



**PAN EUROPE  
Report 2011**

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# INTRODUCTION BY FRANCOIS VEILLERETTE

More than ever we must work for agriculture not dependent on pesticides.

Right now, even being an optimist like I am, it is difficult not to see that the European authorities seem to be in a phase where the defence of the environment as well as human health are considered after, way after the purely economic and financial considerations.

Some examples well characterize the attitude of the European Union:

- The difficulty of seeing the CAP reform, at this stage of negotiations, considering something as basic as the crop rotation as a mandatory requirement to basic payments.
- The total lack of will of the Commission to establish "a comprehensive assessment as part of the EU legislation" concerning chemical mixtures.
- The granting of fantasist derogations for using banned pesticides.
- The establishment of a re-submission system to apply for registration of pesticides considered dangerous, allowing the usage of these substances on the European market...

In front of this difficult situation, where the economic crisis seems to justify all the sacrifices in the minds of some people, we must stay mobilized more than ever.

This is what PAN Europe has been doing in 2011, defending the environment and public health in all the occasions mentioned above and way more:

- Fight for getting a green component included in the CAP such as a mandatory crop rotation

which would put an end to the existing monocultures

- Uncovering industry infiltration in Food Authority EFSA regarding a tool which would classify pesticides safe without testing.
- By attacking the so called "120 days" derogations.
- By exposing the scandalous systems in place in Europe concerning requirements evaluating pesticides, like the strategy of "threshold of toxicological concern" promoted by the EFSA or the aberrant system of "resubmission" request concerning pesticides authorization... that should have been simply banned!
- By attacking in the competent tribunal some authorizations given to pesticides in this lax system, as in the case of Prochloraz.

More than ever our organization resists and some results are already there. Thus France, particularly targeted by PAN Europe for giving too many generous "120 days" derogations, has significantly reduced the number of derogations granted this year, under our pressure. Even more important, PAN Europe, having attacked the in 2008 the regulation on maximum pesticide residue levels in food, just got the European Court of Justice to recognize its right to challenge the regulation. This is a real victory - even if the Commission has appealed this decision because this is the first time an environmental NGO is legally allowed to challenge EU legislation!

So, yes, although the current economic situation makes our struggle even more difficult, we have to keep in mind our goal more than ever defending the idea that agriculture more respectful of the environment as well as of the health is possible. Other successes are waiting for us!



## **Who is PAN Europe?**

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. Its projects and campaigns are coordinated by five autonomous Regional Centers.

PAN Europe is the regional centre in Europe. It was founded in 1987, today bringing together 31 consumer, public health, and environmental organizations and other non-governmental groups in 19 countries. PAN Europe is managed by a board of directors consisting of five board members while two staff members take care of the daily management.

## **Our mission**

PAN works to replace the use of harmful pesticides with ecologically sound alternatives (where possible practices but also products).

## **Our focal points**

NGO advocacy and public participation in EU pesticide policy, with activities including:

- being involved in the EU decision making process;
- disseminating information and raising awareness on pesticide problems, regulations and alternatives;
- organizing workshops and conferences and promoting dialogue for change between government, private sector and civil society stakeholders.
- Coordinate our network of members for joint action and policy interventions



## 2. CHEMICALS

### *Say goodbye to Chlorpyrifos*

Many very dangerous chemicals have been approved under the old pesticide regime of Directive 91/414. Part of the reason is the lack of clear criteria for banning, part of the reason is a lack of political will. There is evidence for many years that exposure of children and the unborn to Chlorpyrifos might result in brain damage and health effects of in later life. Chlorpyrifos is restricted for this reason in the US but still allowed in Europe. Soon Member States and Commission will –behind closed doors and a total lack of transparency- decide on effects of Chlorpyrifos on wildlife. PAN-Europe feels it is time to say goodbye to Chlorpyrifos.

Chlorpyrifos is a nerve toxin –used as insecticide- and research shows it is involved in dis-

turbing development of organisms at special windows of vulnerability, leading to irreversible mental damage. Chlorpyrifos targets cell signalling cascades that control neural cell replication and differentiation, leading to cell damage and loss in the immature brain, mis-wiring of neuronal circuits, and corresponding behavioural deficits that continue to emerge later in adolescence and adulthood (Slotkin 2010<sup>1</sup>).

The key finding was that organophosphate-induced interference with this signalling cascade during critical developmental periods permanently reprograms the future expression and function of the signalling proteins themselves. This means that cellular responses to the multiple neurotransmitters, hormones, cytokines and trophic signals that operate through cyclic AMP are permanently altered. Chlorpyrifos is analysed in almost any place, food, water, in the air, tissue and even the North Pole.



1. Theodore A. Slotkin, Does early-life exposure to organophosphate insecticides lead to prediabetes and obesity?, Reproductive Toxicology 31 (2011) 297-301.

## **PAN Europe position paper on criteria for endocrine disrupting pesticides**

PAN Europe submitted its position paper on endocrine disrupting pesticides to Environmental Commissioner Potocnik in May 2011. Soon the 'comitology procedure' for developing such criteria will be started in DG Environment. Several stakeholders like industry and some EU Member States have already put forward their ideas on the criteria.

In Regulation 1107/2009 endocrine disrupting properties are seen as unwanted properties and pesticides having these properties will not be allowed on the market (unless in exceptional cases such as use in closed systems). The criteria for determining such properties still need to be defined. By 14th December 2013, the Commission shall present measures concerning specific scientific criteria for the determination of endocrine disrupting (ED) properties (Regulation 1107/2009). These criteria will likely be used in the implementation of other regulations, and as such will cover 'horizontal' legislation, including that relating to cosmetics, biocides, pharmaceuticals, and industrial chemicals at large.

PAN Europe puts strong emphasis on the need of a new testing design and a new way of assessing adverse effects. The traditional risk assessment methodology, used for decades, was not able to discover this potentially very harmful effects. A 'hazard' based approach needs to be introduced.

There can be no doubt that EU policy makers, Council and Parliament, have chosen and agreed on a hazard, not a risk-based, approach for endocrine disrupting properties in Regulation 1107/2009. Specific inherent effects of pesticides (carcinogenic, mutagenic, reprotoxic), specific chemical qualities (persistence, bioaccumulation) and endocrine disrupting properties (apart from specific cases such as closed systems) are identified as sufficient reason to prevent chemicals with such properties from en-



tering the European market. In risk assessment numerous methodologies and ways of arguing were allowed, rarely, if ever, leading to a ban of a chemical. If an effect was discovered in a test animal, industry was allowed to question of this effect was relevant for humans and deliver assumptions for disregarding this effect. If an effect was discovered industry could claim an assumed (or calculated) alleged low dose exist with no effects. Exposure to humans could be argued to be acceptable, or even it was assumed human can adapt to high doses and wildlife 'restored' one year after application of pesticides. Unknown metabolites allowed to be classified as 'irrelevant'. This toolbox was extended indefinitely. The 'hazard' approach is meant to make an end to this toolbox and bring back pesticide assessment in the realm of science.



## ***PAN Europe report on derogations (and other loopholes in pesticide policy)***

One of the many derogations in EU pesticide legislation is the “120-day derogation” allowing EU Member States use of illegal pesticides for almost a full crop season. This on condition of “unforeseen danger” where no alternatives are available. PAN-Europe analysed the use of this derogation in the past 4 years and observed an explosion in use, from 59 cases in 2007 to 321 in 2010, many times allowing very harmful pesticides, in total 152 different chemicals. France went up from 0 derogations in 2007 to 74 in 2010, Greece from 6 derogations to 54 and Portugal from 1 to 41 in 2010. PAN-Europe concludes it is highly likely the provision is misused by Member States on a large scale. Can Portugal have 1 case of “unforeseen danger” in 2007 and 31 in 2010? Can France have 0 derogations in 2007 and even 0 in 2008 and 2009 and all of a sudden 74 cases of “unforeseen danger” in 2010? This looks more like whitewashing illegal use. Several granted authorisation for soil fumigants also cannot be an “unforeseen danger” at all and alternatives are readily available.

PAN-Europe additionally observes an enormous intransparency in decision making, done behind closed doors in the Standing Committee of DG SANCO. Applications for these derogations are not published, Commission “measures” are not published and a discussion and voting –if any- is not visible, as well as any control or enforcement action. PAN-Europe thinks it is essential for stakeholders to be able to verify if a provision is properly used. Committee meetings and documents should be freely accessible.

Given the long list of derogations, backdoors and loopholes in pesticides policy in general, a ‘wider picture’ needs to be considered. PAN-Europe believes the conflict of interest of Agricultural Ministries, delivering the representatives in the Standing Committee, is one of the main reasons for the continuing pressure to open backdoors, serving mainly groups of back lagging farmers, stopping innovation in agriculture and certainly not serving citizens in Europe.



# CHEMICALS

## ***EFSA proposal to stop toxicity testing***

Food authority EFSA proposes to substitute actual testing of chemicals by the use of a fixed exposure figure. An adult can –according to EFSA- safely eat 90 microgrammes of any chemical of a defined class every day for his/her entire life, the TTC (Threshold of Toxicological Concern). The TTC is a proposal developed by pesticide industry and is far from safe. TTC is based on old, outdated company data which EFSA did not check because the studies are non-retrievable. TTC is calculated by excluding the 5th percentile most toxic company data, allowing a certain level of harm to happen. Additionally infants, which are known to be more vulnerable, are not extra protected by TTC and mixtures of chemicals not calculated. TTC is therefore scientifically completely flawed, puts humans/infants at great risks and only serves to get unlimited market access for chemicals.

Independent literature was not taken into account in TTC and PAN-Europe could easily

falsify the extreme high TTC-threshold with real scientific data. For endocrine disrupting chemicals lower toxic doses could be found being a factor 10, 100, 1000 and up to 7500x lower than the TTC value. If the TTC were used for the most dangerous class of chemicals, pesticides, a group sprayed intentionally on food, >85% of the pesticides would all of a sudden be classified “safe” for humans and no testing needed anymore. It is unbelievable EFSA, stating to be a top-class scientific institute, adopts this dangerous non-science based proposal. EFSA’s blind love for industry also allowed industry people and other known promoters of TTC in the panel adopting TTC.

See PAN website:

[www.pan-europe.info/News/PR/110830.html](http://www.pan-europe.info/News/PR/110830.html)

and

[www.pan-europe.info/News/PR/111219.html](http://www.pan-europe.info/News/PR/111219.html)



## ***Revised toxicity testing for pesticides with industry bias***

The present rules for toxicity testing of pesticides will be revised soon. They are outdated, do not include new insights in science and fail to protect citizens. But instead of making them stricter, Commission and member states have made the tests more flexible and cheaper for industry. No tests are required for immunotoxicity or endocrine disruption. There is no standard test even for neurotoxicity and no mention of the need to protect the developing foetus or babies during vulnerable phases. There are no tests on low doses or mixtures of chemicals, in spite of the fact that these reflect real-life human exposures. There is, however, progress on bee testing.

Health Commissioner Dalli's proposal has been developed over the last seven years in cooperation with industry umbrella organisation ECPA (European Crop Protection Association); member states like Ireland and the UK invited them to the working groups. Other stakeholders were invited into the process only last year, when the text was largely fixed. Many of the industry proposals of ECPA and the industry lobby club ILSI<sup>2</sup> were accepted. This happened especially in the crucial area of long-term human health toxicity testing.

The one-year dog study was deleted and industry was allowed to choose a different test species, as in the long-term rat test, or to waive studies like the 2-generation mouse test. In addition, EFSA (European Food Safety Authority) panels, with ILSI-linked scientists on board, issued Opinions and Guidances that contributed to a pro-industry bias in the test proposals. PAN-Europe believes that the already quite insensitive toxicity testing requirements are watered down and will not adequately protect citizen's health.

*2. ILSI, the International Life Science Institute, states to have a mission to provide science that improves public health and well-being. Behind this façade hides an industry-sponsored lobby club which works to redesign risk assessment to make it less rigorous and cheaper. ILSI was restricted from activities in the international health organisation WHO because of its track record of putting the interest of its corporate members first.*


## ***Discussion in European Parliament on the use of science***

### ***Hearing organised by Ms. Lepage/Parvanova 9th November 2011 in collaboration with PAN-Europe/EOS***

The public is reassured by industry and governments that risky products like pesticides, chemicals, and genetically modified foods are strictly regulated. But approvals for such products depend on a few limited studies, paid for by the same companies that stand to profit from the product's approval and sale. Studies not only have an inherent bias, but they are also old and outdated. Often, they are unpublished and commercially confidential, meaning that they cannot be evaluated by independent scientists or the public. At the same time, regulators ignore or dismiss large numbers of peer-reviewed independent studies in their assessments of risky products – even though such studies are less likely to be biased, are of better quality, and use the latest scientific methods and insights. Regulators rely instead on small numbers of industry studies that are claimed to be safe? This has been the case with aspartame, genetically modified foods, bisphenol A, and glyphosate/Roundup. In sum, science has separated into two diverging strands: industry science and independent science. While billions of Euros of taxpayer money is poured into independent research, it is still not properly taken into account in regula-

tory assessments. The EU Parliament and Council have made progress in addressing the problem. They passed new pesticide and chemicals regulations stating that assessments will no longer rely solely on industry studies. The regulation forces regulators to take account of independent science. But an EFSA Guidance has compromised the new regulation and RA culture ensures that REACH dossiers also will hew to industry data, enabling industry to dismiss any independent study it wishes on the grounds that it is not “relevant” or “reliable”. The loopholes in this Guidance are reinforced by the draft data requirements of DG SANCO, which, if adopted, could undermine the intent of the new regulation to protect public health and the environment.

Independent scientists and civil society groups are fighting to make the voice of independent science heard in public health and environmental regulation. But each individual or group is fighting their own corner – no one is addressing the bigger picture. This is in spite of the fact that the crisis in independent science crosses over into many areas that directly affect the public – from food quality to public health and environmental sustainability.



## ***PAN Europe proposal on mixtures***

Risk assessment on chemicals ignores the exposure of human and the environment to mixtures since decades. Regulators still act as if people were exposed to one single chemical while the reality is a daily exposure to hundreds of chemicals at the same time.

A few EU scientific committees now are considering taking mixture effects into account. Most proposals from these committees accounting for health effects of mixtures however only cover the tip of iceberg. Some focus on common mechanism of action (Food Authority EFSA), some on concentration addition in case of known substances (SCHER-committee). But these approaches will miss the overwhelming majority of the cases of mixture exposures in practice which happen by exposure through air, food, dust, cosmetics, etc. Therefore these proposals are not protective enough and continue to put people, especially the vulnerable, at risk. We propose not to take into account the whole iceberg, in trying to cover risks of the millions and millions possible combinations of chemicals in daily life. The best option to do this is the use of an extra uncertainty factor in risk assessment (UF-mix) in addition to the ones used presently. The actual used uncertainty factors in risk assessment (10x10) are an underestimation of the actual risks and do not cover the effects on vulnerable groups like children. Based on academic studies available the extra uncertainty factor would be estimated to be at a level of 100. We propose to use this extra factor until good independent science provides for a better estimate.



# 3. AGRICULTURE

## *The Common Agricultural Policy*

PAN Europe urges the EU to put sustainable agricultural practice with biological control (rather than chemical) at the heart of Europe's agriculture policy reform.

**When the reform proposals were published on the 12 October 2011 PAN Europe and HEAL** made a joint press release insisting that the reform proposal as it stands is half-hearted. While the proposal recognises the much-needed environmental shift, the measures proposed to make the shift are insufficient (and unable to ensure the needed change) to reduce external input dependency, such as pesticides and fertilisers, and to ensure long term food security.

At the same time we highlighted the fact that reductions in external inputs are possible :

“A study released in July this year (Florence Jacquet et al, An economic analysis of the possibility of reducing pesticides in French field crops, *Ecological Economics* (2011), doi:10.1016/j.ecolecon.2011.04.003) shows that French farmers can reduce their pesticide use by 30% without reducing their income. The two main reasons for not implementing less intensive techniques are farmers' aversion to risk and the anticipated labour and skill requirements for implementing these techniques.”

So while it is positive that the European Commission is proposing that all EU farmers will have to apply a mandatory package of agronomic measures to obtain direct payments as from 2014, the so-called green component, which is calling on all farmers to diversify their agricultural production, and reserve 7% of their land for ecological focus areas, it is sad that the proposals do not go further. Fact is that the proposals as they stand still will allow farmer to apply monoculture, same crop on the same land year after year, on 70% of their land.



## *What we are asking for concretely?*

**A faster inclusion of the sustainable use directive on pesticides in cross compliance:** Farmers should respect the rules of both the water framework directive and the sustainable use of pesticides directive as of January 2014, and not wait until these directives have been “properly applied” in all EU Member States.

**Crop rotation as part of green payment of the first pillar:** Crop rotation would reduce the need for chemical inputs, such as fertilisers and pesticides, and promote biodiversity. Each farmer will be obliged to apply a package of agricultural measures, such as diversification of crops, but the present proposal does not include crop rotation.

**Biological control as the model for sustainable innovation:** Each farmer applying for rural development funding should take a „system approach” to farming. This starts with the delivery of a (certified) plan to drastically change methods and deliver advances in agricultural practices. These will prioritise harm prevention, resistant crop varieties and use of biological control. The starting point for knowledge transfer must be organic farmers spreading their knowledge to conventional farmers.



## 4. BEES

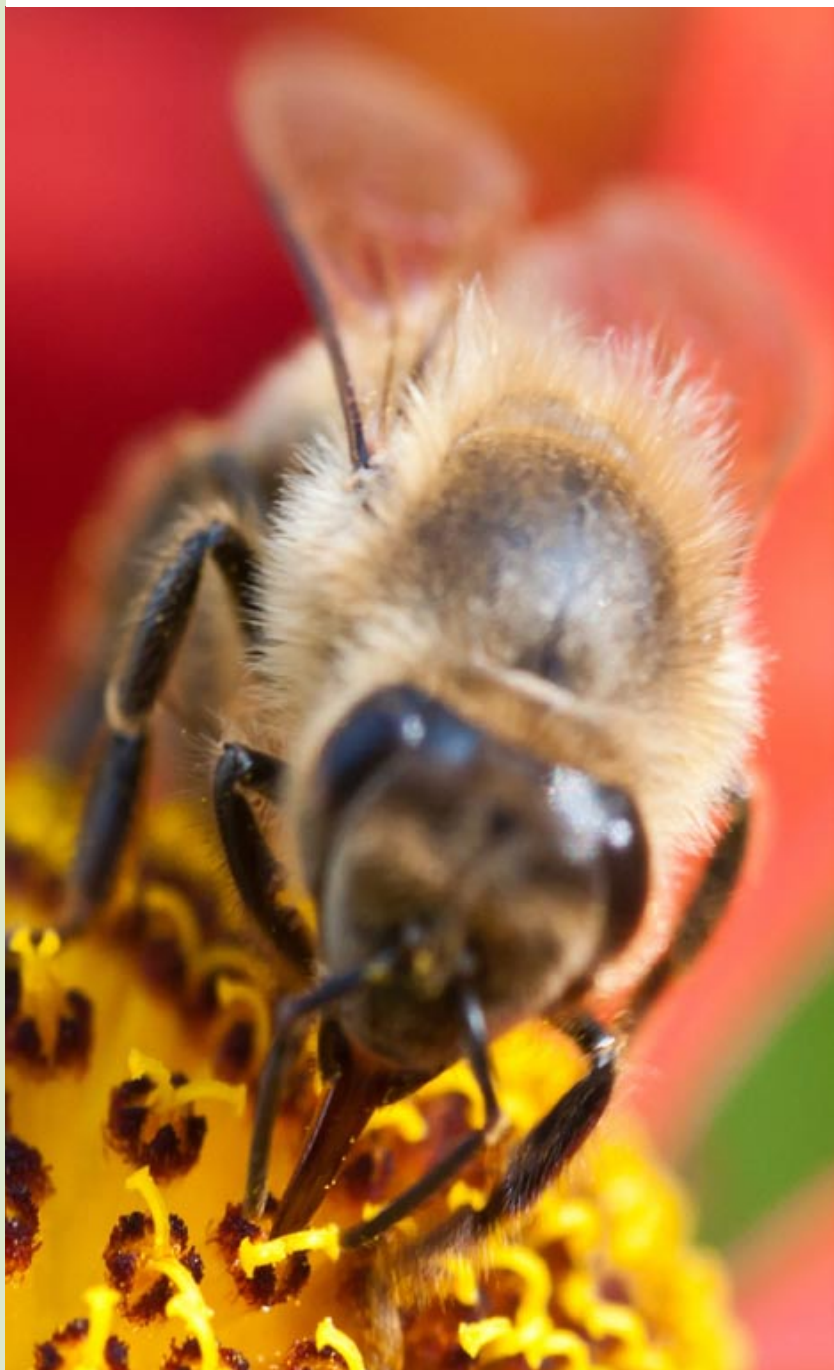
### ***PAN Europe starts identifying bee friendly agricultural practices to make Integrated Production more concrete***

Several factors act as driving forces for pollinator population instability. Starting from habitat deterioration and pollution due to human activities, increased sensitivity of pollinators to diseases, or the agricultural model based on monoculture and chemical utilisation.

In order to help stem bee decline, a holistic approach is needed. Since 60% of the honey production in Europe is linked to farmland, actions taken by farmers greatly contribute to the well being of bees.

In an attempt to transform words into actions, PAN Europe and the European Beekeeping Coordination launched last year their initiative to identify conventional and Integrated Pest Management-practice farmers who are making a difference. The aim was to recognise and reward those producers who perform sustainable agricultural practices, supporting environmental protection at the same time as growing crops profitably. In doing so, not only do they protect our health, environment and biodiversity, but also combat climate change.

In our publication from last year ([www.pan-europe.info/Resources/Briefings/SSP\\_EN.pdf](http://www.pan-europe.info/Resources/Briefings/SSP_EN.pdf)) agriculture poses certain threats for bees linked to GM-crops, monoculture (including dependency on imported soybeans), and pesticide application can cause mortalities, probably in combination with other factors, or disruption of behaviour. Bees need variety like crop rotations with (flowering) protein crops (legumes), and a diversified environment, where crops are interspersed with hedges and rows of wood or grove, where wetlands and grass-land can still flourish. PAN Europe and European Beekeeping Coordination established in 2010 a pilot project for a Europe-wide “Bee friendly competition” for conventional farmers who believe they deliver special benefits to bees.



### ***Bee Friendly Farmer of the Year***

PAN UK will be presenting the award for the British heats of a new annual competition to find the ‘European Integrated Production Farmer/Grower of the Year’. The aim is to recognise and reward those farmers and growers making an extra effort to produce food sustainably, and to inspire other farmers to do the same. The theme for 2011 is ‘Bee-friendly Practices’.



The project was launched in the United Kingdom by distributing a questionnaire among farmers. In the future, this initiative will be developed in other countries.

The aim is to create a platform of discussion and constructive work among different actors through the building of a win-win relationship. The project brings together farmers, beekeepers, bee experts, environmental NGOs and organisations working on Biological Control (IOBC). The 2010 pilot experience enabled us to identify farmer groups interested in, and working for defining sustainable agricultural practices

for bees. Few, but very interesting answers were received, allowing the identification of good agricultural practices to preserve pollinators, including in addition to the practices mentioned above:

- Long term plan based around positive management to increase both food production and all bio-diversity on this farm (including bees).
- Crop rotation with protein crops;
- Protect natural areas and invite the local community to observe biodiversity changes

The low number of applications made it impossible to identify a real winner this year. However, the jury was happy to find great potential among the participants and might offer further advice to these farmers. In doing so, they will be in a better position to be winners next year.

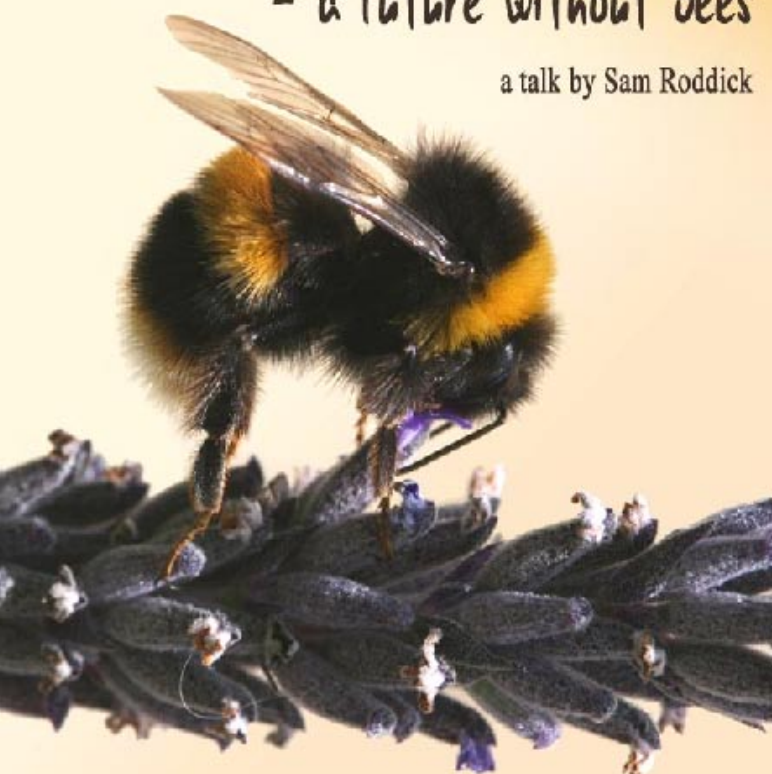
## Rachel Carson Memorial

*This year PAN UK dedicated their Rachel Carson lecturer to the link between pesticides and pollinators, giving focus to the bee friendly competition...*

Rachel Carson Memorial Lecture 2011

# Pesticides and pollinators - a future without bees

a talk by Sam Roddick



## Pesticides and pollinators - a future without bees...

Honeybees have been hitting the headlines recently, as their numbers have been falling alarmingly. Numerous other species of bee and other pollinators have also been on the decline.

So what has this got to do with pesticides?

It is fair to say that the precise role of pesticides in bee deaths is unclear, given the many pressures on bee populations, such as parasites and diseases. However, what is recognised is that there are three issues related to pesticide use that could be part of the problem:

- Toxic pesticides having acute or chronic effects on bee health
- The effects of pesticides as stressors on bees making them more susceptible to parasitic, microbial and viral attack
- And loss of foraging habitat due to over-use of herbicides and widespread monocultures in agriculture

The loss of pollinators is of deep concern, not least because we depend on them for food: it's thought that a third of our food comes from crops pollinated by insects. Dwindling insect numbers will also impact on the bird and mammal species that feed on them. Not to mention the intrinsic value of these extraordinary and fascinating creatures.

supported by

The co-operative

The Human Rights Action Centre, London EC2A  
1 April 2011, 6.30pm  
Tickets £20 / unwaged £12 (includes wine and canapés)  
www.pan-uk.org admin@pan-uk.org 020 7655 0505

PESTICIDE  
ACTION  
NETWORK UK

## *The European Parliament's report on bee health*

On the 15 November 2011, the plenary session of the European Parliament voted on an Initiative report about bee health and the future of the beekeeping sector.

Two initiative reports had been presented: one by the Socialist Csaba Tabajdi (voted and accepted at Com AGRI), and an alternative one by the Green Bas Eickhoud.

Initially, the text proposed by the ComAGRI was the one that was going to be voted in plenary session. However, an alternative coalition was established because certain MEPs considered that the AGRI report was not rigorous enough on certain points. Since the parliament has specific rules for plenary amendments, the only possibility for them was to table an alternative motion for resolution (AMR). PAN Europe has been actively lobbying to propose a good outcome and made several amendments in this direction.

The points included into the alternative resolution are as follows:

- an objective critique of pesticide toxicity, in particular the banning of systemic neurotoxins (such as neonicotinoids and phenyl-pyrazoles and pyrethrinoids) on the basis of a lack of a proper risk assessment, in line with the precautionary principle;
- the implications to the beekeeping sector of GMO contamination of honey and beekeeping products, as well as consequent costs of testing for contaminants and loss of income for beekeepers;





- on the interaction of agriculture and bee-keeping, a critique of monocultures, and the idea that wide-scale changes are needed in agriculture, including crop rotation to reduce (the need for) pesticide use, in order to reverse the sharp decline of pollinator populations.

We need sustainable agriculture everywhere, and buffer strips and wildflower/melliferous beds are not enough on their own.

Both reports were voted in plenary session after discussion, and even though 25% of the MEPs voted in favour of the alternative resolution, presented only very shortly before the vote, it was the Com AGRI (Tabajdi) report which was approved.

So, while the alternative resolution was not approved, it still allowed important concepts on the impact of GMOs, pesticides and the agricultural model on bee health, to be touched upon in plenary of the European Parliament.

You can find more details about the not very ambitious report approved on:  
[www.europarl.europa.eu/sides/getDoc.do?type=REPORT&reference=A7-2011-0359&language=EN](http://www.europarl.europa.eu/sides/getDoc.do?type=REPORT&reference=A7-2011-0359&language=EN)

You can find more details on how the MEPs voted on the alternative bee resolution on:  
[www.votewatch.eu/cx\\_vote\\_details.php?id\\_act=2312&lang=en](http://www.votewatch.eu/cx_vote_details.php?id_act=2312&lang=en)



See clip on the consequences of regional bee extinction in rural China (FR sound) - key fact: one hive can pollinate 3 million flowers/day for free versus one worker pollinating 30 fruit trees/day by hand:  
[www.youtube.com/watch?v=p3U4hQIY494](http://www.youtube.com/watch?v=p3U4hQIY494)

## ***Evidence from Italy on crop rotation as the real alternative to neonicotinoid pesticides***

In the EU honey bees play a key role in the successful production of 80 million tonnes of food every year - that is approximately 160kg of food per EU citizen. Though, the neonicotinoid pesticides have been implicated in the death of bees since they were introduced into agricultural use on the early 1990s. In the winter of 2008/2009 around 1/5 of honey bee hives in the UK were lost. In Germany in 2008 60% of their bees were lost. In 1999 France banned the use of the neonicotinoid based product Gaucho after the loss of 1/3 of French honey bees.

In Italy, the ban is temporary, running on an annual basis, though since September 2008 the ban has been confirmed in both 2009, 2010 and has recently been confirmed to apply until autumn of 2012.

Thought what is interesting in the case of Italy, is that since September 2008, where the Italian Ministry of Health and the Ministry of Agriculture decided to apply the precautionary principle, and suspended use of the neonicotinoid and systemic insecticides clothianidin, thiamethoxam, imidacloprid and fipronil on maize treated seeds on an annual basis. They also established APENET, the official Italian monitoring network to monitor the results of the ongoing suspensions on pesticide treated maize seeds and the effects on bee deaths, pest attacks and follow potential productivity changes in maize caused

by the ban. Therefore APENET became a partner of PAN Europe concerning bees in 2011.

APENETs monitoring is composed of surveillance modules, with at least one module for each Region and Autonomous Province. Every module consists of 5 stations (apiaries), each of which is in turn made up of 10 hives, located in representative geographic areas of each Region. To date, the network is composed of 20 modules, 94 apiaries and 940 hives.

The function of the monitoring network is to gather information on the health status of the bee families contained within the modules by means of periodic surveys and subsequent laboratory analyses performed on the different matrices collected (dead bees, live bees, brood, wax, pollen). In addition to routine analyses at pre-established dates, the programme also specifies that special surveys, sample collection and analyses should be carried out at any time if abnormal mortality is reported.

So far, the results of the monitoring carried out by APENET have shown that notifications of bee deaths in maize growing areas reduced to zero during the sowing period March – April 2009 compared to 185 cases that were notified in the spring of 2008 and that there were no bee deaths notified in the years following in relation to the sowing of maize. The results have also shown that the losses in Italian winter beehives have declined from 37.5% in 2007-2008 to around 15% in 2010-2011.

The monitoring has revealed what had already been suspected, namely that bees can come into contact with bee toxic pesticides in a



number of ways and at many different times throughout the year. In particular the dust emitted by seeding machines can be lethal to bees if they come into direct contact with it. It has also established that even very low dose ingestion of these pesticides by bees can cause immense damage to their brains. Other potential sources of exposure for bees include the exudates of plants in their early growing stages which, mixed with morning dew provide a water source for bees. Residues of systemic pesticides have also been found in pollen and nectar following seed treatments, an indication that sources of nutrition for bees are also contaminated with pesticides.

Of further concern is the long persistence of imidacloprid in the soil. Research has shown that imidacloprid residues can remain in the soil at a high enough level to be taken up by non seed treated plants for up to a year.

Though another fundamental issue concluded from the APENET monitoring, is the crop rotation as the alternative to seed treated maize seeds has had no negative effect on the yield and productivity loss of the maize crops in the areas monitored. More than 180 fields were monitored in most important Italian maize producing regions. No major ground-based pest attacks were observed even without using treated seed (also due to the precautionary suspension). The presence of visible attacks (below 10% of plants, with no impact on overall production) affected less than 3% of the sample. These results are statistically fully in line with a damage risk below 1%, as demonstrated by previous research.

The conclusions from the work of APENET are very clear and should be heeded by the regulatory authorities; banning these maize treated seeds has seriously reduced the bee death and that application of crop rotation has been able to keep pest attacks under control and at the same time keep yield unchanged.



## 5. FROM THE NETWORK



### ***The permanent people's tribunal, a PAN Europe and PAN UK collaboration***

The Permanent Peoples' Tribunal was founded in 1979 and grew out of the work by Senator Lelio Basso of Italy. The PPT is an international opinion tribunal that aims to raise awareness of situations of massive human rights violations when such situations receive no institutional recognition or response. Starting in 1979, the PPT has held 35 sessions exposing various forms of human rights abuses through alternative judgments and legal articulations. It was created as an institution to compensate for the absence of access to justice for all people; where barriers to justice exist, the Tribunal serves as a grassroots, ad hoc court to consider charges and to issue verdicts.

From 3-6th December 2011, the Permanent Peoples' Tribunal (PPT) will convene in Bangalore, India, to hear cases brought against six multinational agrochemical companies who

stand accused of violating human rights by promoting reliance on the sale and use of pesticides known to undermine internationally recognised rights to health, livelihood and life.

Known as the 'Big 6', the indicated agrochemical corporations are Monsanto, Dow, BASF, Bayer, Syngenta and DuPont. Collectively, these companies control 74% of the global pesticide market, making the pesticide/agricultural biotechnology industry one of the most consolidated sectors in the world.

The World Bank estimates that 355 000 people die of pesticide related illness every year<sup>3</sup>. "The aim of taking the Big 6 to the PPT is to give a voice to the otherwise voiceless victims of pesticides around the world who have suffered as a result of the relentless promotion of toxic poisons by these multinational companies."

3. World Bank, *World Development Report 2008: Agriculture for Development* (Washington, DC: World Bank, 2007)

Cases from the UK and Europe will focus on the loss of bees due to neonicotinoid pesticides developed and sold by Bayer; Graham White, a beekeeper said, “Bee losses in the UK and Europe have been catastrophic, with over a million colony deaths since 1993; there is a massive body of peer-reviewed scientific evidence from European universities, which indicate that neonicotinoids are having a lethal impact on bees and other pollinating insects. It is high time that the companies that manufacture these toxic pesticides are held to account for the damage they have done.”

Cases from the UK will also focus on the damage that has been done to the health of UK citizens by organophosphate (OP) pesticides, most notably sheep dips. In the UK many hundreds of individuals and their families have had their lives devastated by exposure to OP pesticides and have had no

recognition or compensation for their suffering. “We hope that by taking these companies to the PPT we will raise the issue of OP poisoning in the UK and bring to the attention of the public and politicians the suffering that has been caused” stated Elizabeth Sigmund of the Organophosphate Information Network.

During the course of the tribunal, Pesticide Action Network Europe as well as United Kingdom will invite witnesses including scientists, medical doctors, and lawyers, to prove the charges through expert testimony on pesticides, genetic engineering, intellectual property rights, and other subjects germane to the cases at hand. The PPT will also hear testimony from farmers, farm workers, beekeepers, mothers, young people, scientists and consumers from around the world. The defendants will be served and summoned to offer their perspectives and responses.

Also under indictment are the International Monetary Fund, World Bank, and World Trade Organisation; these entities are charged with facilitating corporate concentration of power through their policies and programs. Additionally, the governments of Switzerland, Germany, and the United States – the home nations of six defendant companies – have been indicted for colluding with, and failing to regulate, corporate power.



You can read the preliminary verdict on:  
[www.votewatch.eu/cx\\_vote\\_details.php?id\\_act=2312&lang=en](http://www.votewatch.eu/cx_vote_details.php?id_act=2312&lang=en)

## **Pesticide campaign Nature & Progrès Belgium**

Last September, after 35 years of promoting organic gardening and agriculture, Nature & Progrès Belgium decided to sniff out the stinking reality of pesticides. We have always declared that pesticides were unnecessary and harmful, but during that time their use in private homes has been increasing...

We learned at that time that one third of pesticides used in Belgium are used by amateurs! However, the same products are sold to members of the public and professionals, whereas only professionals are subject to use regulations (sprayers and storage) and only a few must be trained (sellers). How can you leave in the hands of inexperienced, untrained and misinformed amateurs some products whose toxicity toward living things is usually the first "quality"? We set ourselves an ambitious and long-term objective of banning sale of pesticides to the public. Nothing less!

To increase our knowledge of the sale and use of these products, we have mobilized our members to make careful observations of marketing methods of pesticides. Currently, our members are visiting retailers to survey practical sale aspects, presentation, packaging and labeling as well as retail staff knowledge of alternative methods of pest control. The information collected is transmitted to us and builds up the basis of a report on the danger that manufacturers of pesticides pose to the individual and their environment. We intend to highlight the impossibility to prevent accidents and contamination when individuals make use of these products with very high toxicity. The survey results in retail outlets will be announced at our annual organic fair in, to be held 3-5 September.

For more information visit: [www.natpro.be](http://www.natpro.be)  
and [www.valeriane.be](http://www.valeriane.be)



## **The Pesticide Reduction Program (PRP) of GLOBAL 2000**

In February 2002 GLOBAL2000, the Austrian Environment Protection Organisation, tested peppers from Spain and found pesticide residues much higher than the permitted legal limits. As a contribution for solving the general problem of pesticide residues in food, GLOBAL 2000 designed a program to alleviate the pesticide situation

for fruits and vegetables. Since 2003, this program is implemented in partnership with REWE International AG supermarkets in Austria.

The program focuses on a step by step reduction of residues of fruits and vegetables. Internal upper limits were set which are mainly based on the ADI (Acceptable Daily Intake) values for each pesticide and product. Besides compliance with MRL (Maximum Residue Level) and ARfD (Acute Reference Dose), suppliers and producers of fruit and vegetable have to fulfill rigorous PRP-limits, which are in most cases much lower than the legal upper limits. Furthermore, the so-called "cocktail-effect" is taken into account by assessing the combined effect of the pesticides, expressed by an additional internal limit, the "Sum of Exposure".

The goals of the PRP are:

A reduced pesticide burden in our resources:  
Water, soil and air.

Advantages for consumers: The additional level of quality control reduces the risk of consuming contaminated products.

Safety for delivery and sales persons: A clearly reduced risk of legal action or negative public relations caused by contaminated products.

Reduction of health risks for producers: Reduction of total exposure and careful selection of pest control methods used improves the working conditions in the fruit and vegetable production business.

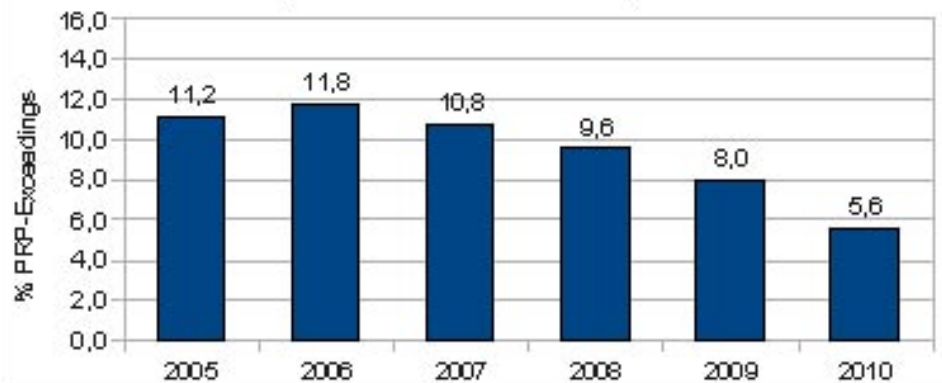
To achieve the aim of the PRP, the team of GLOBAL 2000 cooperates intensively with suppliers and producers and encourages alterna-

tive plant protection methods and optimisation and reduction of chemical pesticide use. GLOBAL 2000 also conducts practical field tests about the efficiency and practicability of natural pest and disease controlling methods.

The results of the regular pesticide-analyses show a marked reduction in the number of exceedances of the internal PRP-upper-limits in recent years (see graph). It has to be underlined that these internal limits are very stringent and in most cases much lower than the official upper limits (MRL).

The Pesticide Reduction Program is thus a successful way of providing consumers with residue-free fruits and vegetables and helping protect consumers health and the environment.

**Exceedings of PRP-internal limits, 2005-2010**



## ***SIXth edition of the Week for Alternatives to Pesticides by Generations Futures***

From 20 to 30 March 2011 the 6th annual Week for Alternatives to Pesticides took place, event initiated by a group of associations and coordinated by Future Generations (formerly MDRGF).

This Week is an opportunity for many organizations, communities, citizens or businesses to publicize their work by organizing activities to educate the public about issues related to synthetic chemical pesticides and promoting alternatives to their use. It was also the occasion to remind policy makers of the major issues surrounding these topics and their responsibilities and commitments, in particular during the Grenelle Environment (France's policy debate with citizens).

The balance of this year's Week is positive with 15 countries engaged, over 730 organizations and 230 shares were listed on the website of the campaign, an increase of 23% since 2010. Stakeholders have organized screenings and debates, lectures, visits to organic farms, workshops around the organic vegetable garden, shows, etc.. For 2011, symbolic steps to say "Yes to alternatives to pesticides" were organized all over France and Africa. The idea was to march in a festive and family event to show that many citizens are in favour of alternatives to pesticides.

One highlight of the 2011 Week in France has been the creation of the association Phyto-Victims group of occupational victims of pesticides.

The creation of this adventure began in January 2010. Future Generations and HEAL lifted the veil on the victims of pesticides in organizing a briefing and discussion at Ruffec (Poitou-Charentes), in collaboration with Paul Francis, a conventional farmer who was poisoned with a herbicide during the opening of the sprayer. The objective of this meeting was to bring together victims of pesticides in order to exchange and collect testimonies from people (farmers and individuals) sick or made ill due to pesticide exposure. This meeting was filmed by Marie Monique Robin, and is the subject of an early sequence of her new film "Our daily poison."

Following this meeting, everyone felt the need to continue. That is why a year later we decided we had to find ways to take action by coming together again and launching the association Phyto-Victims to help victims of occupational pesticide harm. The objectives are, among others, to inform the impact of pesticides to health professionals to assist their patients in providing legal advice and medical scientists, to identify the number of people suffering from diseases related to their professional activities but also help victims to change their practices and move towards more environmentally friendly alternatives. Given these objectives, the launch of the association during the Week for Alternatives to Pesticides was therefore quite natural and more than symbolic. The site dedicated to the association will soon be online:

[www.phyto-victimes.fr](http://www.phyto-victimes.fr)

For more information on pesticides, go to the site of Future Generations:

[www.generations-futures.fr](http://www.generations-futures.fr)

and on the website of the Week for Alternatives to Pesticides:

[www.semaine-sans-pesticides.com](http://www.semaine-sans-pesticides.com)



## **Week for Alternatives to Pesticides in Macedonia by MADE**

On 20 March 2011 the Association of Doctors for the Environment MADE – Kumanovo, Republic of Macedonia, organized a walk with posters for pesticides alternatives. Members of MADE took posters along the streets to show messages to the citizens which we meet during our walk stop us and ask what we are doing? We tell them about PAN – Europe, that MADE are part of PAN, about the aims of the Week without Pesticides, about organic food. The public show great interest and some joined MADE in their walk.

On 27 March MADE organized a meeting with health workers to give them short lessons about consequences of using pesticides and how they can be part of this global movement. With these events, MADE has successfully increased awareness about acute and chronic poisoning of pesticides.

## **From the 20th-30th of March 2011 the South of Belgium went Pesticide-Free! By Adalia**

For the 4th time The Pesticide-free Week was held all across Wallonia during the 10 first days of spring. A total of 106 events took place, inviting families, gardeners, and professionals to discover ways of replacing chemical pesticides. ADALIA, a non-profit organization, decided in 2008 to join the French initiative by coordinating their own campaign, funded by the Wallonian government.

Our goal is to draw people's attention all over the region to the dangers of using pesticides and especially to show practical ways to reduce their use. People could choose amongst a large variety of activities such as conferences, exhibitions, visits, guided walks, organic gardening tips, etc. ... organized by local public authorities, gardening stores, environmental organizations, or simply dedicated people to our cause.

The first step for someone to participate and organize an activity during the campaign is to contact us for help and then fill in a form on our website [www.semainesanspesticides.be](http://www.semainesanspesticides.be) (not yet

in English), after which their event shows up on the program and they receive free promotion material such as flyers and posters. Adalia also gives away information booklets warning about the dangers of using chemical pesticides and how to garden without them.

We organize our own events and collaborate with gardening stores willing to take part by hiring a student who will advise the shop's clients on which (ecological) product to choose. In this way we are able to inform people who are not particularly aware of the campaign. We promote the "Semaine Sans Pesticides" by contacting the press, the radio and the television and, since this year, by using other networks such as Facebook.



## ***Water pollution from agricultural pesticide use, joint project from Hungary and Slovakia***

Since EU accession water pollution came under stricter control from industry and from sewage, agriculture became the largest water polluter in the region. Clean Air Action Group from Hungary and Slovak NGO Centre for Sustainable Alternatives (CEPTA) started project AGROWATER (HUSK/0901/2.1.2/0076) supported by Hungary-Slovakia Cross-border Co-operation Programme 2007-2013.

The project is focused on good agriculture practice preventing water pollution, including water samples and analyses, as well as ecotoxicological analyses of soil taken from different farming practices – conventional, integrated and organic, then training and publishing different infomaterials. The aim of the project activities is to decrease water pollution coming from the agriculture sector.

There are four major routes through which pesticides reach the water: it may drift outside of the intended area when it is sprayed, it may percolate, or leach, through the soil, it may be carried to the water as runoff, or it may be spilled, for example accidentally or through neglect. They may also be carried to water by eroding soil <[http://en.wikipedia.org/wiki/Soil\\_erosion](http://en.wikipedia.org/wiki/Soil_erosion)> . Factors that affect a pesticide's ability to contaminate water include its water solubility <<http://en.wikipedia.org/wiki/Solubility>> , the distance from an application site to a body of water, weather, soil type, presence of a growing crop, and the method used to apply the chemical.

## ***Serious pollutions***

Every year, pesticides are possibly responsible for several dead fish. This pollution's origin is rarely known, some of them should be because of illegal disposal or using methods.

The measurements, and water services suggest that the drinking water is absolutely safe. This illusion has been lost at the end of 2010.

## ***Winter measurements in HUSK project, 2011***

The first round of Danube sample analyses took place in February 2011. 11 samples were taken in a two-week period from Heinburg through Bratislava to Dunaújváros, central Hungary. In February there is no actual use of pesticides, but surprisingly all samples contained pesticide residues, but below official limit values. We found residues of hazardous, persistent pesticides, including (2,4-D, alachlor) ingredients. One sample even contained 6 different residues, including several hazardous chemicals. 5 out of 11 samples contained alachlor – a substance banned in the EU for many years. Alachlor and 2,4-D are both potential carcinogen and endocrine disrupting substances. In this measurement other monitored pesticides were obsolete pesticides, no more in use.

## Summer samples, 2011

The second water sampling period took place between the 26th of May and the 21st of June; during the period of intensive herbicide use in agriculture. We took 31 samples in the Danube rivers-basin: 19 river, 4 lake and 8 drinking water samples in 28 spots – 5 samples from Slovakia and 26 from Hungary. The results were worrying, as we found high concentration of pesticides even banned pesticides in the samples and we found the same pesticides in a bit smaller concentration in the drinking water samples:

- All of the 31 samples contained pesticide residues. The most often identified substances were: acetochlor, metolachlor and phased out (banned) atrazine and trifluralin. Same sample were polluted with 4–5 different pesticides.

- Two drinking water samples from Budapest contained pesticide acetochlor above the 100 ng/l limit value (drinking water limit is 100 ng/l for each pesticides and 500 ng/l for all pesticides). One sample contained 221 and the other 173 ng/l acetochlor. Furthermore all except one of the 31 samples contained acetochlor. California EPA considers acetochlor as carcinogen and the EU as an endocrine disrupting compound.

- 7 out of the 31 samples including 4 drinking water samples contained banned herbicide atrazine. Atrazine is a highly hazardous substance, and it has been phased out in the EU several years ago. Studies showed that atrazine poses danger to human health and to the environment also there are some concerns regarding its carcinogenic effect. Beside the Hungarian drinking water standard for atrazine is 2 ng/l, some of the Hungarian drinking water samples contained atrazine above 20 ng/l.

- 20 out of the 31 samples were polluted with metolachlor, a substance classified as carcinogen category C by the US EPA.

- 7 samples contained trifluralin which also has been phased out from use in the EU's agriculture. We measured trifluralin 3 times above, EU's surface water maximum annual average, what is 30 ng/l for trifluralin. Trifluralin is also and EPA C carcinogen and it is on EU's endocrine disrupting list.

- More than half of the samples contained herbicide 2,4-D, which is classified by a possible carcinogen (2B) by the IARC.

- 5 samples contained diazinon. This substance should not be used in the EU and it also on the US TRI's developmental toxin list.

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[www.envitrend.hu](http://www.envitrend.hu)



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