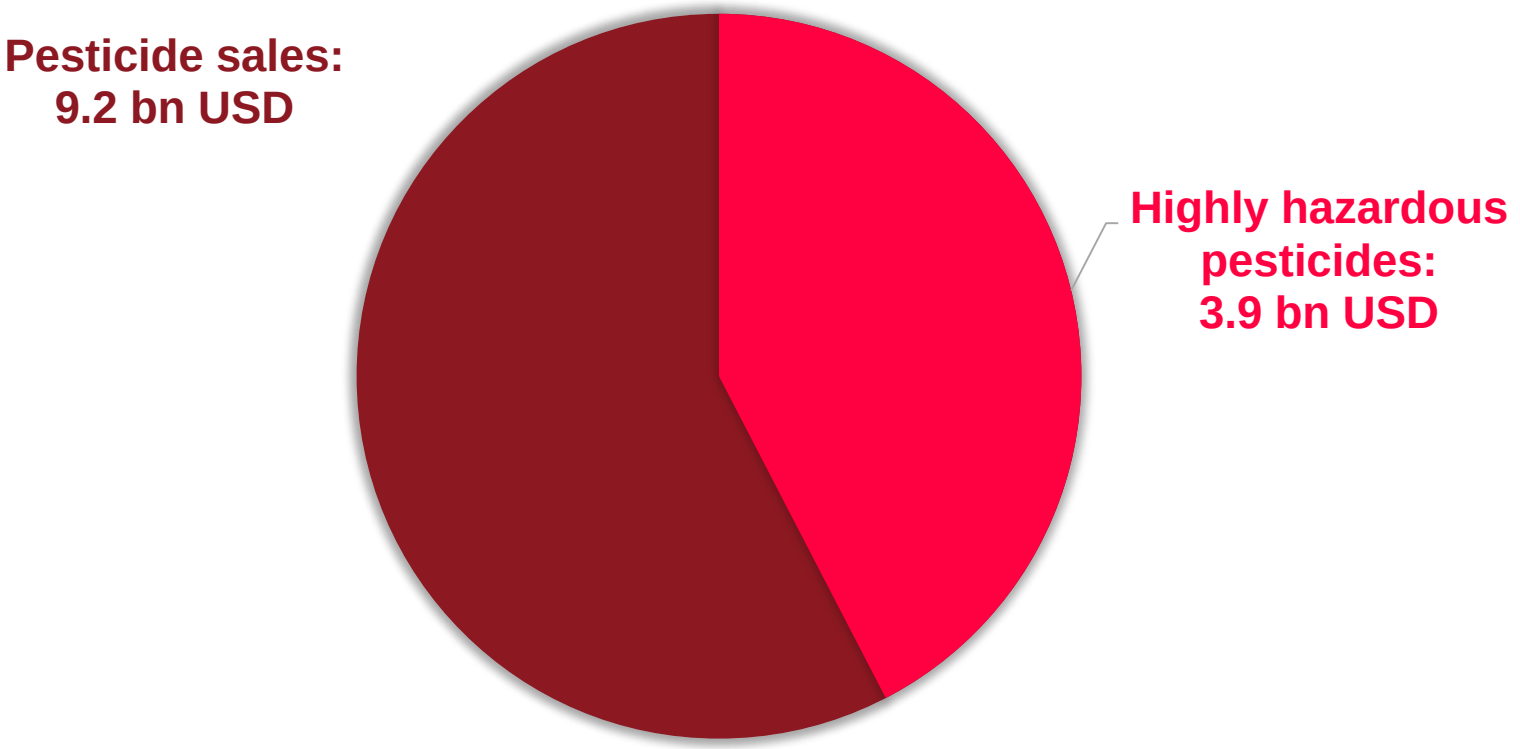
# Syngentas HHP sales 2017



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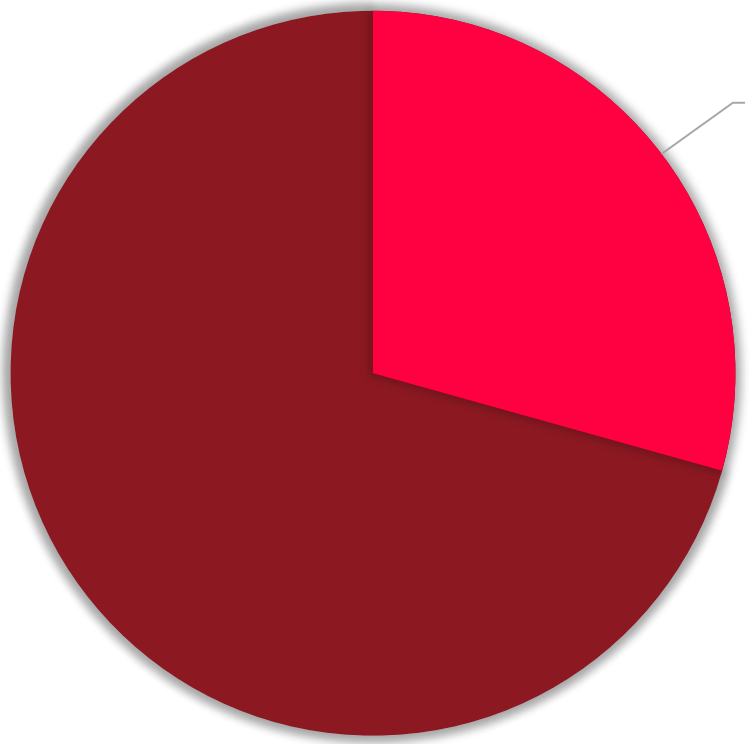
# Syngentas HHP sales 2017

**Pesticide sales:**
**9.2 bn USD**



**Pesticides banned in the EU:**
**2.2 bn USD**



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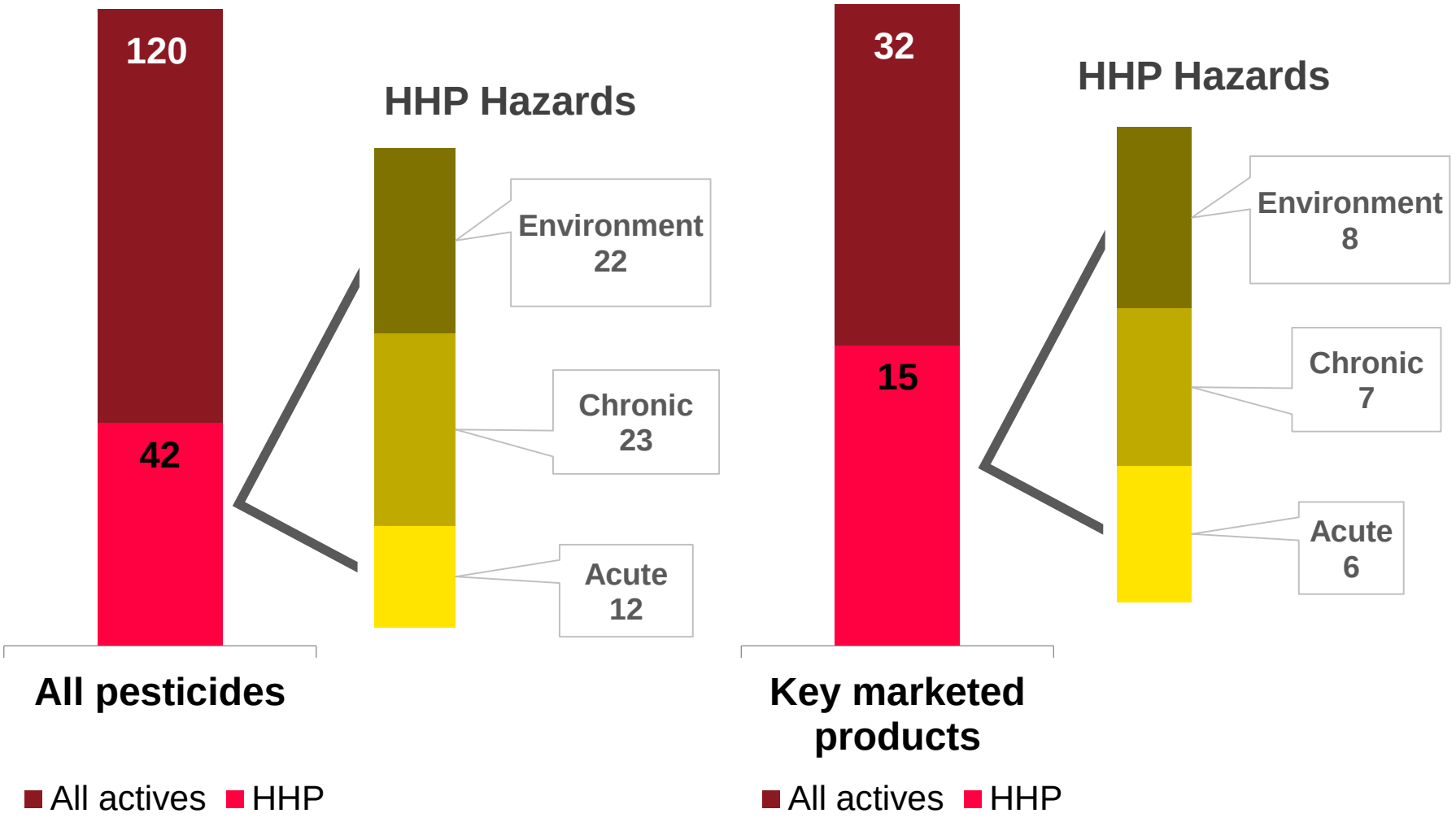
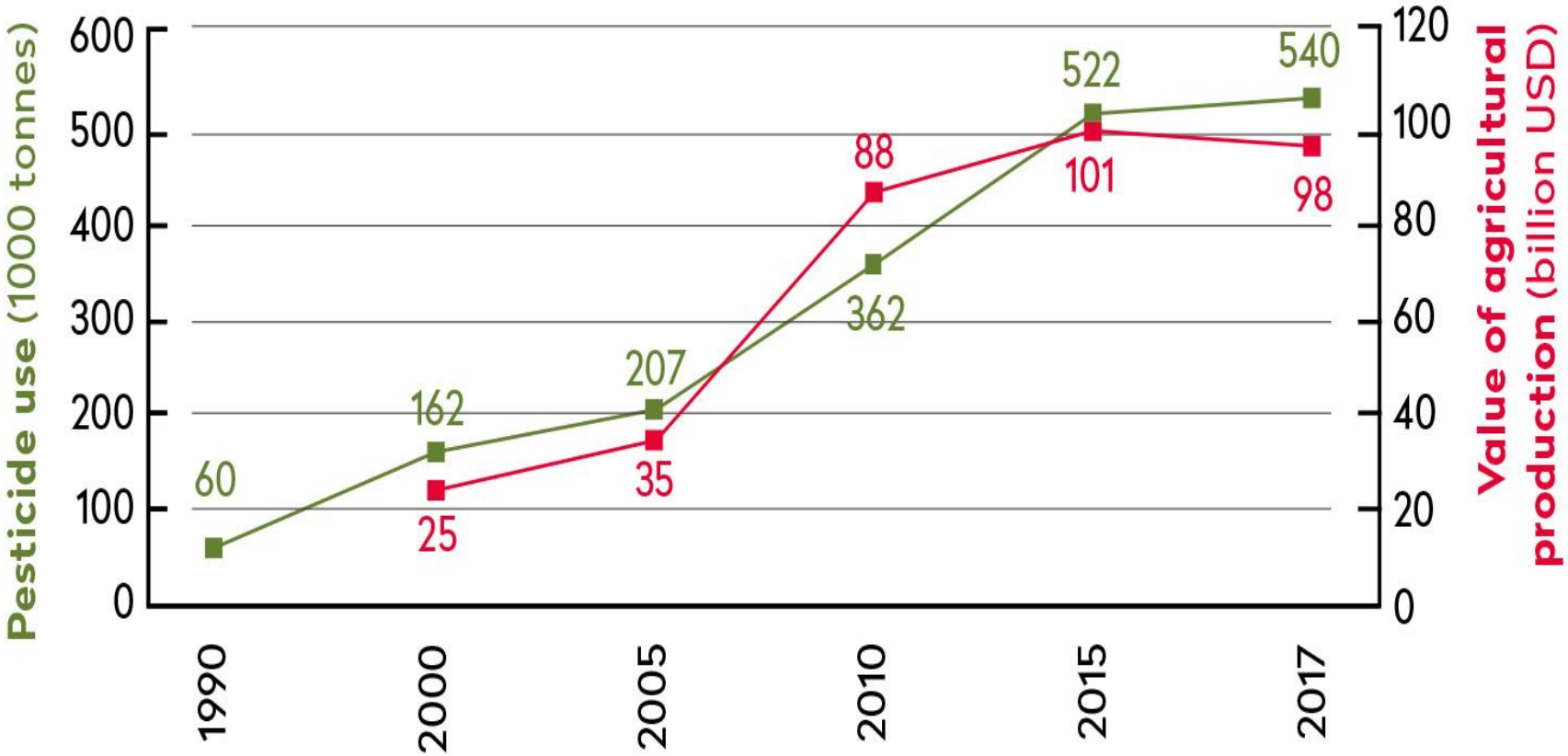
# Syngentas pesticide portofolio



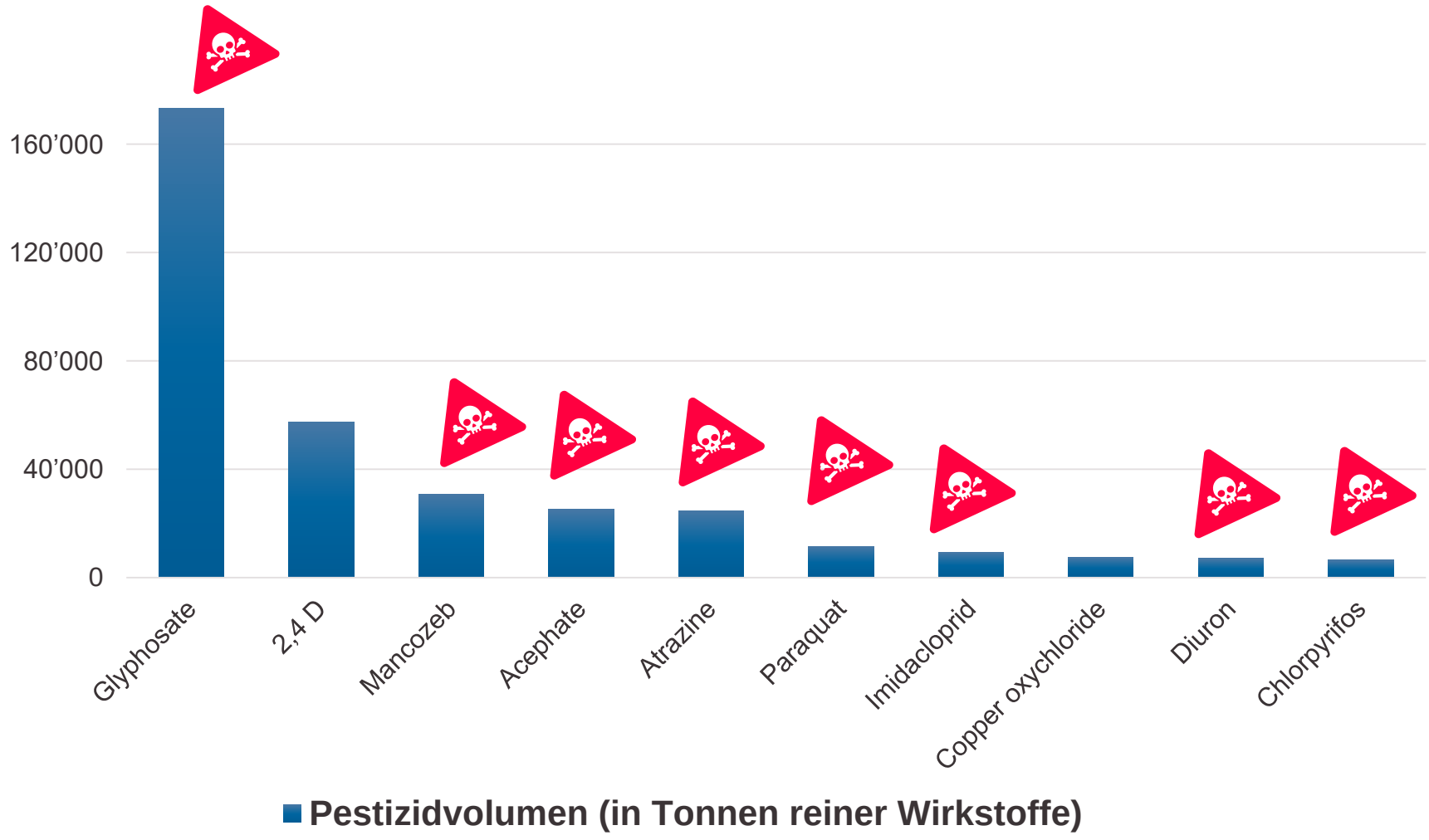
# Brazil’s pesticide problem

## Total value of agricultural production and pesticide use in volumes in Brazil, 1990–2017




Source: Public Eye estimate based on IBAMA 2019, Porto and Soares 2011, IBGE 2019

# Top10 pesticides Brazil 2017



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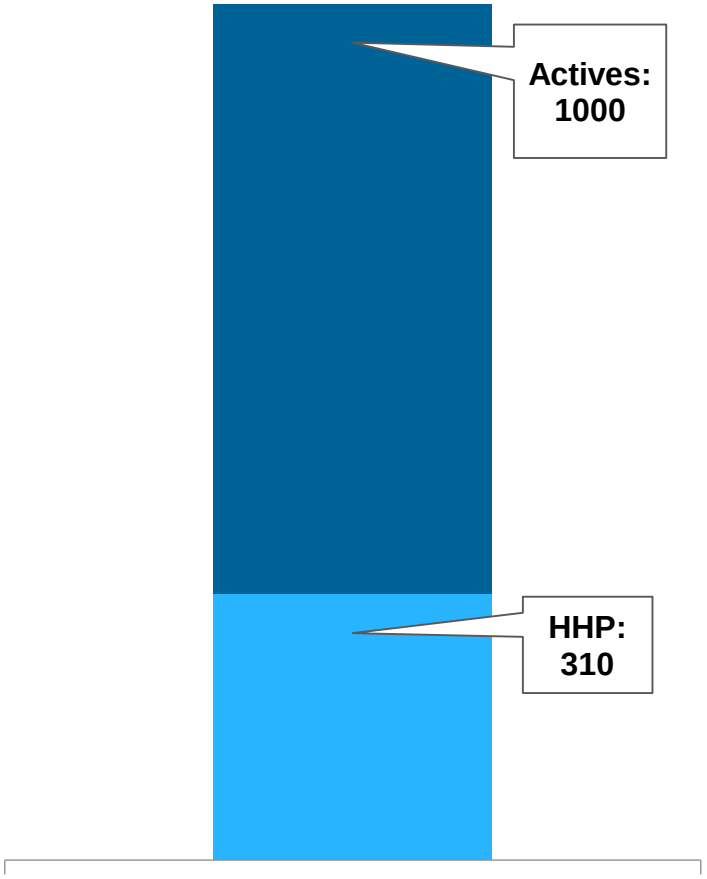
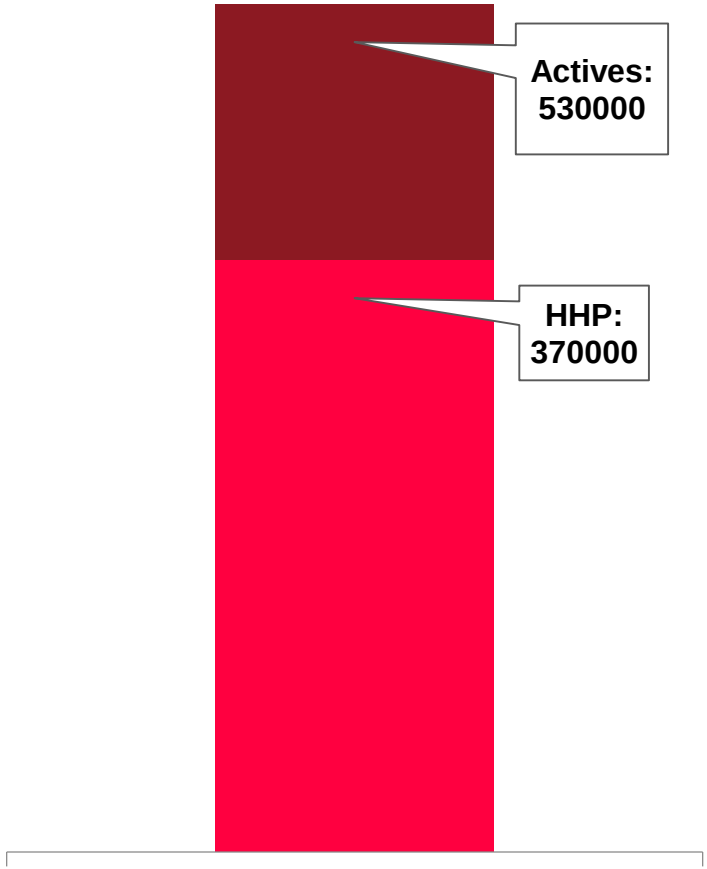



No. of active ingredients




Volumes (tonnes)



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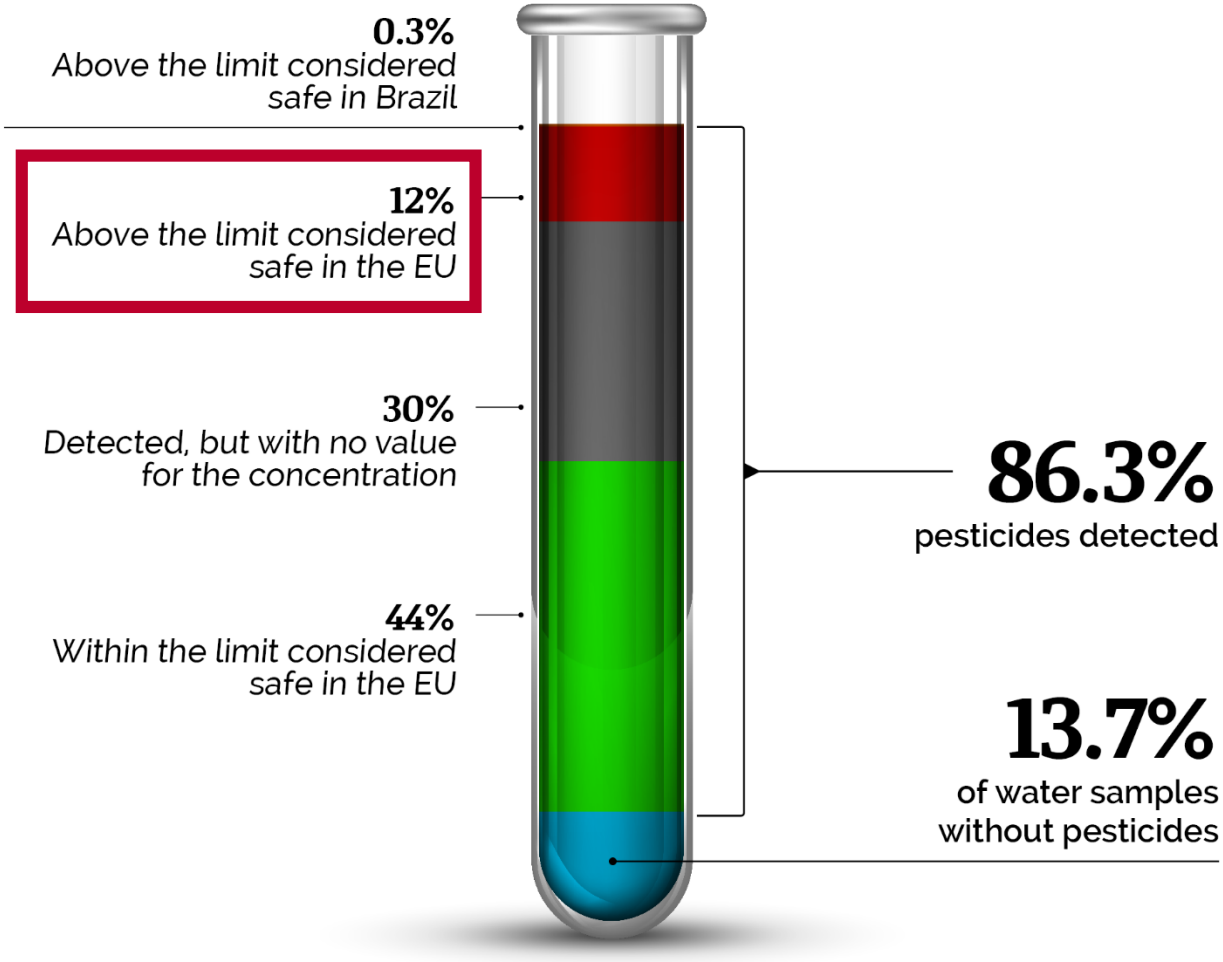
# Syngenta in Brazil

- Syngenta No. 1 on market with USD 1.6bn sales in 2017, 15% increase in 2018
- 21 of 45 pesticides marketed are listed as “highly hazardous”
- 10 are banned or severely restricted in EU or Switzerland
- HHPs represent 60% of Syngenta sales in the country

# Syngenta sales of HHP in Brazil (2017)

# Pesticides in drinking water




Source: Sistema de Vigilância da Qualidade da Água para Consumo Humano (Sisagua)



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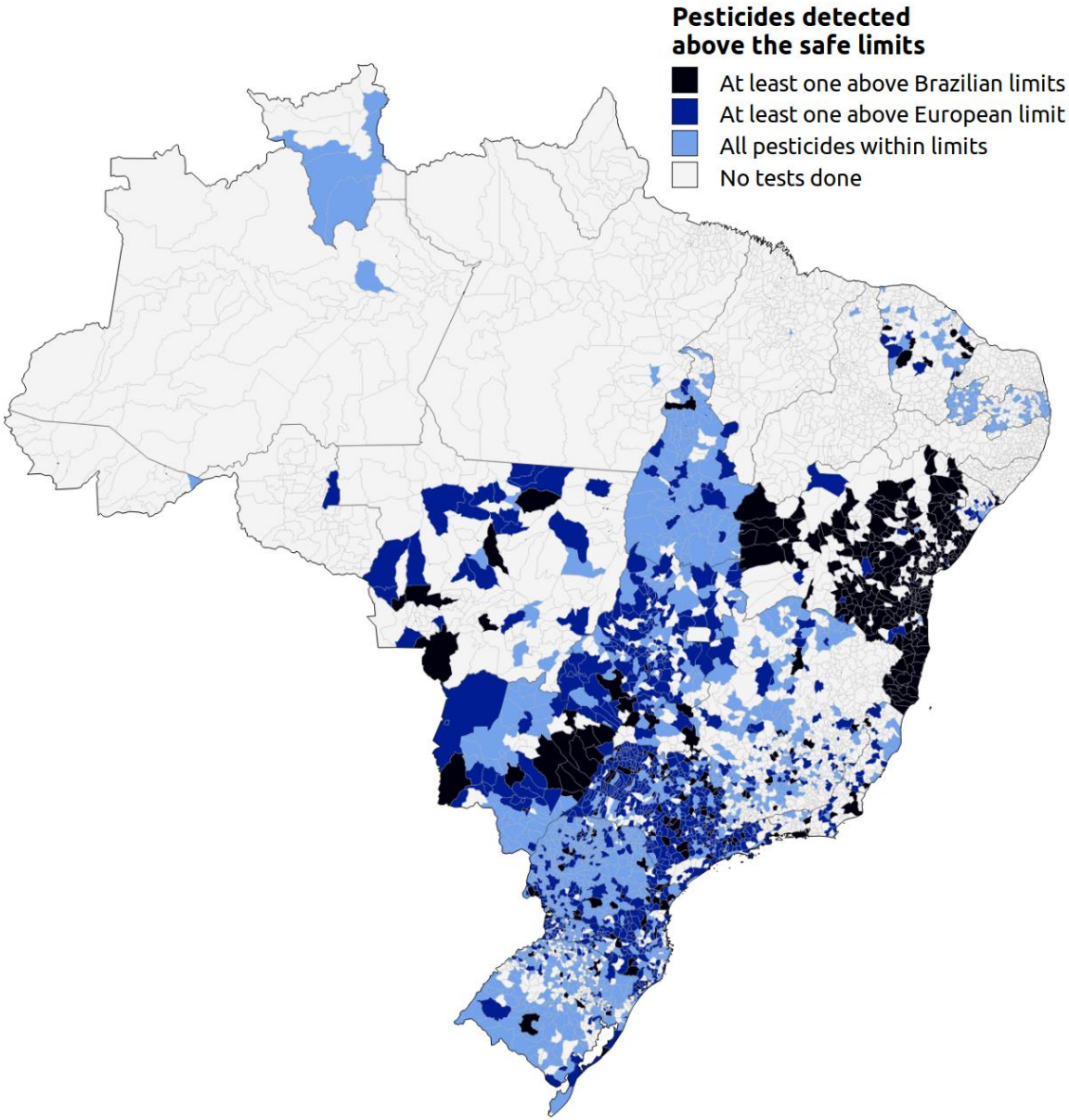
Pesticides detected
above the safe limits
At least one above Brazilian limits
At least one above European limit
All pesticides within limits
No tests done



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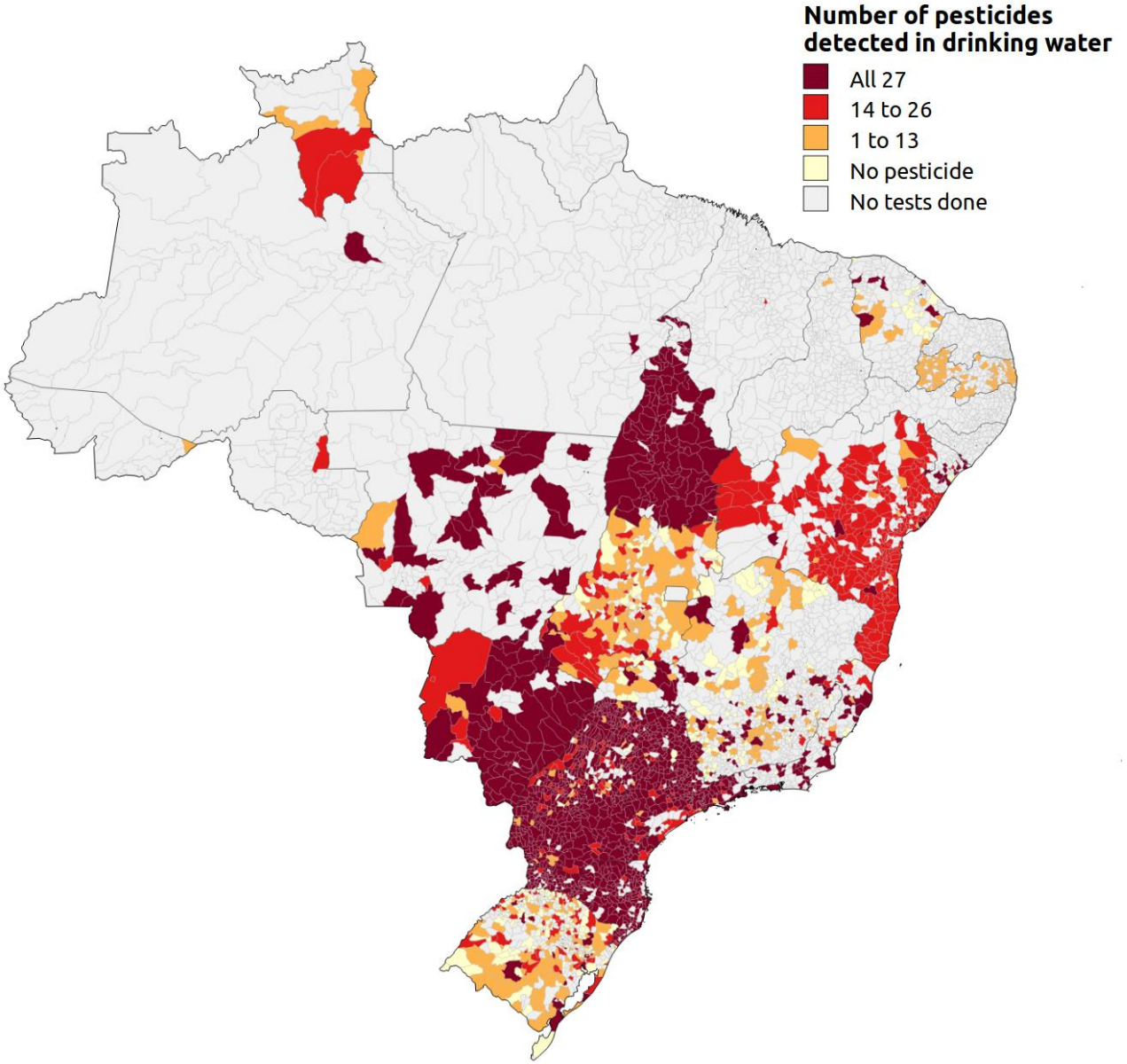
Number of pesticides detected in drinking water
All 27
14 to 26
1 to 13
No pesticide
No tests done



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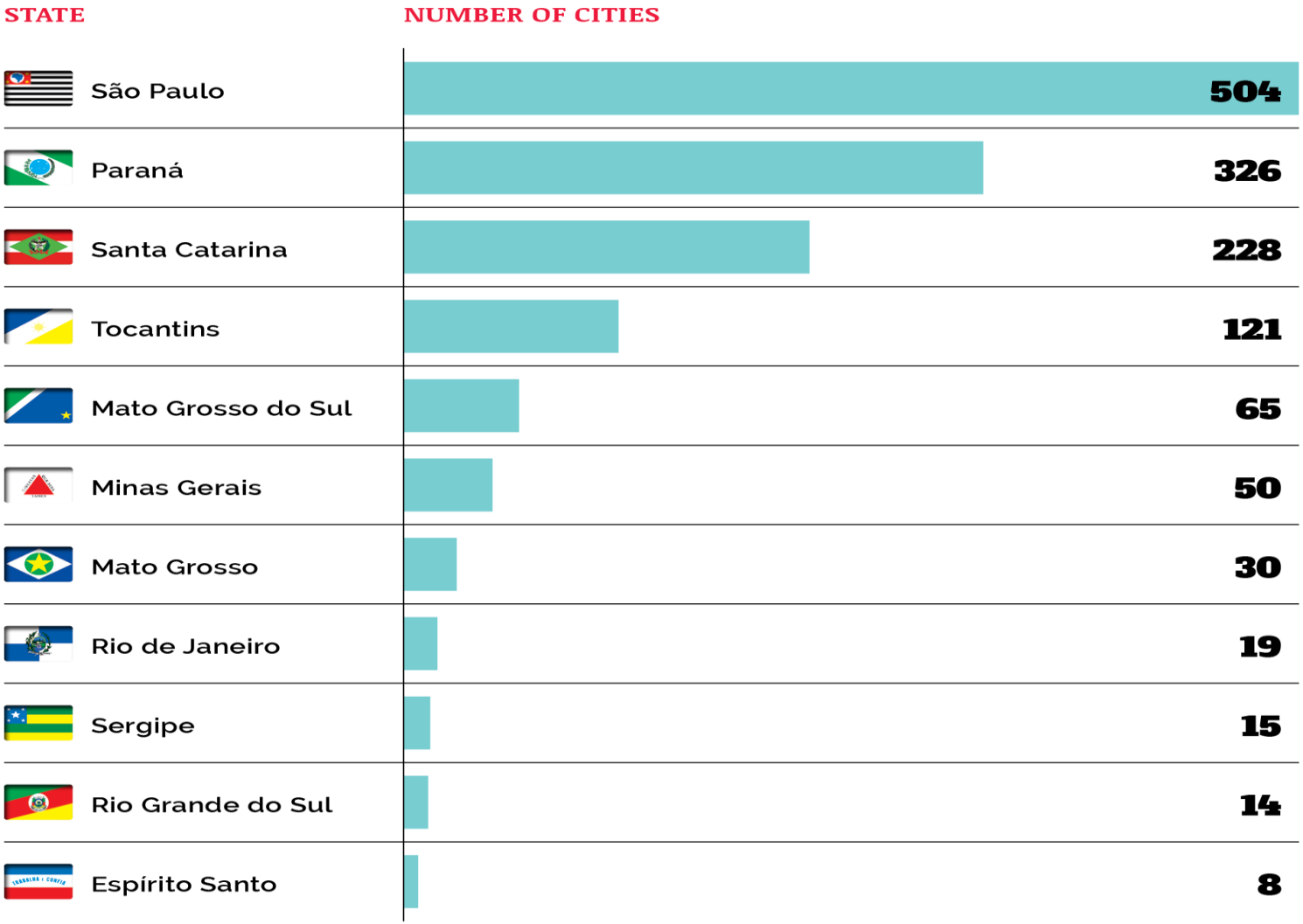
# TOXIC COCKTAIL

Where are those cities that detected all 27 pesticides in their drinking water




Source: Sistema de Vigilância da Qualidade da Água para Consumo Humano (Sisagua) (2014-2017)



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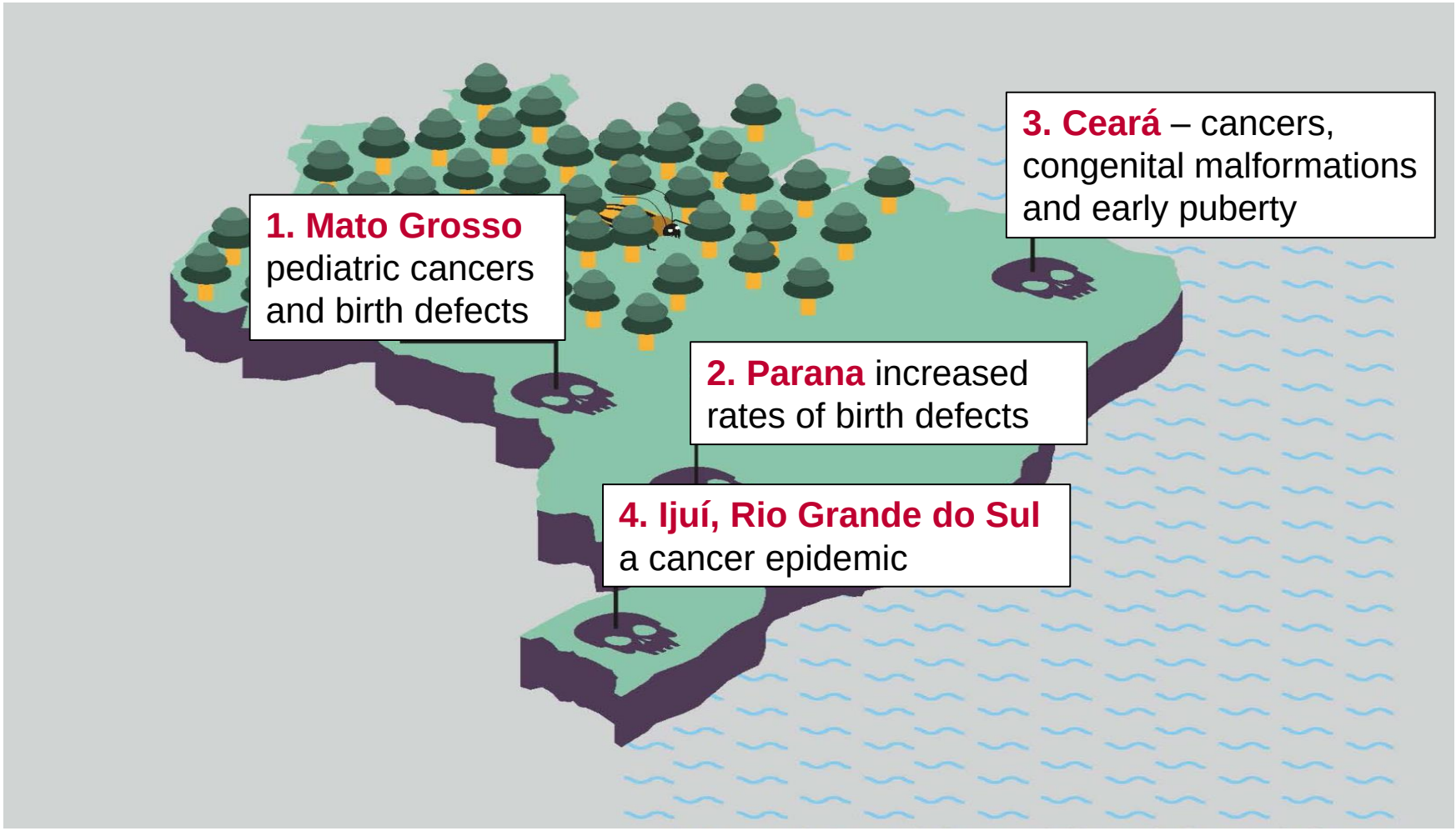
# Studies in agricultural corridor



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# Our demands

# Syngenta: no to highly hazardous pesticides!

Sign now: **Syngenta must stop producing and selling highly hazardous pesticides.**

**Sign now (form in German)**

**Sign now (form in French)**



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# Demands to Switzerland

1. **Prohibit the export of pesticides** that have been **banned in Switzerland** owing to their impact on human health and the environment, as demanded in a motion filed by National Councilor Lisa Mazzone;

2. Establish mandatory **human rights due diligence** for companies based in Switzerland, as proposed by the Responsible Business Initiative;

3. Support the efforts in favour of an international legally binding **treaty to phase out highly hazardous pesticides.**