## Pesticide Action Network Europe

# 2014 ANNUAL REPORT

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## INTRODUCTION

By François Veillerette, president of the board

#### Dear friends of PAN Europe,

*I am proud to introduce this new annual report of PAN Europe for the year 2014.* 

Once again PAN Europe has been very active during this year as you will see in detail. We produced high-level reports on EDC pesticides or on the lack of use of independent scientific literature in the assessment of pesticides that proved very useful to open a public debate on the lack of action of the regulators in these fields. Indeed this period is key as far as EDC pesticides are concerned and our involvement in pressing the Commission to deliver a protective definition of EDC pesticides to be excluded is crucial. Crucial is also our involvement in monitoring the implementation of the pesticide regulation. I could also mention the neonicotinoid pesticides, a dossier in which PAN's activity has been key to keep up the pressure that is necessary to maintain a ban on these products, and maybe strengthen it!

Beyond these points PAN Europe has also been actively involved in more positive aspects of our mission, for example by co-organising the 'Feeding Europe with fewer pesticides' symposium in the European Parliament to create a debate and push for safer alternatives to be adopted in agriculture throughout the EU as part of the implementation of EU's Directive on Sustainable Use of Pesticides, we have become a fully recognised partner in European Commissions civil society groups obtaining 10 places in various groups discussing a number of aspects of the Common Agricultural Policy. We celebrated the 2014 pesticide action week in Brussels by co-organising a workshop and debate in the European Parliament on a European future for a toxic free environment.

Finally, in 2014 as something positive, PAN Europe also worked on the EU Green Capital award, with the result that pesticide use in public areas will be one of the selection criteria in this award as from 2017.

All this work was possible with the determination and experience of our team in Brussels and with the help of many of our members. The team in Brussels has welcomed a new member: Angeliki Lysimachou, an environmental toxicologist with over than 10 years of experience in research on the effects of endocrine disruptors in aquatic ecosystems. She has also been working for Ecologistas en acción, Spain- in her free time- as a marine pollution coordinator. Welcome aboard Angeliki: you've got plenty of work ahead of you with the EDC dossier that you now have to manage for PAN Europe!



## Who we are

Pesticide Action Network (PAN) was founded in 1982 and is a network of over 600 non-governmental organizations, institutions and individuals in over 60 countries worldwide working to replace the use of harmful pesticides with ecologically sound alternatives. It's projects and campaigns are coordinated by five autonomous Regional Centres, in Europe, Africa, Latin America, Asia

The mission of PAN is to replace the use of harm- and North America.

ful pesticides with ecologically sound alternatives (where possible practices, but also products).

PAN Europe is the regional centre for Europe. It was founded in

1987, today bringing together 35 consumer, public health and environmental organizations from 25 European countries.

PAN Europe is managed by a board of directors consisting of seven board members while four part time staff members take care of the daily management.

## Our focal points in 2014

#### **General activities**

PAN Europe activities include being involved in the EU decision making process; disseminate information and raise awareness on pesticide problems, regulations and non-chemical alternatives; advocate politicians on the updates of scientific research on the adverse effects of pesticides; organize workshops and conferences and promoting dialogue for change among gov-

ernment, private sector and civil society stakeholders.

PAN Europe challenges pesticides authorisations in court at European and national level and coordinates our network of members for joint action and policy interventions.

ln 2014, we

worked on the strict

implementation of the Pesticide Regulation 1107/2009, covering among others the EU regulation on authorisation of pesticides and the EU Directive 128/2009 on the Sustainable Use of Pesticides, and on maximum residues levels of pesticides in food and feed.

We reinforced our campaign on bees and neonicotinoid pesticides; on pesticides with endocrine disrupting properties for humans and wildlife; on conflict of interest, access to the EU court, worked for international bans on some of the most hazardous pesticides, followed the implementation of the Common Agricultural Policy and as part of this continued our work to promote alternatives to pesticides. Finally in 2014 we started to work on the EU Green Capital awards, as more and more citizens are contacting us regarding this issue.

We focused on the authorized pesticides with endocrine disrupting properties and the criteria that the Commission failed to present in December 2013, to define these chemicals for regulatory purposes.

We also started working on the vision of a non-toxic environment, where pesticides will be banned from public gardens, playgrounds and schools, with the aim to gradually eliminate completely the use of these hazardous chemicals.

#### **Specific activities:**

#### Some specific activities of PAN Europe:

- One workshop and debate in the European Parliament discussing the future of a toxic free environment, with a number of victims of pesticides together with Health and Environment Alliance (HEAL)
- One high level symposium jointly with International Organisation for Biological Control (IOBC), International Biocontrol Manufacturer Association (IBMA) and Greenpeace Europe, in the European Parliament. (www.pan-europe.info/Activities/Conferences/141104.html)
- One EDC training meeting (2-days) with PAN Europe members and Dutch/Belgian Flemish organisations, where research scientists, MEP advisers, chemical experts and pioneer NGOs presented the different angles of EDCs, how they affect society and the environment and what actions are needed on a national and European level.
- A thorough study on the lack of use of independent literature during the pesticide risk assessment by regulatory bodies, which is against the pesticide regulation that requires "all available data" to be used in the assessment of pesticides. Laboratory studies that show adverse effects in mammals and other animals, even when performed by pioneer scientists, are evaluated as "inadequate" and are being dismissed without reasonable justification. "Missed and Dismissed report" (http://www.pan-europe.info/Resources/index.html).
- A thorough research to identify the authorised pesticides with endocrine disrupting properties, and which ones are likely to be banned in the EU following the Commission's criteria options.

(www.disruptingfood.info/en/what-we-do)

An evaluation of the work of Food Authority EFSA on the mixture toxicity of pesticide residues in food. Already 9 years ago politicians decided that mixture toxicity should be taken into account and EFSA to define the methodology. However, EFSA wasted much time, partly because infiltration of panels by industry-linked experts, and considered the topic generally irrelevant. After intervention by DG SAN-CO in 2011 EFSA still is looking for ways to keep food standards in place, now by modelling and allowing harm for a

certain percentage. The PAN report "A poisonous Injection" describes the misery and presents recommendations to DG SANCO.

- PAN Europe was requested by Austrian certification body AMA to prioritise endocrine disrupting pesticides for phasing out. We collected data from EFSA on the daily exposure of ED-pesticides, data on adverse effects and send a final report to AMA, producing a list of top-10 pesticides of concern.
- Intervention in the court cases of Syngenta and Bayer against the European Commission before the European Court of Justice. These 2 companies attack the EU partial ban on bee-killing neonicotinoids. PAN Europe took the lead of an NGO coalition to intervene in the case to support the European Commission. We have provided valuable scientific and juridical inputs to the judges of the EU Court.
- PAN Europe initiated, together with French Confédération Paysanne farmer union, a court case against the European Commission to force them to set Maximum Residue Limits in pollen and honey at a level compatible with bee health. Currently, this level is set at 10 µg/kg, which is high enough to induce sub-lethal effects such as disorientation or memory impairment.
- Despite all good language of EU Commissioners on transparency the access to documents rights are watered down gradually. Many documents are considered 'ongoing policy', or 'personal documents' and not many documents from the civil servants are accessible anymore. PAN Europe has three cases running on this bad transparency policy, one with ClientEarth (appeal) on documents we like to receive from the work in EFSA panels, one with Greenpeace NL on safety testing documents on Glyphosate (appeal from Commission, http://www.pan-europe.info/News/PR/131008. html ), and one on documents on endocrine disruption from DG Trade that were refused, both at the Luxembourg court.
- A detailed evaluation of all National Action Plans that Member States have been elaborating as part of their implementation on the Sustainable Use Directive, with a set of recommandations on ways forward:

(www.pan-europe.info/Campaigns/NAPs.html)

#### **Other relevant activities:**

In 2014, PAN Europe actively participated in EFSA advisory committee and stakeholders' meetings, as well as of the OECD advisory group on testing and assessment of endocrine disrupters (EDTA AG), European Environmental Bureau (EEB) chemical experts group, more than 40 workshops with other stakeholders, 30 conferences and meetings in relation to bees conservation, food safety, endocrine disrupting chemicals, national action plan, alternatives on pesticides, conflicts of interest, as well as a number of European Commission, DG SANCO advisory group and DG AGRI civil society groups etc.

We prepared numerous reports, articles and briefings, compiling and sharing research findings on pesticide hazards; best EU practices on non-chemical alternatives and IPM successes with fellow NGOs in the EU. PAN Europe appeared in the news several times and the work on endocrine disrupting pesticides was also discussed in plenary debate in the European Parliament in Strasbourg.



## MOVING TOWARDS A NON-TOXIC ENVIRONMENT



PAN Europe workshop in the European Parliament during the Pesticide Action Week (PAW) on the future of a toxic free environment.

On Thursday and Friday 27-28 March 2014 PAN Europe celebrated the Pesticide Action Week (PAW) in the European Parliament by co-organising a film screening of 'la mort est dan le pré' and a strategic workshop on the further development of the toxic free environment on Friday morning.

Around 100 people attended the film screening and took part in the debate with victims of pesticides on Thursday night, while around 30 people to took part in the workshop the day after where we started to explore the possibility of developing a EU strategy for a toxic free future.

The event was reported on by the following: France (www.phyto-victimes.fr/), the peoples tribune (www.agricorporateaccountability.net/en/page/general/20), and www.pan-europe.info/Issues/Pesticide Victims.html

The debate on the toxic free environment is of relevance to the EU the 7<sup>th</sup> General Union Environment Action Programme to 2020 'Living well, within the limits of

our planet'. It cites the need for 'developing an EU strategy for a non-toxic environment, supported by a comprehensive chemical exposure and toxicity knowledge base and conducive to innovation of sustainable substitutes. The EU therefore needs to start looking around on what is already happening across Europe.

The most obvious example is Sweden, which in 2010 decided to develop a strategy for a non-toxic environment http://www.kemi.se/en/Start/A-Non-Toxic-Environment/.

The Swedish model is defined as follow:

'The environment must be free from man-made or extracted compounds and metals that represent a threat to human health or biological diversity. The overall goal is that, one generation from now, the major environmental problems currently facing us will have been solved.' Since then, Swedish municipalities, county administrative boards, responsible central agencies etc. have been working to make this happen with the aim of becoming non-toxic by 2085.

This overall Swedish objective steers policy making in a positive way. While it is a gradual approach, where a set of interim targets and timetables are set for the first 10 years (each of these have specific time tables), each policy that Sweden now sets has to fall within this overall objective of reaching a non toxic environment by 2085. This is a very positive model that we hope Europe will follow.



Europe's Green Capitals will become even greener from 2017 – an important start in the needed transition towards detoxing our cities



Every year, one European city with over 100,000 inhabitants is chosen as Europe's Green Capital, the winning city commits to a number of environmental, biodiversity and climate goals: http://ec.europa.eu/environment/europeangreencapital/index\_en.htm

However since the Green Capital award was established in 2010, no specific attention has ever been given to pesticides, despite the fact that danger from exposure was recognised by the European Union decades ago. This recognition even led to the enactment of EU Directive 128/2009 on Sustainable Use Directive on Pesticides (SUD) in 2009.

During the 2014 EU Green Week, the selection criteria for municipalities applying to be Europe Green Capital in 2017 were published: http://ec.europa.eu/environment/europeangreencapital/applying-for-the-award/call-for-2017-applications/index.html

For the first time, a strong reference to the SUD referring to 'the need to improve water quality, minimise or prohibit use in certain specific areas such as public and protected areas, and introduction of integrated pest management in European farming sector'.

As a result, municipalities wishing to participate in the 2017 award will need to elaborate on trends in local water quality, and regarding their intention to reduce use of pesticides in both public areas and in protected – or green – areas.

However, municipalities still do not need to give details on: How to reduce and eliminate toxins in food eaten in the cities, despite the fact that low input agriculture, especially organic in local food chains - have huge potential as drivers in the local change towards the development of sustainable societies. Longterm steps taken to move towards becoming an non toxic environment.

In more EU legislative wording:

While municipalities will have to explain: 1) what is done on water quality, among others defined in article 11 of the SUDP on specific measures to protect the aquatic environment and drinking water; and 2) what they will do to reduce pesticide use in public and sensitive - green - areas, among others defined in article 12 on reduction of pesticide use or risks in specific areas.

Municipalities still do not need to explain:

which 'measures they take to promote low pesticide-input pest management, giving wherever possible priority to non-chemical methods, so that professional users of pesticides switch to practices and products with the lowest risk to human health and the environment among those available for the same pest problem, including both integrated pest management and organic farming, though this is a clear require-

PAN Europe and our national PAN groups are ment according to article 14 contacted increasingly often by concerned par- of the SUDP.

ents, dog owners, nature lovers etc. for advise and actions, and organic towns is a fast growing phenomenon. PAN Europe therefore welcomes the development that pesticide issues are includ- Green Capital in 2014, ed as a selection criteria for EU Green Capitals.

Copenhagen, European banned the use of pesticides in public areas in 1997. This shows that

cities wanting to really be green cannot continue to use poisons in parks and streets where its citizens work, live and play. We hope that Bristol will follow this example and commit to going pesticide free before the end of 2015.



## **ENDOCRINE DISRUPTING PESTICIDES**

Hormone disrupting chemicals: A disruption in the EU political arena

Since the 90s, the EU has recognised that some man-made chemicals found in our food, water and the environment have endocrine disrupting properties and pose a threat to human and environmental health<sup>1</sup>. The process of regulating these substances has been challenging not only because of the complex mode of action of these chemicals but also due to "conflicts of interests"; in other words, banning these chemicals from the market will cause profit-loss to the industry sector. The influence of the industry is so strong in the European political arena, that regulators are now evaluating the economic impact of such a ban before they take a final decision. But when did economic profit start being the "deciding factor" to protect human and environmental health?

#### **Hormonal interference**

Endocrine Disrupting Chemicals (EDCs) are biologically active chemicals of diverse origin and uses that interfere with the hormonal system of animal species, including humans. They are found in industrial chemicals, plastic components, cosmetics, pharmaceuticals, biocides etc. and are also used as pesticides in agriculture that can end up as residues in our food. The hormones can be seen as a network of chemical messengers that circulate across the body and transfer the necessary "information" to specific organs to regulate their function and development. Very small amounts of EDCs are capable of interfering with or "disrupting" the natural action of hormones, 1. http://ec.europa.eu/environment/chemicals/ endocrine/strategy/being\_en.htm pass the wrong "messages" to specific organs and result in alterations in morphology, physiology, growth, reproduction, development and behaviour. Such changes have been linked to endocrine-related disorders such as reproductive failure, reproductive organ deformities and cancer, diminished fertility, altered sex differentiation, metabolic disorders (e.g. obesity and diabetes in mammals), immune dysfunction and cognitive impairment among others.

#### Wrong programming

What makes these chemicals particularly problematic is that they mimic/disrupt the role of hormones that are naturally present in very small concen-Thus, a very tiny amount of an EDC, similar trations. to the levels we find in the food and environ-

the levels we find in the food and environment, is sufficient to trigger an effect. al signals are sent during the early-life stages of de-

> velopment, a whole erroneous cascade of events is triggered and the "wrong programming" is set that becomes permanent and will inevitably result in disease and dysfunction later in life. This means that foetuses (exposed in the womb through their pregnant mothers), babies and children, are the most vulnerable to EDC exposure. Exposure of adults to EDCs may result in different effects or no effects at all due to the adult organism's capacity to "correct" the alterations. Therefore these chemicals neither follow the rule of "the dose makes the poison" nor can they be assessed with the classic risk assessment testing that mostly uses adult animals to determine "safe" levels of exposure.

> There are still great uncertainties regarding the diseases triggered by EDCs and the underlying mechanisms of action, thus it is not always possible to establish a direct link between exposure to EDCs and disease. In such circumstances, where dangers to human and environmental health have been detected but scientific data is incomplete to permit the full evaluation of the risk and employ safety measures, the EU has to apply the "precautionary principle" and stop the production and distribution of, in this case, EDCs to avoid further potential damage.

#### **Precautionary principle**

The Plant Protection Products Regulation EC 1107/2009 (PPPR)<sup>2</sup>, put into force in 2011 to regulate pesticides, is the first legislation to apply the precautionary principle on EDCs and introduce "hazard-based cut-off" criteria, i.e. any pesticide with EDC properties is regarded as a hazard and must be banned (hence the wording "cut-off"). This approach is also adopted in the case of genotoxic and mutagenic compounds. Since pesti-

2. www.eppo.int/PPPRODUCTS/ information/2009\_1107\_EU-e.pdf cide residues are found in our food, deciding against the use of endocrine disrupting pesticides is certainly a wise move. EDC "cut-off" criteria were also incorporated later in the Biocide Product Regulation EU 528/2012 (BPR)<sup>3</sup>, which was put into force in 2013. Back in 2009, the European Council and European Parliament approved the Pesticide Regulation's "cutoff" criteria for EDCs<sup>4</sup>.

Ironically the Pesticide and Biocide Regulations were put into force before defining the criteria to identify EDCs. This task was first given to the Environment Directorate (DG ENVI) of the European Commission. Although a first draft on the EDC criteria was ready in 2013, which supported the precautionary approach, DG ENVI did not present the criteria by the December 2013 deadline. DG ENVI has since stopped being the leading Directorate on EDC-criteria. So what happened?

#### **Manufacturing doubt**

The fact that several EDCs would have to be removed from the market brought reactions in the other Commission Directorates and the industry sector that triggered a different kind of "cascade of events". In such cases the usual approach of the industry is to manufacture doubt on the evidence - look for example at the case of the tobacco industry in the 50s and 60s, insisting on the lack of solid scientific evidence that tobacco causes lung cancer and respiratory diseases. Here, the agricultural industry composed reports claiming that far too many pesticides would be identified as EDCs with the Pesticides Regulation and draft criteria, causing a "catastrophic" loss in agricultural production and economy (see the analysis of PAN Europe's Impact Assessment Annex III<sup>5</sup>). The reports include irrational statements such as that Europe will face hunger and will be excluded from international trade due to its strict regulations. They have major flaws as they totally ignore the Sustainable Use Directive that aims to restrict or prohibit the use of pesticides in Europe anyway, to motivate farmers to use less toxic alternatives.

According to the Directive all member states must apply the Integrated Pest Management approach from January 2014, and must give priority to those methods, "which cause the least disruption to agricultural ecosystems and encourage natural pest control mechanisms". None of the industry reports considered the replacement of EDC pesticides with the existing non-chemical or even chemical alternatives, which is required by law and consequently their baseline for comparison is wrong. In parallel, industry research institutes started claiming that chocolate and vitamin D also affect the endocrine system, mixing up the terms of endocrine **function** with endocrine **disruption**, confusing in such way the general public, regulators and non-specialists. 3. http://eur-lex.europa.eu/LexUriServ/LexUriServ. do?uri=OJ:L:2012:167:0001:0123:EN:PDF

4. www.europarl.europa.eu/sides/getDoc. do?pubRef=-//EP//TEXT+IM-PRESS+2009011 2IPR45936+0+DOC+XML+V0//EN

5. pan-europe.info/Resources/Other/impact\_ assessment\_ed/IMPACT\_ASSESSMENT\_AN-NEX\_III.doc

#### **Conflicts of interest**

Following the industry lobbying, the Commission Directorates of human and consumer health (DG Sante), Enterprise (DG Enterprise), Trade (DG Trade) and Secretary General together with the European Food and Safety Agency (EFSA) started putting pressure to recognise EDCs as non-hazardous chemicals and abandon the "cut-off" criteria approach - this means that exposure to small quantities can be permitted. On the top of this, on June 2013, a group of 18 toxicologists - 17 of which were later proven to have conflicts of interest due to their ties to the industry - published an open letter written to the Chief Scientific Advisor of the European Commission accusing the Commission of being over-precautionary and against well-established science and risk assessment<sup>6</sup>. This letter was immediately strongly criticised by experts in endocrinology including members of The Endocrine Society, due to the misleading information it provided on endocrine disruption research<sup>7</sup>.

Ironically, when the toxicologists that had composed the letter were invited to the Commission, they failed to support their opinion on. But the damage was already done, and all the extensive research on EDCs was suddenly under question. The industry had succeeded to halt the process. Instead of the criteria on EDCs, the Secretary General of the Commission called for an impact assessment<sup>8</sup>, with the argument that "if Europe is the first to ban these chemicals, the economic impact on society should be evaluated". The lead was given to DG Sante and an inter-service consultation opened for all the other DGs with an interest.

Thus, in June 2014, six months after the deadline to present the criteria, the Commission published a "Roadmap"<sup>9</sup> instead presenting the different criteria and decision-making options considered by regulators, including "safe levels", "potency", risk assessment and socio-economic elements - all against the original "cut-off" criteria of the Pesticide Regulation. Next, the Commission launched a public consultation that received 27,000 replies that will now have to evaluate before it conducts the impact assessment. This process, which ignores the science behind endocrine disruption, will delay the decision on EDC criteria and consequently our exposure to these chemicals will continue for several years.

6. http://link.springer.com/article/10.1 007%2Fs00204-013-1117-2

> 7. www.ncbi.nlm.nih.gov/ pubmed/23981490

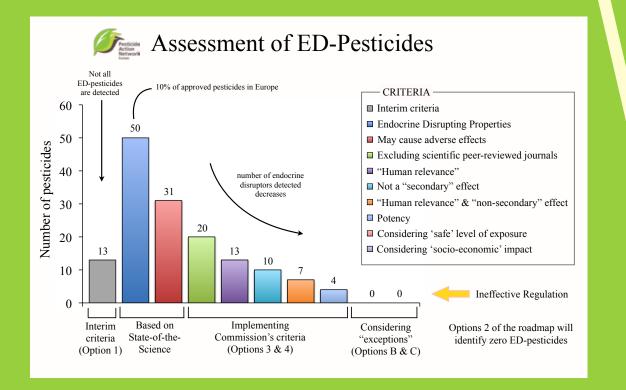
8. http://pan-europe.info/Resources/ Other/impact\_assessment\_ed/Panic%20 mail%20of%20Testori%20to%20Serv oz%20SG%20March%201%202013%20 page%205%20-%206.pdf

9. http://ec.europa.eu/smart-regulation/ impact/planned\_ia/docs/2014\_env\_009\_ endocrine\_disruptors\_en.pdf

#### **Science fiction**

In the meantime, PAN Europe undertook research to evaluate which pesticides would be banned according to the Pesticides Regulation and which ones are likely to be banned according to the Commission's options, using all scientific literature, including academic literature and industry studies (IMAGE 1). The study concluded that 31 pesticides should be banned following the Pesticides Regulation, but in practice the Commission, following the options considered for the criteria and regulatory decision-making, will ban seven, four or zero pesticides<sup>10</sup>. For all these pesticides there are both non-chemical and chemical alternatives and it's very unlikely that their ban will result in any economic or yield losses. On the contrary, the results would be beneficial, by applying alternative methods to pesticides and reducing human and environmental exposure to EDCs. This contradicts considerably the industry's reports claiming that the Commission is planning to ban more than 100 pesticides, which will destroy agricultural economy and food production. Clearly, industry's arguments are based on "science-fiction" to scare the regulators and general public.

10. www.disruptingfood.info/en/what-we-do



Summary diagram: Assessment of pesticides for endocrine disrupting properties by PAN Europe. The Commission is considering different options to define endocrine disrupting chemicals (EDs) for regulatory purposes (provided in the Roadmap). The Regulation requires the ban of pesticides with endocrine disrupting properties that may cause adverse effects. PAN Europe has carried out an assessment of pesticides for endocrine disrupting properties based on the regulation requirements (PPPR 1107/2009) and compared it to the assessment of using the criteria proposed by the Commission in the different options of the Roadmap. The full analysis is provided in Annexes 1&2.

11. www.europarl.europa.eu/RegData/ etudes/etudes/join/2008/408559/IPOL-JOIN\_ET%282008%29408559\_EN.pdf It's important to highlight that the Pesticide Regulation aims to protect human health and the environment and therefore, an impact assessment should consider all the benefits of the Regulation towards human and environmental health. Indeed, in 2008, before the approval of the Pesticide Regulation, MILIEU Ltd completed an extensive impact assessment on the benefits of the "cut-off" criteria of the Pesticide Regulation, upon request by the European Parliament<sup>11</sup>. Both the European Parliament and Council approved the "cut-off" criteria to provide protection to human health from exposure to these chemicals. Therefore, we already have an impact assessment on the Pesticide Regulation.

#### **Politics-based science**

What the Commission is requesting now, is an impact assessment to decide what definition we will give to these chemicals to fit the regulatory procedures and avoid economic losses! Instead of having "science-based" politics, we get "politicsbased" science. However, an economic impact assessment will neglect any benefits that are not translated to monetary values, such as the ones of a clean and healthy environment, protection of biodiversity and soil erosion or how we will save money from the diseases that we will not have. Thus, it appears that the industry's economic losses will determine what EDCs are and whether the new generations will develop endocrine-related diseases. This is just another example of the strong and persistent industry lobbying deciding on what harmful chemicals we will be exposed to.

PAN Europe



## Endocrine disrupting pesticides An overview

Endocrine disruption is an issue known to independent scientists for more than 15 years. It has been observed mostly in nature, as illustrated for example by the case of alligators with low testosterone levels and small penises, in lake Apopka, Florida. The phenomenon was 'coined' as such by Theo Colborn. In the meantime, an enormous number of scientific studies have been published showing this is a very serious effect, demonstrating the need for governments to act. Many negative human effects such as low sperm counts, mental disorders, cancers and reproductive dysfunction have been linked to endocrine disruption and to chemicals. Notable is the website of Theo Colborn<sup>12</sup>, which shows the potential effects on a developing child. Low doses are also an important element in endocrine disruption, which has long been disregarded in decision-making. The science group of professor Kortenkamp showed that even at official "No Effect Levels" of chemicals, endocrine disrupting effects can be shown<sup>13</sup>.

Hundreds of scientific studies have been published on the plastic monomer Bisphenol-A, many of which show effects even at low doses of exposure. Despite the evidence, the reaction of governments has been slow and inadequate. Denmark finally took the lead in banning baby bottles, in the end the European Commission followed. This conclusion was reached after years of controversy, fuelled by chemical industry, where science seemed to be less and less important and politics & power dominated the arena.

Endocrine disruption can lead to a multitude of harmful effects: mental disorders from exposure during development, hormone-related cancers such as breast and prostate cancer, failures of the reproductive system such as low sperm counts and malformations, and metabolic diseases (such as obesity).

All are reported in literature to be For linked to endocrine bas disruption.

For pesticides, we only can hope for a sciencebased regulatory approach and –in case of doubtno hesitation to use the precautionary principle.

Given the amount of effort chemical industry put in exactly this topic by organising 'scientific meetings' of their lobby clubs like ECETOC, supported this time by German Health institute BfR, it can be expected politics & power will again dominate the arena. 12. http://endocrinedisruption.org

13. Nissanka Rajapakse, Elisabete Silva, and Andreas Kortenkamp, Combining Xenoestrogens at Levels below Individual No-Observed-Effect Concentrations Dramatically Enhances Steroid Hormone Action, Environmental Health Perspectives 110 (9), September 2002



#### The legal text of pesticide Regulation 1107/2009 states in Annex II, 3.6.5:

3.6.5. An active substance, safener or synergist shall only be approved if, on the basis of the assessment of Community or internationally agreed test guidelines or other available data and information, including a review of the scientific literature, reviewed by the Authority, it is not considered to have endocrine disrupting properties that may cause adverse effect in humans, unless the exposure of humans to that active substance, safener or synergist in a plant protection product, under realistic proposed conditions of use, is negligible, that is, the product is used in closed systems or in other conditions excluding contact with humans and where residues of the active substance, safener or synergist concerned on food and feed do not exceed the default value set in accordance with point (b) of Article 18(1) of Regulation (EC) No 396/2005.

By 14 December 2013, the Commission shall present to the Standing Committee on the Food Chain and Animal Health a draft of the measures concerning specific scientific criteria for the determination of endocrine disrupting properties to be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 79(4).

Pending the adoption of these criteria, substances that are or have to be classified, in accordance with the provisions of Regulation (EC) No 1272/2008, as carcinogenic category 2 and toxic for reproduction category 2, shall be considered to have endocrine disrupting properties. In addition, substances such as those that are or have to be classified, in accordance with the provisions of Regulation (EC) No 1272/2008, as toxic for reproduction category 2 and which have toxic effects on the endocrine organs, may be considered to have such endocrine disrupting properties.

The text is quite complicated and much will depend on the implementation, especially since the Commission missed to present the criteria to identify EDCs by December 14, 2013.

Back in 2008, Sweden, based on regulation 1107/2009, already presented their list of pesticides, which would meet the criteria and need a ban. But the Commission after missing the deadline to present the criteria, asked for an impact assessment on the different criteria options and regulatory decision-making. This process will delay the implementation of the regulation for years and therefore the general public will keep being exposed to these harmful chemicals. Already quite some time ago, the Consultant BKH was commissioned by DG Environment to compile research from open literature for chemicals at large. The result was an evaluation of a list of 146 substances, and a priority list of 66 substances with high, medium or low concern. Concern or no concern, this will not yet lead to action on behalf of the regulators, and an individual assessment seems unavoidable.

Ultimately, testing and the evaluation of the testing results will be necessary to arrive at a decision for every individual substance. Tests are already underway in the US where a first list of chemicals needs to be tested by the chemical industry (tier 1). The OECD has been working on it for many years, but incredibly slow. The implementation of the pesticides Regulation is therefore of major importance to speed up the process.

In 2009, PAN-Europe presented a first position paper to the Commission on the criteria to be developed. Industry pushed very hard (ECETOC) proposing criteria, which will in effect undermine the EU-"cut-off" criteria and return policy to full risk assessment. The German national Health institute BfR is remarkably active on this topic and looks like it wants to take the lead on this in Europe. BfR joined forces with the UK who opposed the endocrine

criteria from the beginning. They have now both proposed the inclusion of the criterion "potency", thereby introducing the exposure-element UK and Germany man- in the criteria, opposing pesticide regulation.

aged to push DG Environ-

ment to include criteria that are currently misused at a large scale such as "human relevance" and "indirect effects" in the final draft criteria but didn't manage to include "potency". Industry representatives next started a massive lobby campaign focused on DG's that are generally on their side and managed to stop the process and require an economic impact assessment.

The EU parliament has limited power to act but tries their best such as starting own initiative reports (MEP Schaldemose) and questions (MEP Caputo). Of the utmost importance is the work on the national level since member states, UK, Germany, France, will in the end decide the criteria.

PAN Europe



## EDCs-training organized by PAN Europe

14. With the financial support of the European Commission, DG Environment (LIFE2012ENVNL /0008833) In December 2014 PAN Europe organised a 2-days training session on Endocrine Disrupting Chemicals (EDCs) for our members and Dutch/Flemish organisations<sup>14</sup>. The aim of the training was to bring our members and organizations of interest up-to-date on the issue of endocrine disrupting chemicals, in terms of scientific findings, political developments and health threats. We invited experts, including research scientists, MEP advisers, Chemical experts and pioneer NGOs to present the different angles of EDCs, how they affect society and the environment and how NGOs can work on these issues on a national level.

We also motivated the participants to respond to the Public Consultation launched at that time by the Commission on the different criteria options for EDCs and the regulatory decisionmaking. Moreover, we presented a platform tool for a quick response to the public consultation, created by the EDC-free coalition that PAN Europe is also a member. More than 20,000 people used the tool to re-

The event was very fruitful, reinforced collaboration among NGOs and established common

grounds for action in 2015.

It was also an opportunity to regroup with

> EDC Free urope

our members, exchange ideas, learn from each other and of course have fun!





PAN Europe - Disrupting food project www.disruptingfood.info/en/

## Invitation to the EDC meeting by PAN Europe

"Dear members and colleagues,

There is some heat going on in the Brussels arena in relation to Endocrine Disrupting Chemicals (EDCs). The Public Consultation has been launched (which is so technical that it can hardly be called "public") that will be crucial to determine the next steps: how these chemicals are going to be regulated in Europe.

We don't want EDCs in our food, we don't want them near our houses, children's playgrounds, residential areas, not even near our pets. These chemicals are active in tiny amounts and all scientific evidence suggests that EDCs are **bad news**. Reproductive anomalies, cognitive difficulties, obesity, diabetes, autism, Parkinson disease are some of the diseases/dysfunctions that may derive from exposure to EDCs- especially when exposure takes place during the early life stages, when the organism is still under development.

The public consultation ends in January. PAN-Europe wants to use this opportunity and organize a training session/seminar among all our members and collaborators about EDC pesticides. Some of the experts on the field including research scientists, MEP advisers, Chemical experts and pioneer NGOs will present the different angles of EDCs and how they affect society and the environment. Furthermore, our members and NGOs active in Netherlands and Brussels will have the chance to present their national activities and discuss further opportunities.

Below is a very preliminary agenda of issues that we would like to include in the seminar: (*check our website for the final agenda*)

Thank you in advance for your contribution and collaboration.

Best regards, PAN Europe″











## HONEYBEES



## Using honeybees as a communication tool: for the best and the worst...

The end of 2013 was quite satisfying for environmental NGOs and beekeepers' organisations following the partial ban on neonicotinoids and fipronil to protect bees. Far from being completely satisfying, as the majority of the uses will actually remain authorised, this move from DG Sante (new name for DG SanCo) was a breath of fresh air and a motivation for the future of EU's environment.

For the last 10 years at least, honey bees have been used as a symbol for environmental protection, as a sentinel of the quality of our surroundings, a symptom of our negative pesticides and are worried about their own health, residues they find in food and the state of biodiversity.

> These insects are thus, a powerful communication tool that could reach the media and decision makers.

> Of course, honey bee-driven communication has been thoroughly used also by communication agencies. Hives are set on

every rooftop of important buildings, even in areas where they cannot find enough nectar and pollen to survive but this does not matter, communication comes first.

Pesticides companies also use them. Bayer has built two bee care centres: one in Germany, another one in the USA. Syngenta saws flowering strips along highways and in the margins of farmers' fields.

The European Commission too, organised a bee conference in April 2014. A big show, where the Commission explains how active they are to help the bees. EFSA, DG SanCo, DG Agri, DG Research, bees are

everywhere! So if everyone is aware of the problem, everyone does positive things, even pesticides companies, why are bees the varroa mite! Var- sometimes 80% this winter.

roa mites are a real issue among beekeepers and are often properly controlled by beekeepers but still, their hives die.

The word 'multifactorial' is often heard when talking about causes of honey bees decline: pesticides, varroa mites, lack of flowering biodiversity etc. 'Multifactorial' seems to be synonymous of inaction, because it would simply be too complicated to take measures. No one denies the multifactorial aspect of bee health but one thing is certain: what can be done easily (suppression of bee-toxic chemicals, changing in our model of agriculture towards a low input agricultural model) has to be done. And the rest (presence of varroa mites than cannot be avoided as they are now present in all parts of the world) has to be dealt with.

As we have already complained about to the Commission, the ban on neonicotinoids and fipronil is a partial ban (for beeattractive crops only, before flowering) and has a limited impact. In the Netherlands, only 14% of uses are restricted by the ban. These chemicals are persistent in the environment (soils, water, etc.) and absorbed by succeeding crops, margin flowers, etc. Environmental studies show they are now everywhere.

Furthermore, despite the growing importance of all wild pollinators in pollination services (bumble bees, solitary bees...), this ban does not take them into account. More than half European wild pollinators nest in soils. They are thus not protected by this ban: winter cereals are still massively coated with neonics and contaminate soils where wild pollinators will be intoxicated when nesting... At PAN Europe, we are acting to obtain a full ban on neonicotinoids. The current ban is a good step in the right direction but it is not enough and might not be efficient at all, seen the systemic and persistence properties of these pesticides. We want them to be comthem to be completely banned tunately no one takes decisive and impactful measures. from the EU with Symbols will not save our bees... no derogations possibility.

#### When the pesticides industry counter-attacks

2014 and 2015 are two very intense years for the pesticides industry. After the loss of the battle of the historic ban on neonics, the pesticide industry sector put all its forces in a lobbying campaign to obtain a suspension of the ban that might be reviewed at the end of 2015. Member States, European Parliament, European Commission are currently under big pressure by the industry.

Last year, the argumentation from the industry suddenly changed . Slogans such as "EU is responsible to alleviate the world's hunger" are coming back, even though they were not heard so much in the last years. The majorly flawed argument of a world going hungry because the EU stops using pesticides is heard in every meeting on agriculture or pesticides' danger. No matter how many times it will be said, this will remain untrue. Hopefully decision-makers will be farseeing enough not to be afraid of these scaremongering messages.

Arable lands are already numerous enough to feed the world until 2050. It depends what we wish to do with it: grow biofuels? Grow maize to feed cattle? Or grow food for human consumption?

In 2014, a very interesting and positive article (Ponisio *et al.* 2014) was published on the difference between organic agriculture and conventional agriculture. The difference is as small as 8% if high-level organic farming is conducted. Knowing that at least 30% of food production worldwide is going to waste, it is very easy to understand that pesticides are not necessary to feed the world but rather a new agricultural/consumption model.

Another angle of counter-attack is the court case Bayer, Syngenta and BASF are carrying out against the European Commission to suspend the ban on neonics and fipronil. PAN Europe participated in the creation of an NGO coalition (with Bee Life, Client Earth, Greenpeace Europe, Bug Life, SumOfUs) to intervene in the court cases. We are providing to the court additional arguments than the ones from the Commission in order to strengthen the Commission's position to support the ban. This procedure is very important. Even though we consider the partial ban is not enough, it is of major importance to consolidate it, not only for a "partial" protection of the bees but also because if the European Commission loses the case, it will hamper any future ban of a pesticide based on environmental grounds rather than just human health.

Despite the lack of balance of resources between the pesticides companies and us, we are very motivated to have our voice heard in order to bring science back in the political arena and counteract the false information claimed by the industry. One big motivation is the support we receive from our members and citizens in general!



http://savehoneybees.info

## COMMON AGRICULTURAL POLICY, NATIONAL ACTION PLAN & INTEGRATED PEST MANAGEMENT



IOBC-IBMA-PAN Europe and Greenpeace joint symposium on "Feeding Europe with fewer pesticides" held in the European Parliament on 4 November 2014.

In 2014, the 3rd European Symposium on feeding Europe with fewer pesticides was organised in Brussels. Since the first symposium in 2012, the event has been organised by PAN Europe, researchers involved with the International Organisation of Biological Control (IOBC), and companies producing alternatives to pesticides as members of the International BioControl Manufactur-

Around 150 participants took part in this years er Associasymposium, and all presentations can be found tion (IBMA). on the homepage of PAN Europe:

www.pan-europe.info/Activities/Conferences/141104.html

This year,

Greenpeace joined the in with the organising effort for the first time.

#### The Chair concluded that:



1. The background to the symposium "feeding Europe with less pesticides" held at the European Parliament on 4 November 2014, was the strong desire, throughout society, to transition towards fully sustainable agriculture. Addressing pesticide use is central to this aim. The symposium itself was organised by PAN, IOBC-WPRS, IBMA and Greenpeace and hosted by Benedek Javor MEP. It followed similar meetings in recent years and again drew significant interest and attendance from concerned sectors of the industry.

2. The symposium concentrated on three major themes:

- Where we are now;
- Success stories in reducing pesticide use; and
- Ways forward to reduce pesticide use in the EU.

The key messages emerging from presentations and discussion are summarised in points 3-5 below. Points 6 and 7 form the chairman's reflections and conclusions regarding the road forward.

#### 3. Where we are now:

- Substantial legislation and support measures have been in place in the EU for more than 20 years to deliver reduced and more precise pesticide use in agricultural production. Nevertheless, there is serious concern - based not least on MS NAP implementation plans – that the obligations and opportunities provided are neither well used nor fulfilled. As a result, benefits for farmers, human health and the environment are not fully realised;
- IPM is a knowledge based, systematic and well understood approach to crop production and protection, which can deliver a valuable contribution to sustainable agriculture. But its potential is far from maximised and progress in its implementation has stalled.
- Parts of the retail sector are playing a major role in reducing pesticide use, notably in the horticultural sector. This role extends beyond the farm to households and gardens. Their customers are increasingly better informed and responsive and can be an important driving force for change.

#### 4. Success stories in reducing pesticide use:

- Significant success has been made in reducing pesticide use at the farm level. Research, advice and continuous education are central to this success.
- Examples of successful approaches abound in the viticulture, maize, fruit, potatoes and horticulture sectors, including mushrooms. These examples are very largely based in IPM.
- Specifically targeted agri-environment schemes can play a role in increasing crop protection and production in crops such as peas and carrots (at a minimum) where field margin species encourage pollinators and positive predators.

#### 5. Ways forward to reduce pesticide use in the EU:

- From the perspective of specific pesticide legislation, the SUPD is a powerful instrument with which to drive reduced pesticide use and IPM forward. However, it needs to be understood that in the EU, subsidiarity is an important concept which has to be respected. It is neither possible, nor practical to regulate all details at the EU level. The Commission will soon release the report originally foreseen for November 2014 on MS NAP content and implementation. Getting to this stage has involved considerable effort, which should not be underestimated. A further report is foreseen in 2018 when it will be possible to better gauge progress.
- Common Agricultural Policy (CAP) legislation offers opportunities to reduce pesticide use in both its pillars. However, while benefits from crop rotation to crop diversification are theoretically to be had, the rules governing EFAs do not prohibit pesticide use. This is especially the case when short crop rotation and specific crops considered as compliant with the EFA requirements are concerned. The Commission is committed to examining the implementation of greening in 2015 and thereafter to the midterm review of the CAP. Predictions of the outcome of these processes would be premature given that the Council and European Parliament only agreed to the reform in 2013.

Despite the issues above, there is concern that feeding Europe with less pesticides is not yet working. This manifests itself in the following comments from participants:

The perceived limited ambition in the MS NAPs despite the long term presence of pesticide regulations;

- The apparent absence of urgency in driving implementation of the SUPD;
- The "softness" inherent in the CAP greening approach, not least in so far as the EFA cropping pesticide use possibilities and the absence of rotation obligations are concerned;
- The absence of the Sustainable Use of Pesticides Directive (SUPD) from CAP cross-compliance and the unintended encouragement of non-implementation and hence noninclusion due to the legal technicalities;
- The apparent inconsistency between EU policies despite their common aim of sustainable agriculture; and
- The difficulty for citizens to understand the limited progress on a common goal, which is not contentious and which benefits farmers, economically as well as otherwise. Citizens do not understand this nor the use of concepts such as subsidiarity as a tool to obstruct progress.

#### 6. Reflection:

Considerable progress has been made in reducing pesticide use in the EU. The legislation and policy support provide obligations and opportunities to apply principles that could potentially lead to further progress at farm level,. Nevertheless, the MS implementation reports under the SUPD appear to suggest little or limited ambition. This is disappointing given the potential benefits for society and the general reception for improved use

across the industry. So what is wrong and how can the obstacles be overcome? How can IPM move to main-

The Commission im- stream farm practice?

plementation report on

the SUPD NAPs is due shortly and will provide civil society and the European Parliament an opportunity to review the quality of implementation. Debate is needed to clarify the situation regarding the extent of implementation, pitfalls and successes, and to stimulate action to garner all potential benefits. There is an inherent risk that implementation of the directive could fall down the priority list without their active interest. This would encourage real progress and avoid the tedium of recourse to infringement procedures. Positive cooperative implementation has to be the goal. The maximisation of the potential for SUPD implementation within the CAP needs continuous review, including through the farm advisory system.



The perceived best approach to reduced pesticide use is generally agreed to be IPM. At the 2013 conference, it was emphasised that IPM treats crop production as a system rather than the sum of discrete parts. It gives meaning to the concept of the soil being part of nature's capital capable of playing a much greater role in crop production than simply being the medium through which fossil fuels are transformed into agricultural production with the aid of external inputs including pesticides. At that meeting, the barriers to implmentation of IPM were identified as: the registration and authorisation processes for biological control agents (a huge difficulty), the lack of research, the absence of biological control centres across the EU, limited citizen awareness, limited interest by some chemical companies and lack of ambition in the NAPs and in the CAP. To these, farmer knowledge, awareness and training must be added (together with similar awareness, training at the regional authority and extension services level). If these blockages are not addressed, it is likely that IPM will not be broadly implemented nor the accruing benefits realised.

#### 7. Conclusions

The timetables set out above in point 5 with respect to the SUPD and CAP underline that further opportunities will exist to pursue IPM. To help this process, two further approaches are recommended. These are:

- That the EP, in its response to the forthcoming Commission report, prepare its own report on what's going well and what poorly at MS level so as to focus efforts towards full implementation of the SUPD and garner the potential inherent in IPM.
- That the Commission prepare a Roadmap to full IPM that would provide targets and dates for staged, but full implementation. The roadmap should systematically address barriers via cooperative work with the sector, support and incentives for farmers through relevant funds where appropriate, and progressive legislation as needed. Ideally, in preparing this roadmap, all relevant parties would be encouraged to play a constructive role. The Commission's report on SUPD implementation has the potential to start this process going. In doing so, a positive approach would be to set a series of interim targets for registration, research and innovation, the full uptake of good farm practices, the extent of IPM uptake within the lifetime of current plans, and the extent of biological control and reduction of pesticide use to be achieved.

### National Action Plans (NAPs)



As part of this year's Pesticide Action Week (PAW), PAN Europe sent a letter to Commissioner Borg questioning how seriously Member States have implemented the Directive on Sustainable Use of Pesticides, and encouraging the European Commission to take further action.

PAN Europe has analysed the National Action Plans (NAPs) that Member States developed to comply with Directive 2009/128/EC of 21 October 2009 on the Sustainable Use of Pesticides, see PAN Europe's "Reducing pesticide use across the EU" report<sup>15</sup>.

Our analysis shows that Member States' ambition to reduce pesticides use is lacking.

#### Problems include:

A dearth of quantitative objectives, targets, and clear timetables for pesticide use reductions.

A recycling of what is already mandatory from other EU policies (maximum residue levels of pesticides to be respected in water; maximum residue levels in food to be respected), without proposing new action. A few member states (Cyprus and Germany) even set targets that are lower than fixed EU limits under applicable environmental and public health laws.

Indicators to help measure use reduction or conversion towards more use of non-chemical techniques are replaced by 'soft' targets such as numbers of training hours, number of guidelines developed, number of certificates issued, etc. This prohibits one from being able to measure the effective change.

While there does seem to be a shift towards increased use of non-chemical techniques in public areas (especially parks, sport areas, highly populated areas, sidewalks), there is a serious lack of ambition in the agricultural sector. This is an extremely disappointing finding, considering that the EU spends more than 60 billion Euro each year on the Common Agricultural Policy, and part of that is indirectly used to buy pesticides. 15. www.pan-europe.info/Resources/index.html

PAN Europe therefore wrote to Tonio Borg, the Commissioner responsible for Health and Consumers at the European Commission in March 2014, pointing to a number of actions that the European Commission must take so that Member States finally start taking the implementation of the SUDP seriously.

You can the details of this correspondence

on our NAP homepage:

www.pan-europe.info/Campaigns/NAPs.html

While the European Commission is rather prudent in their reply, they do confirm

that: 'we are currently analysing the information received through the NAPs. This analysis will be the basis for the report the Commission has to submit to the Council and the European Parliament. On the basis of our analysis, we call on the Commission to communicate the information received with the NAPs and, furthermore, to report on the methods used and the implications concerning the establishment of different types of targets to reduce the risks and use of pesticides'.

More information about this event

in the next newsletter, and on: www.pan-europe.info/Activities/conferences.html

PAN Europe is joined by scientist united in the International Organisation for Biological Control (IOBC),

companies making alternatives to pesticides united in International Biocontrol Manufacturer Association (IBMA), and Greenpeace organising our 3rd Joint symposium held in the European Parliament, Brussels on 4 November, where we discussed next steps of the implementation of the SUD in more detail. Discussions covered both how to ensure a serious implementation of the SUD on its own, and how to include SUD into other policies, starting with integration into the EU's Common Agricultural Policy.



PAN Europe obtains 10 slots in the civil society group of the European Commission

PAN Europe has long been an accepted stakeholder in the debate with the Directorate General of Health and Food Safety and we actively participate in the advisory groups of relevance to pesticides.

In July 2014, PAN Europe also obtained 10 slots represented in 7 different civil society groups working on details of the Common Agricultural Policy regarding arable crops, wine, fruit and vegetables, rural development etc. To ensure the post possible involvement from the group, PAN Europe is represented by our members from Portugal, Sweden, United Kingdom, France, Estonia, and Slovenia.

# PAN Europe position paper on the sustainable use of Phosphorus

Phosphate is an essential nutritional element of for plants, animals and humans. However as agriculture has become more and more industrial in the last six decades, phosphate supply from mining has become the standard of high inputhigh loss agriculture instead of keeping phosphorus in the food chain as long as possible.

The use of phosphate from mining has many drawbacks. First of all, it is unsustainable because at some point phosphate will run out. Worse, the use of massive amounts of phosphates and accompanying chemicals in the ore are released into the environment and pollute the soil, the ditches, and the sea. Much agricultural land is already phosphate-saturated, especially in intensive livestock areas. This leads to leaching and widespread pollution. These facts should already be enough of a driver to phase out the mining operations, at least for agricultural production.



Phosphate ore is not a pure ore. It is contaminated with about every element of the periodic table. Cadmium is the most well-known pollutant and agricultural soils and food are contaminated over the years with this highly toxic chemical. Attempts to limit the amount of cadmium by allowing only a certain level of contamination in fertilizers was discussed for many years but was never implemented. This is a case of irresponsible policy making which has led to damage for people and the environment. A less well-known class of contaminants in phosphate ore are the lanthanides, a group of radioactive heavy metals. With the standard operation of producing phosphate, an enormous amount of gypsum slurry is released to the environment. Since the lanthanides are released with the gypsum, this procedure is causes trouble for aquatic life, and potentially people through fish consumption. This standard process is decades-old, outdated, and new processes are available. In the early 90's, fertilizer producer Hydro Agri built a plant in the port of Rotterdam with an improved process, but due to the market situation and a race to the bottom on prices, the plant was later closed. In conclusion, phosphate mining is an environmental disaster and should be reduced and phased out.

As a matter of principle, phosphate should be kept in the food chain as long as possible. Prevailing culture in industry and agriculture however, is to use massive inputs and not to reduce emissions and losses. This is aggravated by the fact that prices are low and external Society and future generations pay for the irresponsible practices of industry and agriculture in the end. Politicians watch and do not act.

> Steps towards putting the principle of keeping phosphate in the food chain are ready at hand: these include keeping phosphate in the soil as long as possible, the use of compost, bringing back losses to the begin of the food chain. This is nothing new, not rocket science. Alternative methods and practices will be discussed later in this paper in more detail.

> The real problem is the mind-set of the food chain: the problem is the monotonic objective of companies to aim for profit, trying to transfer all their costs to society (external costs such as pollution), and not take responsibility for the impacts of their business on the health of people and the environment. A change of mind-set looks unlikely but is possible. This cannot be done by communicating with business,

agreeing on voluntary action, or talking about sustainability in fancy meetings with CEO's. The experience of the past 20 years clearly shows that these types of tools -though very much favoured by politicians- are useless in solving environmental problems. Business should therefore be confronted with the problems in their own 'language': money. This is the only language they understand. Putting a big levy of the use of phosphate suddenly will make them move and adopt alternatives, which have been waiting on the shelves for many years. Importantly, this will also make business understand that phosphate reduction is a real topic and will give the desired change of mind-set. Business will fight the levy in the beginning, you can count on that. But politicians should be prepared and show their strong backbone and their will to solve the problems.

Regarding the alternative methods and practices, we will focus on plant production, given the common use of phosphate fertilizer. For plant production, and the food chain in general, the principle is to keep phosphate in the chain and to not let it escape. Fertile soil is the first essential element of implementing such a principle with a wide variety of soil biodiversity. The objective of fertile soil is to increase the level of soil organic matter, which stores phosphorus for a longer period and is capable of releasing it at the right time. Agriculture therefore has to (re)develop the knowledge on how to increase soil organic matter. Current industrial agriculture practices deplete organic matter<sup>16</sup> (kind of mining themselves therefore) and must be restructured. Measures include shallow or no ploughing (no-till), use of compost from the end of the food chain, timing of doing (during building up of organic matter, in late summer), crop rotation, use of nitrogen-fixing plants, a limited use of nitrogen (synthetic nitrogen itself breaks down organic matter<sup>17</sup>) and banning the use of soil pesticides. Plant production should not aim for maximum yield but optimal yield. Food waste should be collected at supermarkets and private houses while any plant material in parks, golf courses, etc. should also be collected. Recovery of phosphate from sewage plants is also necessary. The intensification of livestock also should be stopped. Current developments lead to massive amounts of manure in some regions while other regions and continents suffer from a lack of manure. Livestock and plant production should be integrated again, on regional, national and international level.

 L.M.Vleeshouwers and A. Verhagen, Carbon emission and sequestration by agricultural land use: A model study for Europe, Global Change Biology, (2002), 8, 519 -530.

 P. J. Crutzen, A. R. Mosier, K. A. Smith, and W. Winiwarter, N2O release from agro-biofuel production negates global warming reduction by replacing fossil fuels, Atmos. Chem. Phys. Discuss., 7, 11191–11205, 2007

While there are no technical limits to close the circle of phosphate, this will never happen without government intervention. Any policy without clear rules and financial incentives is a waste of time. Therefore, we propose reforming the rules for agriculture to oblige farmers to increase their soil organic matter. The increase will be slow and to reach desired levels it will take decades, but every farmer should show that the soil that organic matter is increasing with yearly reports and analysis. To get farmers and the food chain to act, a high phosphate levy is necessary. The most effective system we know is a levy combined with subsidies for alternatives. This combination was used by water authorities in the Netherlands (levy on water pollution + subsidy on purification plants) and an 80-90% reduction in water pollution was achieved in 10 years. To avoid repeating mistakes, we should learn from history and adopt successful systems of change. A high levy of phosphate should be combined with subsidies for farmers following a clear set of rules (no ploughing, low synthetic nitrates, crop rotation, a

The techniques are available, successful implemen- ban on pesticides, use tation systems are available, so the only missing of compost, optimal, not maximum yields, element is political will. The need for society to solve etc.).

this enormous problem is huge and we urge EU Commission to follow their mission and act.



PAN Europe

# **OTHER ACTIVITIES**



For decades European regulators have based their "safe" food standards on the toxic effects of a single pesticide. This is far removed from reality as EU citizens consume many different pesticide residues in fruit and vegetables at the same time. Of the fruit and vegetables on the European market, 26% have traces of more than one pesticide. So if one would eat an apple in the morning with 3 pesticides, strawberries in the afternoon with 5 pesticides and tomatoes in the evening with 4 pesticides, one would be exposed to a toxic mixture that was not taken into account in testing. Further, this exposure comes in addition to exposure to other chemicals from cosmetics, plastics and through air pollution.

The conclusion must be that the current food standards for pesticides are unsafe because the toxic effects of the pesticide could add to toxic effects of other pesticides and other chemicals we are exposed to. Regulators have gravely underestimated the risks.

This was finally recognised by European Commission and Parliament when they changed the residue Regulation in 2005 to take mixture effects into account. Policy makers made one big mistake, when they mandated the Food Authority EFSA to develop the methods for assessing the mixture effects. While methods were readily available as early as in 2005; now, 9 years later, methods are still not published by EFSA. This leaves consumers, especially the vulnerable, unprotected.

Last year we started intensively researching the reason for this delay. We wondered why EFSA neglects its mission to protect the health of people for so many years. We learned that industry linked academics have infiltrated the agency and specifically the scientific panels. Further, this is the case not only with EFSA but also with the World Health Organisation (WHO) in this arena. The industry-linked people appeared to work in a tight network and showed their commitment by trying to get seats in all relevant scientific bodies. These same academics have not been involved in research (as one would expect them to).

The WHO is a 'pushover' as 73% of the experts with known links to industry or industry ideas outnumbered the others. Not one of them is actively involved in academic research. Within EFSA, the same people can control the pesticide panel and put forward the opinion in a series of EFSA statements that mixture toxicity is generally non-relevant. While this opinion ignores available scientific evidence, several experts from national institutes in the panel considered these ideas credible, not aware of their hidden agenda.

Finally after 6 years, the EU Commission discovered that the pesticide panel was obstructing the process and forced EFSA to re-evaluate. The panel however didn't want to give up and one year later EFSA even had to withdraw the mandate from the panel because of a 'lack of progress'. Industry however insists: the very same advocates of industry proposals now gather in the EU research program Acropolis, led by food traders group Freshfel, promoting another industry tool to water down the standards and "prove pesticide use is safe". Again, EFSA is apparently not Our main conclusion is that there is a lack of aware of their intentions

professionalism at EFSA and a lack of and continues to closely awareness on scientific integrity.

> We propose that EFSA learns from the US Environmental Protection Agency (EPA), and appoint a 'science integrity officer' who's mandate would be to change the industry-leaning culture at the agency, and restore independent science involving independent scientists.

PAN Europe

# The work of PAN Europe on Threshold of Toxicological Concern



PAN Europe continues its work on the Threshold of Toxicological Concern (TTC), a new tool to screen toxic chemicals currently under evaluation and development by EFSA. Recently, in December 2014, PAN Europe attended the stakeholder's meeting organized by the European Food Safety Agency (EFSA) on TTC and presented its work on the uncertainties of this tool to identify endocrine disruptors. Earlier, in September 2013, PAN Europe responded to the Life Sciences Institute (ILSI) commentary on the article published in the Journal of Epidemiology and Community Health (Robinson et al., 2013<sup>18</sup>) with the following E-letter:

## "TTC places public health at risk

It cannot be denied that TTC (Threshold of Toxicological Concern) was originally proposed in the U.S., as Dr. Harris states in her commentary on our article,[1] but her industry-sponsored organisation, the International Life Sciences Institute (ILSI) played a major role in developing it further to the form in which it was accepted by European Food Safety Authority (EFSA).

This process took place in an EFSA working group, in which ten out of 13 members had previously developed and promoted the tool with ILSI.[2] While EFSA communicators have attempted damage control in their online Q&A, the biased work on TTC raised such concerns in the European Parliament that EFSA was forced to ban ILSI-linked people from being members of expert panels and working groups. Any link with ILSI now has to be cut in order to qualify as an EFSA expert.

In addition to this industry infiltration of EFSA, the tool as delivered by ILSI is far from being "scientifically supported", as Dr Harris suggests. The database underpinning the TTC for nongenotoxic substances[3] is entirely based on (potentially biased) industry studies. Many of these studies are 40-60 years old and non-retrievable (cannot be accessed), meaning that their quality cannot be assessed. In addition, the old protocols used means that current scientific knowledge will not be taken into account in calculating TTCs. In utero exposure is generally missing and important risks will be overlooked because of the limited endpoints considered at that time. The grouping of chemicals for TTC is artificial and is based on the Cramer classification,[4] which relies on expert judgement only and is subjective. ILSI has also changed the genotoxin database to get to an apparently desired outcome. For example, it has removed aflatoxin-like, azo- and N-nitroso- substances.[5] Another unscientific shortcoming of TTC is its disregard of cumulative effects.

18. Robinson, C., Holland, N., Leloup, D., and Muilerman, H. (2013). Conflicts of interest at the European Food Safety Authority erode public confidence. J Epidemiol Community Health. 67:717-720 The TTC is derived by arbitrarily removing the most toxic effects found in the database of NOELs (no adverse effect levels) from the calculation. The TTC sets the 'level of no concern' at the 5th percentile, resulting in a 1 in 20 chance that a random substance in any one group of chemicals is toxic

Thus 5% of the chemicals in the group are more *at this exposure level*. toxic than the 'level of no concern' that is set for

> any one group of chemicals. TTC is promoted as a screening tool, while in practice it is already being used as a cut-off criterion (safe level) for pesticide metabolites.[6] Industry is now trying to extend TTC to other fields such as any chemical found in food,[7] outcomes of developmental testing,[8] drinking water,[9] and inhaled chemicals.[10] In many cases, and not coincidentally, advocates of TTC are pursuing these aims through opinions published in Regulatory Toxicology and Pharmacology, the controversial chemical/pharmaceutical industry-sponsored journal. The journal was one of several entities subject to a 2008 US Congressional Committee investigation over their role in the Food and Drug Administration (FDA) decision allowing bisphenol A in infant formula and other foods.[11-13]

Analysing the TTC tool and the background of its development can only lead to the conclusion that industry has invested massively in a tool that does not safeguard human health, as Dr Harris misleadingly claims, but rather does exactly the opposite. The tool serves industry's agenda of fast-tracking chemicals to the market and avoids the costs of testing. The tool undermines European legislation and policy. It aims to replace the existing EU policy of 'no safe level' for genotoxic substances with claimed 'safe levels' arrived at through the TTC. It also aims to replace the EU policy that health of citizens should be protected by adequate testing and the precautionary principle with a tool that enables avoidance of testing for chemicals, metabolites and impurities.

The tool, which serves industry's agenda but places public health at risk, has been introduced into European agencies by people who have served as members of expert panels with conflicts of interest with industry. Dr Harris's reference to the Danish study[14] as a balanced review of TTC is a case in point. Its author, John Christian Larsen, worked in ILSI scientific bodies from 2002 till 2008[15] and has published studies with ILSI-affiliated people who have promoted TTC.[16] TTC has made its way into the regulatory policy of the food safety authority EFSA because of industry's massive resources and a lack of awareness on the part of EFSA's staff, not for reasons of sound science.

Hans Muilerman Chemicals coordinator, Pesticides Action Network Europe"

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# The endocrine disrupting chemicals campaign with illustrations

## "Consumers at risk"

In 2014, PAN Europe prepared a new edition of its "Consumer Guide" that contains information on: the health risks from exposure to endocrine disrupting pesticides, the history behind these compounds, the top 10 fruits and vegetables that contain the highest levels of endocrine disrupting pesticide residues, which of those pesticides are still used in the EU and provides tips for consumers to avoid exposure to these chemicals. In 2014, we produced the "consumers at risk" leaflet for easy-reading and distribution, which summarizes the content of the consumer guide and provides some political updates in

Thanks to our members PAN Germany and terms of the regulation of these chemicals in WECF, the consumer guide is now available Europe. in German and Dutch.

How to limit your exposure to ED pesticides NOW

organic food items as they are synthetic pesticides with EDC

> If organic is not possible, avoid eating foods that contain several pesticide residues (top-10 list from PAN-Europe): lettuce, tomatoes, umbers, apples, leeks, peaches, strawpears, grapes, peppers.



d wash the fruits and vegefore you eat them to reduce lingest. Less pesticide residues are permitted in processed baby food than in fruits and vegetables from conventional agriculture. To avoid exposing your baby to pesticides always use organic ingredients or else buy the processed baby food.

Avoid household pesticides (biocides) and pesticides for your garden and prefer environmentally friendly non-chemical alternatives and provisions for managing common pests such as ants, flies or moths. Many such biocides contain ingredients similar or identical to pesticides for plant protection that are harmful to humans, pets and the environment. Watch out for EDCs such as deltamethrin and cypermethrin.

Look for labels that promote environmental friendly and sustainable goods, e.g. the European Organic Label for food stuff, the European Ecolabel for consumer articles or national label for environmental friendly products such as alternatives to house and garden pest control measures.

PAN Europe Rue de la pépinière, 1 B-1000 Brussels, Belgium Tel: +32(0) 2 5033137 www.pan-europe.info

PAN Germany (Pestizid Aktions-Netzwerk e.V.) Nernstweg 32, 22765 Hamburg Tel: +49(0)40-399 39 10-0 inf@@pan-germany.org www.pan-germany.org



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CONSUMERS AT RISK

endocrine disrupting pesticides?

PAN Germany

## "Not in my food"

To approach the general public and politicians, PAN Europe incorporated illustrations in the campaign to attract consumer's attention and explain the key messages.

The first series of post-cards "not in my food" show how pesticides with hormone disrupting properties are added in our food under our own nose, with the industry claiming that these pesticides are "harmless".



Endocrine Disrupting Chemicals (EDCs) ARE NOT HARMLESS

#### What are EDCs?

Mostly man-made chemicals that disrupt the normal function of the body's hormones responsible for development, growth and reproduction.

#### Where are they found?

Virtually everywhere. They are components of plastics, household items, electronic devices, cosmetics, disinfection products, paints (biocides) and pesticides that end up in our food.

## we all eat hormone disruptors daily!

#### Who is in danger?

Both human and wildlife, especially when young and still under development. Exposure of foetuses (exposed through their mothers), infants and children to EDCs may lead to serious endocrine-related diseases later in life.

#### What are the effects?

Early-life exposure to EDCs has been linked to diseases such as reproductive dysfunction and infertility, endocrine-related cancers (breast, womb, prostate, testicular), cognitive disorders and low IQ, cardiovascular diseases, obesity and diabetes.

#### What can you do?

Get informed, learn how to protect yourself and your family, and tell regulators to remove hormone disrupting chemicals (EDCs) from our daily lives and food! Join the campaign:

www.disruptingfood.info

# 260

Nith the financial assistance of the Life+ Programme of the European Commission, DG Environ



## "Happy EDC Holidays"

The second series of post-cards "Happy EDC Holidays" were sent just before Christmas to 100 MEPs and civil servants from the Commission who are involved in the regulation of EDCs.

Despite the mandate of the Pesticide Regulation (1107/2009) to ban endocrine disrupting (ED)-pesticides, the Commission has not presented yet the criteria to identify these substances, which means that even though the regulation has been put into force for more than 5 years, we are still exposed to these harmful compounds.

On the back of the postcard we provided a list of Christmas dinner ingredients that still contain ED-pesticides, together with our greetings



#### PAN Europe wishes you a Merry Christmas and an EDC-free new year!

Endocrine disrupting Chemicals (EDCs) do not belong in our food. Yet for another Christmas holidays the following dinner ingredients will contain hormone disrupting pesticide residues: potatoes, carrots, cauliflower, cabbage, beans, leek, lettuce, cucumber, peppers, strawberries, apples, pears, turkey, chicken, beef, milk and dairy.

To avoid exposing yourself and your loved ones, choose organight

# FROM OUR NETWORK



### 🚺 📶 als Vinschgau/South Tirol:

On September 5, 2014, 75% of voters decided that they want the community to be free of pesticides. The same applies to private, agricultural land.

The referendum of the community of Mals is unique in Europe. The citizens decided that the use of highly toxic, health compromising, as well as chemical-synthetic pesticides and herbicides should be prohibited within the boundaries of the community. The entity responsible for carrying out and supervising this decision is the municipal administration. The referendum was based on the precautionary principle with the objective of protecting public health.

The community of Mals in the Vinschgau valley (South Tirol/ Italy) is the second largest in the region and includes eleven villages between 978 and 1,738m above sea level. The crops cultivated in the valley, an inner-Alpine dry valley, are mostly apples but also berries.

South Tirol uses 18,000 acres for fruit cultivation and is therefore one of the largest fruit-growing markets in Europe. Since 2009, the intensive fruit farming in the cultural landscape of the upper Vinschgau valley has caused frictions in Mals between organic farmers, farmers of livestock, and farmers of integrated fruit farming. Pesticide residues have increasingly been found in organic products, which has especially affected organic famers. One of the reasons for the drift of pesticides is the characteristic wind of the Vinschgau valley, which paradoxically had been a crucial factor for successful farming of grain in the 19<sup>th</sup> century.

Since the parcels of land in the Vinschgau valley are small, each parcel is more affected by the constant drift due to wind, something that can't be controlled. Preschools, schools, residential areas, bicycle paths, and recreational areas are often situated in the immediate proximity of these new, cultivated areas. Therefore, the population has also become more aware of the increased health danger that this poses.

Numerous intensive discussions between all parties in 2010 lead to a common goal: The protection against drift of pesticides and an improved coexistence of the different cultures and farming methods. Notable stakeholders included the South Tirol Farmers' Association, the Beratungsring (offering information and consulting for the fruit and wine farming industry); Versuchszentrum Laimburg (a research centre for agriculture and forestry); conventional fruit growers; the recently founded Association of Fruit Farming St. Veith, together with environmentalists, organic farmers and organic farming associations.

The goal didn't translate to success however and the problems persisted and continue to get worse. Starting in 2011, different stakeholders have been discussing the topic in public. The toxicologist Irene Witte (University of Oldenburg) has been researching the cumulative effects of pesticides since 1979. In 2011, she interpreted the analysis of hay samples taken in Mals, including one taken at the playground of the elementary school in Tartsch. She called the combination of residues extremely dangerous and very problematic, saying that "this hay really should go to the hazardous waste site".

Arepresentativesurveycarriedoutbyaleadingsocialresearch institute in South Tirol confirmed that 84% of the residents of Mals consider the expansion of fruit farming a disadvantage.

In order to hold a referendum, a Promoters' Committee was created. In 2013 "Hollawint", another group of Mals citizens, was formed. Hollawint gained public support through a number of efforts including letters to the editors of newspapers and magazines, banners, participation at and organization of informational events. A great deal of media attention was generated. At the same time, it nurtured a deeper connection between residents and the cause. In 2013, PAN-Italia was founded in Bologna with the help of two upper Vinschgau valley residents. Koen Hertoge is cofounder and board member of PAN-Italia and is primarily responsible for the German speaking part of Italy. PAN-Italia was able to offer expertise and experience on a more international level, significantly supporting the citizens of Mals in their efforts. All civic initiative groups, the Environmental Group of Vinschgau, the Organic Farming Associations, as well as numerous local citizens

contributed to the referendum preparations. In the future, these groups of Organic Farmers Associations, the Environmental Group of Vinschgau, and the community of Mals will continue to work together.

#### However, al-

ready some citizens are fighting back: before the results of the referendum were published, a petition, signed by about 150 citizens, was submitted to the Promoters' Committee, the city of Mals and the commission contesting the referendum. The purpose of the petition is to declare the referendum illegal and therefore invalid. One thing is certain, the citizens of Mals know exactly what they don't want: the use of chemicalsynthetic pesticides within their boundaries.

The community of Mals will form a task force in charge of "sustainable agriculture and environmentally-sensitive tourism". In addition, similar groups of supporters of the cause will work together to find new solutions for an economically and ecologically responsible form of agriculture for the community of Mals.

#### PAN-Italia



# Pesticide Action Week: GET INVOLVED with the 10<sup>th</sup> edition!

The Pesticide Action Week (PAW) is a yearly international event that takes place during the first ten days of spring: from the 20<sup>th</sup> to the 30<sup>th</sup> of March. Initiated in 2005 by the French –PAN network member- organization Générations Futures, the PAW's purpose is to inform the public about the impacts of pesticides on our health and environment, but also to promote alternative methods. This is especially relevant during these first days of spring because spring does not only start with sunshine, nice flowers and birds singing, it also marks the start of the spraying of pesticides on fields.

We therefore invite you and/or your organization to get involved in the next edition of the PAW, not only to raise awareness but also because in 2015 we will launch the 10<sup>th</sup> edition of the event, which makes it a good opportunity to highlight 10 years of action, promoting the alternatives to pesticides use, for a free-pesticides world!

### The tree goals of the PAW are:

- Raising public awareness on the health and environment risks of synthetic pesticides
- Highlighting and Promoting the alternative solutions
- Building a global grassroots movement for a pesticidefree-world

## About the 9th edition:

- More than 1,300 events worldwide
- 400 partners in the field
- 26 participating countries including 13 European countries

## **Actions of the PAW:**

The PAW is comprised of more than 1,300 grassroots events in 26 countries both in Europe and worldwide: conferences, showing films, theatre plays, exhibitions, workshops, cooking courses, rallies, information booths, farmers markets, organic meals, farms open doors...there are plenty of options, just let your imagination flow!



#### We all can get involved!

These events are led by hundreds of organizations, citizens, associations, farmers, companies, teachers, local governments... everyone can join and take action all over the world! These actions can be related to health (victims of pesticides), alimentation (organic food), environment (pollution of water, air, animals...), agriculture (organic farming), endocrine disruptors... the question of pesticides is linked with a great deal of areas! It's now time to take actions and promote alternatives to pesticides in your country, don't hesitate: organize your event in your city and promote a healthier lifestyle and environment!

#### Contact:

Sophie Bordères Générations Futures, France contact@pesticideactionweek.org / 0033 9 70 46 09 94 www.pesticideactionweek.org

# Biocide regulation – delay and dilution

#### **Biocides**

Biocide products are widely used to control harmful or unwanted organisms outside the scope of plant protection, pharmaceuticals and cosmetics. They are produced for disinfection, material preservation, indoor pest control and other applications such as anti-fouling products. Many active substances pose risks to human health and the environment once they are released. Some of them are substances of high concern, such as endocrine disruptors. The knowledge about risks and effectiveness of a lot of biocidal active substances is still insufficient. In Germany alone, more than 35,000 biocidal products fall under the biocide legislation; the total number of biocidal products in the EU is estimated to be about 50,000. Many biocidal active substances are similar to pesticides but are regulated by different EU legislation.

A common European biocide-policy was introduced only in 1998. With this, a programme was introduced to gradually review active substances which on the market before 14<sup>th</sup> May 2000 ("old biocides"). The review programme has been extended twice, now until 2024. Whereas many approval decisions have already been made for wood preservatives, rodenticides and insecticides over the past years other substance/product type notifications are still pending, e.g. for disinfectants, preservatives or anti-fouling paints.



19. European Commission (2014): Commission Delegated Regulation (EU) No 1062/2014 of 4 August 2014 on the work programme for the systematic examination of all existing active substances contained in biocidal products referred to in Regulation (EU) No 528/2012 of the European Parliament and of the Council Text with EEA relevance: http://eur-lex.europa.eu/legal-content/EN/ TXT/?uri=uriserv:OJ.L\_.2014.294.01.0001.01.ENG According to the new Regulation 1062/2014/EC which updates the review programme with reference to the new Biocidal Product Regulation (PBR, 528/2012/EC), currently 222 biocides are still pending for one or more of the total 22 different product types (PTs)<sup>19</sup>. This means that consumers are still exposed to non-assessed and non-approved biocides used in a large number of biocidal products and in an unknown number of biocidal treated articles of daily use.

# New provisions of the BPR - how considered in the review programme?

One positive effect of the BPR is improved transparency regarding nanomaterials. For the first time, the list of old active substances provides information about nanoscale biocides (see annex II of 1062/2014/EC). Currently, there are only tow explicitly named and supported nanomaterials: Silver adsorbed on silicon dioxide used for the preservation of fibrous or polymerised materials, such as leather or textile products for the control of microbiological deterioration (PT 9); and silicon dioxide used in insecticides and acaricides (PT 18). It is to be expected that applicants will subsequently notify further nanoscale biocides because the review list is still open for further applications of active ingredients.

Another new provision of the BPR is the exclusion of active biocidal substances with extremely hazardous profiles from further use. But because of transitional rules, the exclusion approach is not yet in effect for many of the old biocides because their draft assessment reports were submitted to the competent authorities before 1 September 2013, the date when the BPR came into effect. Consequently, the majority of old biocides are or will be reviewed according to the old Directive which does not consider exclusion criteria. In the worst case scenario, only the renewal of the approval after ten years will be performed in accordance with the new BPR and their exclusion provisions. For some biocides this would be only in the year 2034.

A current example of those delays is carbendazim, a highly concerning substance. Carbendazim is characterized as toxic for reproduction, a mutagen and as a suspected endocrine disruptor (ED). Whereas carbendazim will be phased out as pesticide, the active ingredient it is currently classified as candidate of substitution according to the biocide law although it meets three of the exclusion criteria. Other suspected ED biocides have already been approved for ten years. This is the case for cyproconazole and tebuconazole used in wood and other material preservatives. Both are suspected endocrine disruptors and also classified as toxic for reproduction (category 2 according to the CLP Regulation) so that they could be considered under the interim exclusion criteria for endocrine disruptors laid down in the BPR. Zineb, the first approved anti-fouling (PT 21), is listed in the EU prioritisation list of possible endocrine disruption chemicals in category 1 as well as other approved biocides such as the insecticides lamda-cyhalothrin and deltamethrin.

However, the assessment reports (ARs) often based its recommendation for approval despite the fact that harmonised ED test guidance's are missing. For example, the AR of zineb (Dec. 2013) concludes that the anti-fouling should be further assessed with regards to its potential endocrine disruptor properties once further guidance is available and preferably before the product authorisation stage.

The AR for deltamethrin (May 2011) pointed out that "due to limitations in the test guidelines available at the time, the potential for endocrine effects may not have been fully investigated." The Swedish rapporteur recommends that "the potential for endocrine disruption of deltamethrin be reconsidered when EU harmonised guidance is established based on the work and final conclusions of the EC work on defining criteria to identify endocrine disrupting substances".

Finally, the EC delay of the implementation of ED criteria has actual effects on the decision-making in the review programme of biocides. Currently, facts - approval decisions – will be created which acts against the spirit of the BPR and prevents a better protection of human health and the environment from the negative effects of ED biocides.

PAN and other European civil society groups fight for a stringent implementation of ED criteria and for the concept of exclusion criteria in general in the legal framework of biocides and pesticides. Further delay and dilution is a danger by the current impact assessment and public consultation launched by the EC on ED criteria and their regulation<sup>20</sup>.

20. PAN Europe (2014): Endocrine Disruption Criteria Update: A roadmap to nowhere. Press Release, 18th June 2014: www.pan-europe.info/News/PR/140618.html

Susanne Smolka, PAN Germany



# Engagement against environmental pollution by veterinary pharmaceuticals

For thirty years, PAN Germany has been committed to protecting people and the environment from the adverse effects of pesticides and biocides. But residues from veterinary pharmaceuticals used in intensive livestock farming contaminate water bodies and soils and can also negatively affect wildlife. They enter the environment via the excrements of treated animals, manure, or slurry. Though alarming studies exist, systematic documentation and publication of data on the amounts of veterinary pharmaceutical products used is lacking. No systematic environmental monitoring for veterinary pharmaceutical substances is in place, and there are still veterinary pharma-

Environmental pollution from pharmaceuticals has started to be recognized as real problem on the national, European and international scale. environmental impacts.

> For two years, PAN Germany has been engaged to enhance environmental protection from adverse effects of pharmaceuticals. PAN Germany joined with other in supporting the SA-ICM Initiative "Environmentally Persistent Pharmaceutical Pollutants (EPPP)" as a new emerging policy issue. PAN Germany took part in the online consultation for a strategic approach to pollution of water by pharmaceutical substances in the EU and commented the draft guidelines for the prudent use of antimicrobials in veterinary medicine.

> In the process of revising the EU veterinary pharmaceutical legislation, PAN Germany has lobbied for integrating eco-monitoring, for revising old substances and for securing transparent data publication on the use of veterinary pharmaceuticals. Although the EU acknowledges that the pollution of water bodies and soils with pharmaceutical residues is an emerging environmental issue, the newly drafted proposal for a regulation on veterinary medicinal products does not improve environmental protection and does not even link to other relevant legislations like the water framework directive. In the revision process, PAN Germany will now share suggestions for relevant amendments with other stakeholders like NGOs/CSOs and MEPs and will continue its general work against pharmaceutical pollution. This also means standing up for animal welfare and husbandry practices that foster animal health.

Susan Haffmans, PAN-Germany

# Join the global PAN International call for a ban on highly hazardous pesticides (HHPs)!



Globally, a growing number of individuals and organisations no longer believe that "safe use" of hazardous pesticides is possible. Decades of safe use programs and regulatory action to prevent pesticide poisoning have not been successful (1) as many people die from pesticides. Instead, many bodies have started to call for a progressive ban of *hazardous pesticides (HHPs)* and support a systematic phase-in of agro-ecological approaches to produce healthy agricultural goods. Even the Council of the Food and Agriculture Organisation of the United Nations recommended taking a "progressive ban of highly hazardous pesticides" into account to reduce pesticide risks (2). However, the system of chemical plant protection is still highly hazardous as many pesticides with high acute and/or high long-term toxicity

are still legal, distributed and used. who fight the current pesticide regime, PAN International is calling for action against HHPs.

## Join the PAN International call to ban HHPs.

There is still time to support our efforts.

Sign it now at: http://action.panna.org/p/dia/action3/common/public/?action\_KEY=15775

Carina Weber, PAN Germany

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- (2) PAN Germany (2013): Stop pesticide Poisonings! A time travel through international pesticide policies

## Further reading

PAN International List of Highly Hazardous Pesticides: www.pan-germany.org/download/PAN\_HHP\_List\_140527\_F

PAN Germany (2012): Pesticides and health hazards – facts and figures. www.pan-germany.org/download/Vergift\_EN-201112-web.pdf





# Go Organic!

The Swedish Society for Nature Conservation (SSNC) is working on a successful organic campaign targeting consumers. The goal is to increase the consumption of organic food and in the first half year of 2014, there was a 30% increase!

The campaign aims to increase awareness among consumers – as well as producers and decision makers – of the benefits of organic food and farming since it's one of the changes needed to promote a shift towards sustainable food and farming globally. The key has been to not only show the benefits of organic but to demonstrate concretely the downsides of the non-organic production. SSNC has also chosen not to use the word "conventional farming" since it's difficult to get a mental picture of what it is. Instead we have used "un-organic" or "chemical intensive farming". To make it easy for consumers to start transitioning to organic food, we made a list of five important

SSNC Report – "Organic Food and Farming for All": products to start with: milk, meat, www.naturskyddsforeningen.se/organicfarming fruit, coffee and SSNC flyers and folders free to use: potatoes.

www.dropbox.com/sh/9tl30nki2e20xje/AAAYRmeRXr9Ci0xMO1UQtfR6a

The campaign

"Go Organic!" is an initiative by the Swedish Society for Nature Conservation and is organized in week 40, called "Green Action Week". In 2014, around 40 consumer, environmental and farmers' organisations in more than 20 countries across the world are part of Green Action Week. Mid-September to mid-October saw farmers' markets, workshops, radio shows, social media campaigns and many other campaign activities take place.

Swedish Society for Nature Conservation



# New proposal for a new regulation on organic production

The Swedish Society for Nature Conservation (SSNC) has been working for a very long time to promote organic consumption and production as it significantly contributes to a healthy environment, animal welfare, and provides important added value for consumers and producers. The SSNC also has extensive experience in working with consumer issues and has large contact areas with number of green consumers. It is with great concern that we now see a proposed regulation that will negatively impact the market for organic goods. Here are our main points of critique:

## 1. Consumer confidence in organic production is high

The SSNC represents green consumer voice for over 200 000 members. We see a significant and increasing interest in how food is produced and that the added value by the organic production is appreciated. The fact that the consumption of organic food is increasing is further evidence that consumers have a great deal of confidence in organic labeling. We, therefore, believe that the picture painted by the impact assessment that the organic sector has low consumer confidence is not accurate and question the findings. The SSNC does not believe that there is a lack of consumer confidence. Further, the SSNC believes that the proposed regulation will result in a reduction of the overall environmental benefits of organic production, prevent the development of environmental technologies and reduce the potential for an important value-added market.

### 2. The proposal reduces environmental benefits and abandons key environmental principles

If the proposed new regulation is implemented as it is now formulated, it poses a risk in kicking out a large part of organic production. Among other things, the EU Commission proposes removing all possible exemptions that may be required when shortages occur in production, that all agriculture companies must be converted to organic after the transition period, and that the 90% of feed should be produced on the farm or in the region.

This proposal, therefore, includes risks, which will likely lead to far-reaching negative effects and will greatly hamper Sweden's chances to reach its targets on rural livelihoods and environmental quality objectives as "non-toxic environments" and "a varied agricultural landscape".

#### Polluters must pay

The principle that the polluter pays (Polluter Pays Principle, PPP) means that polluters should pay both the cost of environmental problems and cost for the damages affecting other actors in the system.

Today, organic production incurs costs to monitor production to prove that chemical pesticides were not used. Pesticide residues in organic food are very rarely found in the EU control. When they are found, it is likely that organic production is affected by chemical agricultural use where it can be spread from nearby farms or through storage and transport.

The European Commission proposes that there should be maximum residue levels on unauthorized substances in organic products. Here it is important to point out that the organic label is a production label that verifies that production adheres to the established rules, not a product label. To raise awareness about this in a simple way is to increase understanding of the label and avoid false expectations of the products. EU Commission proposes that if pesticides are found over the set maximum residue level, the product should be rejected for any reason. Furthermore, it will be up to the organic producer to prove that products become contaminated by chemical agricultural use. This is not acceptable and completely goes against the principle that the polluter must pay.

Another aspect of the proposal that will raise the cost and hinder the accessibility of the organic products is that the EU Commission proposes that all stores that sell organic products must be certified. This requirement would also apply to stores where only prepackaged goods are sold. This means that, for example, it will no longer be permitted to sell organic milk in grocery stores that are not certified. This will mean an increase in costs and administration for stores and that there is a huge risk that stores with comparatively low sales of organic products will stop selling organic products.

#### Organic agriculture is an important tool for poverty reduction

The Commission's proposal would also require that the rules for imported products "coply" with EU rules. This risks considerably reducing imports of organic coffee, bananas and other fruit, nuts and spices. The potential of poverty reduction by providing access to markets with the organic added-value is a very important issue for the SSNC. The report "Organic farming in Brazil - Participatory certification and local markets for sustainable agricultural development" is a very good example of an agricultural project in southern Brazil and the organization, Centro Ecológicos, which works with participatory certification of organic food. The SSNC also has a partner organization in Ethiopia that has experienced many positive benefits from the transition to organic farming. The project demonstrated that the transition to organic methods led to increase productivity and yields, reduced vulnerability to drought, pests and floods, higher groundwater levels, increased soil fertility, increased income, increased biodiversity and favored the provisioning of ecosystem services.

SSNC believes:

- that the assumptions on consumer confidence in the organic production, which is the basis for the proposal for change, are incorrect;
- that the proposal will not lead to improvements from an environmental viewpoint, but will rather lead to a reduction in environmental benefits mainly achieved through organic production methods;
- that the possibility for poverty reduction through organic production in the global South will be greatly limited; and
- that the proposal should be rejected entirely.

Swedish Society for Nature Conservation

# Ecocity "Re-educating our citizens"

ECOCITY is a non-profit environmental organization primarily concerned with the urban environment. Founded in 2004 in Athens, its network has expanded to Thessalonica and Patra. Voluntary participation together with the contribution of a rich network of scientists, environmentalists and citizens, are the organization's principle tools for fulfilling its task. On a daily basis, we gather, evaluate and disseminate information, concerned with urban-environment (and not only), achieving to generate pressures where needed and suggest solutions through our website (www.ecocity.gr). One of our work priority areas is organizing conferences and discussion groups- we also play a consulting role and promote environmental and sustainable policies on a local and national scale.

ECOCITY's Scientific Committees consist of scientists, specialized in diverse fields and backgrounds allowing us to take a multidisciplinary approach to the subjects we deal with. The scientific committee of Athens comprises of five members



whereas the scientific committee of Thessalonica three. The scientific committee's annual task is to discuss urban-environment related topics such as fuel adulteration, pollution of water resources, city traffic, air pollution etc. and to dissipate the conclusions reached. The scientific committee's work is supported by collaborative alliances with other working groups and committees such as the Environmental Committee of the Greek Parliament, local committees, consumer organizations, etc.

The organization focuses on matters related with air pollution in large cities, water resources management, water bodies' pollution, extensive use of fertilizers and pesticides, eco-friendly building construction, enrichment of urban landscapes with green areas, recycling, working against wasting energy and promotion of eco-friendly driving in cities. We further promote alternative methods of transportation through our program ECOMOBILITY.

The goal of ECOCITY is to generate and raise public environmental awareness, improve urban life quality and promote sustainable development in urban centers. Furthermore we cooperate with scientific committees and research institutions in order to make cities more viable by resolving a variety of environmental problems.We further aim to advance scientific research and disperse the conclusions to the public, stakeholders and decision-makers.

Today ECOCITY has 2,800 members spread out in the main urban centers in Greece such as Athens, Thessalonica and Patra. Our members can be divided in two groups: a) Volunteers, who provide their precious time, abilities and knowledge by attending in ECOCITY actions, and b) friends of ECOCITY, who contribute with their valuable knowledge in resolving environmental issues posed. A large number of members stem from the scientific community, various organizations and the local administrations.

In 2007 ECOCITY began establishing networks to share information on environmental issues. Through networking we manage to supplement our actions, increasing the effectiveness of our work and sensitizing the public about the environment on a broader scale. Our allies in our mission are scientific organi-ECOCITY is a member of EUROPEAN ENVI-RONMENTAL BUREAU, PAN Europe network, and students networks. Transport & Environment and EkoEnergy.



# Portugal A campaign to ban herbicides in public areas

Concerned with the widespread application of herbicides in public areas by local authorities, Quercus and PTF (Platform GMOs Out) a Portuguese GMO Free Coalition, which includes non-profit organizations related to agriculture, development and environmental protection, launched a campaign last March during the International Week of Action against Pesticides.

The campaign advocates that local authorities ban the use of herbicides in public areas and to eliminate weeds using greener alternatives. Those interested, sign a public Manifesto called "Autarchy without Glyphosate". So far, 3 Municipalities and 6 Parish Councils (one is part of Lisbon city) have formally signed on. Participating local governments have opted for manual weeding (by hand and hoe) or mechanical means (string trimmers and clippers). Some are considering other options (alternatives described at http://tinyurl.com/p5bgcwn).

The list of participating local authorities is online and is regularly updated, at: www.quercus.pt/campanhas/campanhas/ autarquias-sem-glifosato/3947-mapa-de-autarquias-sem-herbicidas

Quercus Portugal