

Pesticide
Regulation in EU
and EU's double
standards

Angeliki Lyssimachou, PhD Environmental Scientist/Toxicologist & Science Policy Officer ENSSER, Berlin 7th May 2019 EU pesticide authorisation system – theory and reality



- Maximum Residue Limits & EU's double standards
- Lobbying against EU law





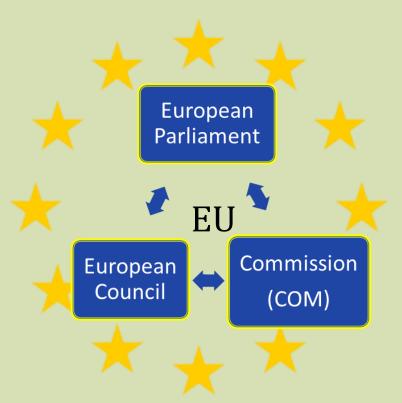
"The EU pesticides and biocides legislations are the <u>strictest</u> and most <u>protective</u> in the world. They are based on sound assessments and robust, extensive data requirements"

Commissioner Vytenis Andriukaitis Directorate General for Health and Food Safety June 2016, European Parliament hearing on EDCs

Legal requirements - pesticides



Plant Protection Product Regulation (PPPR) 1107/2009:



- High level of protection for ALL
 - Humans, animals, environment
- Protect the vulnerable
 - Pregnant women, children, babies
- Apply the precautionary principle
- Consider active substances, products and residues (food & environment)
- Consider mixture effects (cocktails)

Mutagens, Carcinogens, Toxic to Reproduction, Endocrine Disruptors, PBTs



Hazards

Legal requirements - pesticides



Plant Protection Product Regulation (PPPR) 1107/2009:

Mutagens, Carcinogens, Toxic to Reproduction, Endocrine Disruptors, PBTs



Hazards

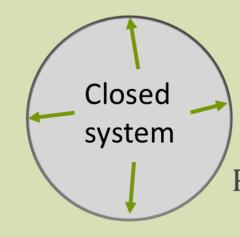
"Hazard-based cut-offs"





Derrogations/exceptions:
E.g. (Carcin + Reprotox + EDCs)

→ negligible exposure



Residues<LOD





- Precautionary principle
- Inadequate, insufficient regulatory tests – data gaps
- Adverse effects dismissed for "unscientific" reasons
- Academic scientific literature
- Harmful pesticides continue to be authorised without restrictions or monitoring
- EDCs high burden of proof

- Safety testing is done by the industry
- Studies are "private" and poorly reported
- Conflicts of interest in the whole process
- Products are not assessed for chronic effects
- Mixtures are not assessed **

Shortfalls and solutions of RA system



CITIZENS FOR SCIENCE IN PESTICIDE REGULATION . A EUROPEAN COALITION RIGOROUS SCIENCE, SAFE FOOD, AND

A HEALTHY ENVIRONMENT

Regulation, has launched this manifesto to call for reform.

THE PROBLEM

The European Union has one of the best regulations for pesticides in the world – in theory. But The European Union has one of the best regulations for pesticides in the world - in the world -

This action comes at a crucial time, when the European Commission is reviewing the pesticides This action comes at a crucial time, when the European Commission is reviewing the pesting of the glyphosate reapproval. legislation as part of its REFIT programme. In addition, the European Parliament's PET of the Pesticides authorisatio

committee, convened by concerned MEPs in the wake of the glyphosate reapproval

or the pesticides authorisation

The EU pesticides regulation explicitly prioritises the protection of human and animal health and the environment. It is underpinned by the precautionary principle to ensure that pesticide The EU pesticides regulation explicitly prioritises the protection of human and animal health and the environment. It is underpinned by the precautionary principle to ensure that pesticide

and the environment. It is underpinned by the precautionary principle to ensure that pesticide in the regulatory. or the environment. However, the market do not adversely affect human or animal healt and the environment.

System allows private interests to take priority over health and the environment. or the environment. However, the rules are not implemented properly and the rest Major conflicts of interest persist in the Pesticides regulatory system. For example industry Major conflicts of interest persist in the pesticides regulatory system. For example, in the pesticides panel, responsibly for risk does its own safety testing and is heavily involved in designing the methods for risk assessment guidelines, continues to include people with financial ties to the assessment. The European Food Safety Authority (EFSA) pesticides panel, responsible for the agrochemical industry. The EFSA expert groups, which conduct the peer review of the designing of risk assessment guidelines, continues to include people with financial ties to a continue to include people with financial ties to the criteria for approval. application dossier and publish an opinion on whether it meets the peer review of the approval of interest is unknown. application dossier and publish an opinion on whether it meets the criteria for approval of the Monsanto Papers, internal Monsanto documents disclosed in cancer litigation in the USA. pesticide, consist of anonymous national civil servants, whose conflict of interest is unknown.

Show how industry can actively subvert science. It is now clear that industry must be kept at

A WHITE PAPER

ENSURING A HIGHER LEVEL OF PROTECTION FROM PESTICIDES IN **EUROPE**

THE PROBLEMS WITH CURRENT PESTICIDE RISK ASSESSMENT PROCEDURES IN THE EU - AND PROPOSED SOLUTIONS

The Monsanto Papers, internal Monsanto documents disclosed in cancer litigation in the USA assessment and risk management. show how industry can actively subvert science. It is now clear that industry management. The result of the failure to properly implement the regulation is a rapid collapse of biodiversity

And insects in agricultural areas and serious harm to humans The result of the failure to properly implement the regulation is a rapid collapse of biodiversity in hormone-related (birds, bees, butterflies, frogs, and insects) in agricultural areas and serious harm to human.

Cancers such as breast and prostate). In addition to its failure to protect health and the Prepared for 'Citizens for Science in Pesticide Regulation' A European Coalition – 2018

(including damage to the brain of the unborn foetus and a steady rise in hormone-relate). In addition to its failure to protect health and the https://citizens4pesticidereform.eu/

Facts – number of pesticides increasing



492 active substances approved 2009-2018

- 142 renewed or first time approved
 - 8 candidates for substitution
 - 12 low-risk

- 40 no longer approved
 - Just 15 non-approvals
 - 18 withdrawn by applicant
 - 7 withdrawn for data gaps



Facts - Approved active substances

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- 11 toxic to reproduction
- 140 acutely toxic to aquatic organisms
- 5 classified as EDC
- 34 two PBT criteria
- Several pesticides are misclassified

Is this really the most protective system?



MRL regulation (396/2005)



"This Regulation establishes... the need to ensure a high level of <u>consumer</u>

<u>protection</u> ... relating to maximum levels of pesticide residues in or on food and feed of plant and animal origin".

Consumers' and animal health in EU

All parties can send an MRL application

Risk-based

Not applied for exported food

Import tolerance ---> trade

Procedure - setting MRLs in EU



Application MRL

Good agricultural practice











- 330 food products
- 1100 pesticides (EU and non EU)
- No application <LOD or 0.01 mg/kg



Control of MRLs in EU



Pesticide residues in food



- 84,650 samples for 791 pesticides
- 67% from EU, 27% non-EU, 6% unknown
- **96.2** % within MRL, 53.8% <LOD

Fruits and vegetables in EU shops with no pesticide residues





Control of MRLs in EU



EU samples with

multiple residues: 30%

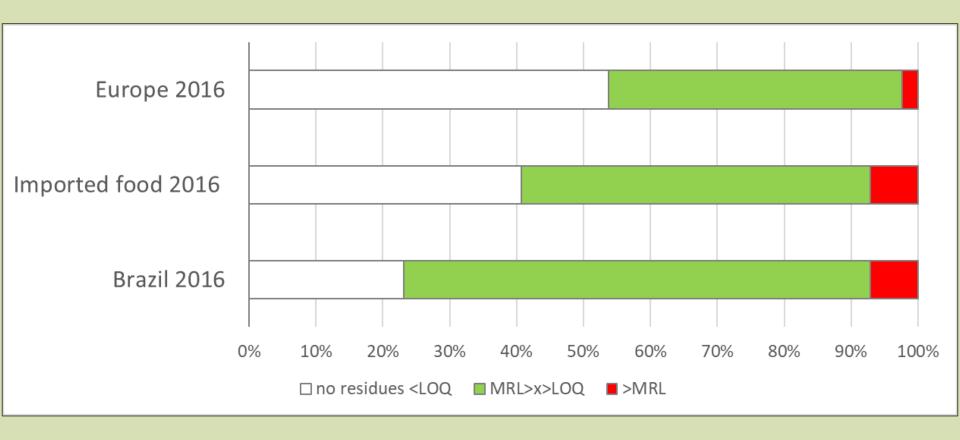
Gooseberries 85.7% Grapefruits 73.1 % Grapes 68.1% Strawberries 65.4 %





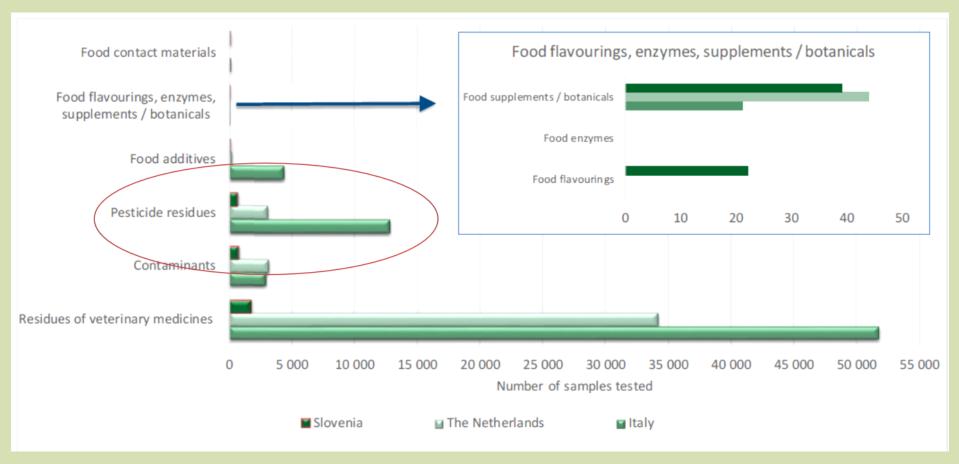
Comparing MRLs in food EU/imported





Uneven control in EU countries





Reminder: Applications are done on Member States and Member States send out the samples for monitoring

MRLs for non-approved pesticides



- 1. Approval rejected high toxicity
- 2. Not used no request for EU approval

If not detected = no problem

If MRL not safe: Default value 0.01 mg/kg or LOD



Not included in Annex II or III of MRL Reg.

MRL for all banned pesticides should be LOD, right?

How to include in Annexes?



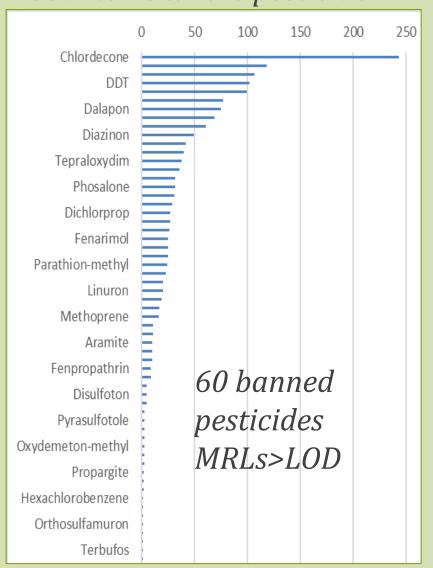
Application, import tolerance, Codex

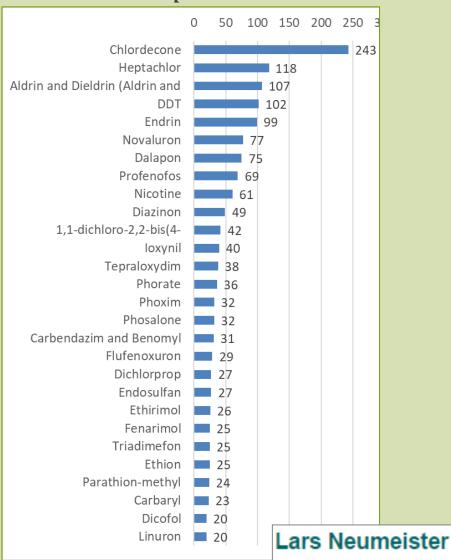
MRLs in food for banned pesticides (110)



Food items where pesticide MRL>LOD

Top 30





MRLs for banned pesticides - example



Carbendazim – fungicide, banned in 2014

EFSA 2010 assessment:

- Mutagenic humans
- Liver tumours in animal experiments



- Infertility in male rats, decrease sperm counts, testicular atrophy, absence of spermatogenesis
- Teratogen in rabbits & rats
- Very toxic to aquatic life

MRLs> 10-200 x LOD permitted in 31 products

2.9% EU food

MRLs for authorised but hazardous pesticides



Glyphosate –herbicide, reapproved in 2017 for 5 years

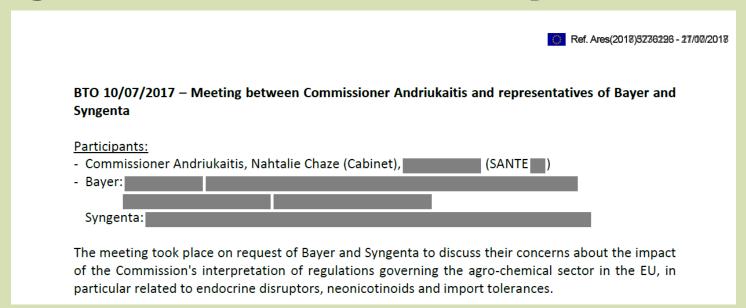
- Probable carcinogen for humans (IARC/WHO, 2015)
 - Humans, animals, genotoxicity
 - Skeletal deformities, teratogenesis
 - Reduced fertility, abnormal sperm morphology/counts, interfering with steroid synthesis
 - Chronic toxicity for aquatic organisms, high health risk for birds
- EU no human health risk!
 - 60% increase in ADI 0.3 mg/kg \rightarrow 0.5 mg/kg

3% EU food

The industry lobbying



Against hazard cut-off criteria in import tolerances



The industry representatives expressed their views regarding the need to conduct risk assessments for the setting of MRLs also for substances that are not approved in the EU due to their meeting the cut-off criteria in the pesticides Regulation and cautioned against setting too low MRLs as this would favour the development of mycotoxins. The Commissioner explained that if substances meet the cut-off criteria, accepting MRLs higher than the limit of detection would constitute unacceptable risks to human health.

syngenta

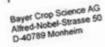








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Dear Mr. Commissioner,

We would like to draw your attention to the urgent issue of regulating endocrine disruptors that your Directorate General is currently dealing with. If the criteria for the identification of Endocrine Disruptors are not drafted carefully and proportionately, many pesticide active substances might unnecessarily face strong regulatory consequences, i.e. restriction or ban. This will ultimately decrease the competitiveness of European farmers and food producing industry, and adversely impact on international trade. Furthermore it will increase the risk of our very capital intensive research & development to a degree that agrochemical research and development may no longer be sustainable in Europe in the future. Therefore, we would like to ask for your support to ensure that the final criteria are based on sound scientific principles in order to enable an appropriate and balanced assessment of the endocrine disrupting potential of our active substances.

Recommendations

Stop exportation of banned pesticides based on human health and environment concerns on exporting country



- Zero tolerance in food for banned pesticides
- Reform the risk assessment procedure
- Replace pesticides with agroecology



Thank you!

Lets work together towards a healthier future

