

## PAN EUROPE SUMMER NEWSLETTER 2013

### Dear Newsletter Readers



Since our two last newsletters, our Winter one and the Flash one on the Pesticide Action Week -also included here – we have all been working a lot on the many ecological challenges within the future European regulation.

As you will read we continued to exchange with the European Institutions and inform the European media about the environmental and health issues linked to the CAP reform, the National Actions Plans, the Bees disappearance as well as the EDCs among other subjects. PAN as well as its 32 members have been very active this first half of the year. In addition, as you will read, a large part of them have been able to meet during our Annual General Meeting which was of course was the perfect occasion, we missed in the past years, to talk about the future challenges we will have to face all over Europe.

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We hope that this newsletter will be interesting for you and will show once again the need to take action for more sustainable agricultural practices instead of using pesticides. In particular you may see how to take action concerning Endocrine Disrupting Chemicals and Bees on our PAN Europe special websites.

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We would like to remind you that you may follow us on Facebook, on Twitter as well as become yourself an Individual Member if you want to support PAN Europe even more.

### PAN Europe Annual General Meeting 2013



#### PAN Europe AGM

The May 30 and 31 2013, PAN Europe welcomed representatives of its members to the PAN Europe Annual General Meeting 2013 in Brussels. The staff was very happy to organize this major internal event, especially as we had not been able to organise an annual meeting for the past several years. As much as today's technological tools help PAN Europe to collaborate with its members all over Europe virtually, it is always a pleasure to meet personally and enjoy some time together.

The AGM started with our General Assembly which fulfilled its administrative duties including the adoption of the work program or approving the budget. The most important vote held was the election of a new PAN Europe Board. Daniel Lesinsky (CEPTA, Slovakia) and Valentina Lukova (National Movement of Friends of the Earth, Bulgaria) who have been board members for many years decided to step aside. We thank them for their help and commitment. We are happy to say that Sandra Jen, Gergely Simon (both Individual Francois Veillerette (Générations Members), Futures, France) and Nick Mole (PAN UK) have been re-elected as members of the new board, which will also welcome three new members Nadia Bennich (Vivosano, Spain), Lusine Nalbandyan ( AWWHE) and Andrzej Nowakowski ( Individual Member). PAN Europe also welcomes two new PAN National Organisations: PAN Swiss which has just been created and PAN France - better known as Générations Futures.

After the General Assembly, an interesting group activity was planned. In fact, we organized a visit to Raucq Farm, a beautiful organic farm 70 km away from Brussels. To read more about this insightful visit, this also demonstrates that a farm can be both environmentally and economically sustainable, see the article below as well as our short video. It is crucial for those of us working in our offices working to advocate for more sustainable agricultural and land use practicesto go in the field and experience the everyday reality concerning agriculture practice first hand.

The day ended with delicious informal dinner in an organic restaurant in the centre of Brussels which allowed us to get to know each other better and brainstorm about future common projects.

The second day was reserved for workshops dedicated to providing our members with information on the crucial topics of the moment: bees, agriculture, chemicals, all of which are related when it comes to health and the environment. The morning was mostly dedicated to National Action Plans (see article). Prof. Orum of the University of Copenhagen's Institute of Food and Resources Economics was given the afternoon to give a presentation on pesticides targets and taxes in Denmark which provided much food for thought regarding pesticide taxation. The presentation and discussion provided the PAN Europe network with inspiration for our future work.



#### Visit to the Raucq Organic Farm

Our AGM led us to visit an organic farm in the Belgian province of Hainaut. Farmer Daniel Raucq and his wife used have his 45 ha farm dedicated to meat and milk production with Belgian Blue cows. Today, the farm is completely autonomous and organic, provides 3 full-time jobs, and Daniel, his wife and their son work fewer hours! A question environmentalists often ask is: why did he change and how did he do it?

After starting out farming in the early 80's, Raucq started intensifying his agricultural practice.In 1988, he realized that he and his wife spent many hours working on the farm with limited incomes and that they were highly dependent on fertilizers and pesticides. He then decided to diminish maize production and modified his grazing technique by reducing the size of the pasture parcels in order to increase their productivity. He gradually improved his grazing technique, restored permanent grasslands, sewed alfalfa, clover, and peas and in 1998, completely stopped maize production and progressively stopped pesticides and fertilizers use. In 2009, he converted to organic and moved up the value chain, starting to produce butter and cheese, which now make up an important proportion of his income.

In Raucq's case, changes were thus not motivated by the desire to diminish his impact on the environment but by the observation that conventional system led to more and more work and less income. Bit by bit, his growing expertise and the will to become autonomous naturally led him to organic practices.



We were impressed by the fact that he was able to replace soy imports and maize production (both crops require lots of fertilizers and pesticides) with crops much more suited to the Belgian landscape and climate such as alfalfa and peas. These plants need neither fertilizers nor pesticides the way maize does and are good for pollinators such asbees. Further, a study by Belgian NGO Nature&Progrès demonstrated that in comparison to other farms, Mr Raucq's farm relied very little on subsidies, produced far fewer greenhouse gas emissions, and provided better working conditions to the farmer, his family, and employees.

We finished the visit at the shop where the group emptied Mr Raucq's cheese stock!

For more information, see the study on the Raucq Farm written by Nature et Progrès (only in French for the moment, but soon to be translated in English) and www.pan-europe.info/index.php

## . AGRICULTURE

### The CAP reform will not be able to reduce EU's dependency on pesticides, but the battle is still only at the beginning

On the 25 of June 2013 the European Union agreed on the reform of the Common Agricultural Policy.

While the final agreement, depending on member states willingness to engage, do have a few opportunities for greening EU agriculture, PAN Europe secretariat estimates that it will take a Small revolution at national level to convert this agreement into an agricultural model able to rely less on chemical inputs.

Theoriginal proposal from the European Commission included the idea of encouraging farmers to take a more holistic approach to farming, and therefore apply the basic rule of integrated production, with the direct payments becoming conditional upon respecting 3 simple agronomic measures. And even though the original proposal did not propose crop rotation, but the main component: integrated pest management (IPM). This first idea was much more ambitious that what is now left, where the main component still is the idea of introducing ecological focus areas.

With the reform, all arable farmers above 15 hectares need to reserve 5 % of their land for Ecological Focus Areas (EFA) starting in 2015, which later might increase to 7%. But the problem from PAN Europe point of view is that there are loopholes allowing pesticides to be use on these EFAs. They seem to kill any idea of using buffer strips to attract natural predators, which could have been a way to start managing rather than killing all pests, in line with the principle of integrated production.

A list of EFA eligible areas has been agreed (e.g. fallow land, terraces, landscape features, buffer

strips, agro forestry, etc.), but it remains to be seen if the EU and/or member states will have the courage to set rules regarding where to introduce EFAs in order to, among other goals, show how best to integrate these into the actual production in line with the philosophy of integrated production.

As something positive, ministers and the European Parliament did agree that Member States will be obliged as part of the Farm advisory service (FAS) to give advises on the Water Framework Directive (WFD) and the Sustainable Use of Pesticides Directive (SUD).

Unfortunately, the Council and the European Parliament did not agree with the Commission's idea of introducing the SUD and the WFD into the so called cross compliance rules, conditions to comply with to receive direct payments. Instead a joint statement was elaborated, in an addendum 2 to the CAP agreement, stating:

'The Council and the European Parliament invite the Commission to monitor the transposition and the implementation by the Member States of Directive 2000/60/EC of 23 October 2000 establishing a framework for Community action in the field of water policy and Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides and, where appropriate, to come forward, once these Directives have been implemented in all Member States and the obligations directly applicable to farmers have been identified, with a legislative proposal amending this regulation with a view to including the relevant parts of these Directives in the system of cross-compliance."



National Action Plans: Only very few Member States are engaging in the EU challenge of reducing their use of pesticides as set in the Sustainable Use of Pesticides.

On the 20<sup>th</sup> of June 2013, PAN Europe sent a letter to Commissioner Borg questioning the seriousness that Member States have in implementing the Directive on Sustainable Use of pesticides. In July, we received an answer that our arguments will be discussed with the Member States. In fact, in the letter, PAN Europe identified a number of lacking points encouraging the European Commission to take action, so that we can finally start reducing EU dependency on external inputs.

Back in 2009, Member States agreed on an EU Directive on Sustainable Use of Pesticides (SUD) aiming at reducing the risks and impacts of pesticide use on human health and the environment and promoting the use of integrated pest management and of alternative approaches or techniques such as non-chemical alternatives to pesticides. The national implementation consists of converting the so-called SUD (Sustainable Use Directive) into national law by 2011, while 2012 developing National Action Plans (NAPs) fixing overall quantifiable objectives, targets and timetables and proposing specific actions.

So far, the majority of the Member States have converted the SUD into national law, while the NAPs from eight Member States – not taking into account Croatia - still need to be published on the European Commission homepage<sup>1</sup>, while at least one, the Dutch has been changed since delivery, and therefore need to be updated.

A first evaluation that PAN Europe has been doing among the NAPs currently available in English, while only very few Member States seem to have developed actual pesticide reduction plans.

Of the 12 NAPs currently available in English only very few ones have fixed reduction targets:

• Only one country, Denmark, has set overall quantifiable objective aiming at a 40% reduction in **use** from 2011 to 2015; • Two member states have fixed subobjectives, Czech Republic aiming at a 10% reduction in **residues** from domestic production from 2010 to 2020, while Lithuania aims at a 2 % reduction in overall **MRLs** levels from 2010 to 2017, and land use for **organic** to increase by up to 2% between now and 2017, while • None of the NAPs in Bulgaria, Cyprus, Finland, Slovenia, Slovakia, Hungary Malta, Spain, and the United Kingdom fix any quantifiable objective at all, even though the Directive is really clear on this point.



Instead of setting overall reduction targets a number of Member States are wrongly arguing they will reduce risk to human health and the environment by ensuring implementation of other existing EU legislations; for instance:



The Finnish NAP has an objective to ensure that Maximum Residue Levels in food are **respected** and to include feed



The Cypriot NAP has an objective to reduce the percentage of cases **exceeding** the Maximum Residue Limits, which should follow a declining trend so that until 26 November 2017 the percentage of exceeds will not exceed 3%, while



The Bulgarian NAP has an objective to ensure **compliance with** EU directives on drinking water, surface water and the water framework directive, and



The United Kingdom NAP has, as one of the overall objectives, to ensure that pesticide pollution of water does not result in the UK failing to **meet its objectives** under the Water Framework Directive.

This approach, which unfortunately is the same also when speaking about topics linked to agriculture and aerial spraying, is definitely wrong.

An effective compliance with the Sustainable Use Directive must go beyond what has already been fulfilled in other EU laws, such as the Drinking Water Directive (EU Directive 98/83) the Water Framework Directive (Dir. 2000/60), the maximum residue levels of pesticides in or on food as well as feed of plant and animal origin (Reg. 396/2005). Instead it must propose something more.

Among the more positive actions proposed, there is Member States willingness to ensure less use of hazardous pesticides in public areas (parks playgrounds, sports area, etc...), as for instance:



Cyprus: from 30/6/13 ban on use in public parks, schools + in water bodies +conservation areas

Bulgaria: no use of hazard pesticides in sensitive areas, protected areas, pasture and meadows





Netherlands: ban on use of herbicide in public areas (new NAP)

Lithuania: Ban of use close to educational and healthcare facilities, use in sport fields limited to low risk substances, ban in protected wetland reserves, soil reserves, animal, bird and fish reserves as well as in karst area land falling under group III and IV

So, in short, the SUD has so far helped to get several actors into one room, and has helped to get focused on the many aspects of pesticides; though, there is still a long way to go before seeing SUD actually being implemented.



### The new EU common Plant Health regime: Lack of environmental as well as public health considerations

On the 6<sup>th</sup> of May 2013, the European Commission adopted "a package of measures to strengthen the enforcement of health and safety standards for the whole agro-food chain" and, as part of this package, a proposal for an updated EC common Plant Health regime.

Of course PAN Europe welcomed that Member States, aspartofthenewplanthealthreformproposal, will have to establish proper survey programmes. Nevertheless PAN Europe believes it has been a missed opportunity to highlight what kind of actions might be done for prevention. Therefore the reform proposal fails in targeting environmental and public health concerns without any proposals on what can be done to ensure reduced pesticide use as well as the alternatives programme.

In fact, the new plant health regulation proposal aims to ensure the discovery and eradication of "new" pests at an early stage to reduce the possibility of their spreading. Funding has been found in the new EU budget to both ensure new requirements such as national survey programmes and compensate operators for the value of destroyed plant subject to eradication plans. While PAN Europe welcomes the idea of national survey programmes, we also call for the complete integration of these into the measures already foreseen in the Sustainable Use Directive(1) We further call for a proper national pest and pesticide surveillance system including a system for monitoring, decision supporting systems, the establishment of sufficient number of traps, establishment of farm advisory systems to advise on alternatives, and, last but not least, establishment of an expert panel for biological control.

Furthermore, PAN Europe proposes that rather than compensating operators for the value of destroyed plant – which could mean spraying a lot of hazardous pesticides - it makes more sense to transfer part of this extra funding to the agroenvironmental scheme of the Common Agricultural Policy, in order to encourage farmers to develop more resilient systems, less vulnerable to potential pest attack in the first place. It should at the very least make sure that the level of compensation offered to the farmer is directly proportional with the number of preventive measures that the farmer has taken to prevent the pest from coming and spreading.

#### Link to the proposal:

http://ec.europa.eu/dgs/health consumer/pressroom/docs/cs-plant-health en.pdf

(1) Directive 2009/128/EC of 21 October 2009 specifies in article 14: "makes it mandatory for all EU farmers to apply Integrated Pest Management as from 2014", and states "Member states shall take all necessary measures to promote low pesticide-input pest

# 2. BEES

#### **Conference: Farming without neonicotinoids to protect bees**

On March 22, PAN Europe, joined with the European Beekeeping Coordination and the Greens (MEP Bart Staes), and organized a conference to question the use of neonicotinoids and pesticides in general in agriculture. Independent researchers, farmers, and an alternative producer shared their knowledge on this issue.

The speakers of the conference have confirmed the fact that coating seeds with neonicotinoids was not necessary, even in conventional agricultural system. Neonicotinoids seed coating is used by farmers as insurance in the event that a pest could damage their crops but in the vast majority of the cases, no economic damage would have taken place in the absence of neonicotinoids treatment.

The most famous example of such an industrybased trickery is the use of neonicotinoids seed coating in maize crops to fight *Diabrotica virgifera*. When Italy banned its use, industry claimed such a measure would lead to farmers' bankruptcy. On the contrary, it has been scientifically proven that simple agronomic techniques such as crop rotation broke the cycle of the pest and protected crops. After the ban, maize productivity and production did not decrease in Italy. Furthermore, even in countries where crop rotation is not possible due to very intensive monoculture schemes, alternatives such as nematodes exist and are more efficient than the use of neonicotinoids to fight this pest.

It was highlighted during the conference that the fact that farmers keep using these highly beetoxic insecticides, despite the fact that they are not necessary is due to the lack of independent advice provided. In many countries, farmers are highly dependent on pesticide industry information and marketing.

The systematic use of pesticides, especially with seed coating technology, impedes the development of integrated pest management (IPM) and a shift in farmers' mentality. CAP reform due to be enforced in 2014 obliges farmers to deal with pests using an IPM approach. PAN Europe regrets that the European Commission, European Parliament, and Member States did not go further and forbid seed coating technology as it is in total contradiction with the spirit of IPM which manages pests to keep them under an economic threshold. It is utopic to try to kill them all.

Martin Dermine, PAN Europe

For more information, please see: www.pan-europe.info/Activities/Conferences/130322.html As well as; on our bees campaign, on www.savehoneybees.info



#### The Commission moves to protect bees, but more effort is needed

2013 is a bee-friendly year for DG Health and consumers. In a matter of a few months, DG Sanco moved to partially ban 3 neonicotinoids harmful to bees as well as fipronil. This historic move to protect bees is an important step forward in the protection of the environment, bees being just the tip of the iceberg.

Beekeepers, environmentalists, and scientists applauded the Commission's decision to follow EFSA's opinion on the high risk posed by these insecticides to bees. The Commission has imposed a partial ban on neonicotinoids and fipronil in Member States (MSs). The Commission didn't have a choice, EFSA's conclusions on the risk posed by these substances to bees are clear: they pose a high risk to bees due to their high toxicity at acute as well as chronic and sub lethal levels. EFSA also identified an important number of data gaps that did not permit a conclusion of an absence of harmful effects to bees.

Like others, after nearly 20 years of use of these bee-killer insecticides, we welcomed the courageous move of the Commission to protect bees.The Commission has been under a great deal of pressure from several influent Member States (Germany, UK) and by the industry. Nevertheless, PAN-Europe criticizes the fact that the Commission has chosen to follow EFSA's opinion on certain aspects (honey bees) but not on others (risk to soil-nesting bumblebees or solitary bees). Indeed, even though the ban is positive step forward for the environment, it does not apply to all crops. For instance, it will still be allowed for use on winter grains. This will lead to soil, surface, and ground water contamination. It has been scientifically proven that if a bee-attractive crop is grown the following year on contaminated soil, nectar and pollen will contain neonicotinoids residues. Halflifes of neonicotinoids can be over 10 years under certain crop conditions!

For this reason, PAN-Europe, alongside French rural organisation Confédération Paysanne, has requested that the European Commission to conduct an internal review in order to take into account all aspects of neonicotinoids' toxicity to protect all bees and pollinators, not only honey bees. If the Commission does not accept our request (to make it a long-term full ban), we plan to challenge the regulation before the European Court of Justice.

# 3. CHEMICALS

## Endocrine Disrupting Chemicals: a long way to go before effective regulation

In the last months, the Endocrine Disrupting Chemicals (EDCs) definition has been a very important topic in Brussels Agenda and of course PAN Europe one.

Just before the beginning of the Pesticide Action Week, PAN Europe co-organized with HEAL on the 19<sup>th</sup> of March a Breakfast Press Briefing to give some more precise information to journalists on EDCs issues as well as challenges concerning the future EU regulation. It has also been the occasion to film a short Call for Action on EDCs (watch it on www.disruptingfood.info).

The day after, the 20<sup>th</sup> of March the European Food Authority EFSA released is opinion on endocrine disruption. Unfortunately this has been a big disappointment for PAN Europe.

In fact, EFSA mainly adds confusion to the debate by introducing a new category of substances: the "Endocrine Active Substances" (EAS). The legal text agreed in the pesticide Regulation 1107/2009, doesn't mention EAS and aims to ban pesticides with "Endocrine disrupting properties which may cause adverse effects". In reality, EFSA didn't propose criteria for endocrine disrupting properties and neither for adversity.

What they did is adding elements, which are not part of the Pesticide Regulation at all, mainly industry-developed ideas on mode-of-action, human relevance, secondary effects. Furthermore EFSA tries to undermine established EU rules by insisting on traditional risk assessment while there is a democratic decision to rule endocrines "hazard" based, meaning no exposure is allowed to humans and the environment. By trying to change the rules EFSA also disregards science; the Endocrine Society, the professional organisations for endocrinologists, agreeing with the legal text, states that "having endocrine disrupting properties itself is a reliable predictor of adverse outcome".

From PAN Europe point of view, introduction of a new category of Endocrine Active Substances (EAS) by EFSA makes no sense. Legal text defines endocrine disrupting properties, while DG Environment is discussing endocrine disruptors. This will only add confusion and is a counterproductive move from EFSA. EFSA should in fact define the legal text, within their remit of food, and develop criteria for chemicals with endocrine disrupting properties, but they didn't.

EFSA puts a lot of emphasis on an alleged capacity of the body to balance endocrine disruption and likes to exclude (minor) endocrine fluctuations for instance. Since reversibility is pure speculation this idea would open the door for industry to claim on a big scale effects are reversible. The EFSA idea is also a very dangerous one since the most critical effects will be on the unborn where reversibility is very unlikely in the developing organism. EFSA however chooses to ignore this most crucial element in promoting the 'reversibility' theory.

While not developing criteria for the legal text, EFSA adds elements such as mode-of-action, human relevance and critical effect, which are no part of the legal text and serve to disqualify an observed adverse outcome.

Nevertheless PAN saw a few good points: attention for effects of endocrines disrupting chemicals during critical points of development and attention for effects of mixtures. In fact EFSA proposes more study on these points.

Therefore, because of this very disappointing opinion PAN Europe decided to write a letter to Commissioner Borg to explain our arguments and position. Position that is of course very different from industries one as it has been clearly described by the journalist Henriette Jacobsen in her article *Pesticide industry and NGO clash over EFSA definition of endocrine disruptors.* 

The answer we received a few weeks later did not reassure us concerning the future of the European Union EDCs definition and future application in the pesticides legislation. In fact, "in its reply Commissioner Borg writes that EFSA has endorsed the definition of endocrine disruptors recognised at international level by the World Health Organization (WHO). Therefore, the Commission disagrees that EFSA is not respecting EU law when setting the criteria for endocrine-disrupting properties. "– from Euractiv Article Commission backs EFSA's definition of endocrine-disrupting chemicals where you may read more details on the issue.-

### Raise awareness on EDCs.

In parallel of this active presence in the Brussels EDCs debate; PAN Europe together with its members and partners has been continuing to raise consumers' awareness on the EDCs topic.

Consumer Guide continues to be more and more present in Europe.

Thanks to our Polish Member *Spoleczny Instytut Ekologiczny* the Disrupting Food Consumer Guide has been translated in Polish and always in collaboration with national organisations it will be soon available in Italian and Portuguese.

In addition, we will publish soon a Consumer Guide partly update. Don't hesitate to check it out in a few weeks on www.disruptingfood.info

#### **EXPERT Reports**

Secondly, together with our French Member Générations Futures, we conducted several EXPPERT **reports** in order to show the urgency of a strong preventive action in the endocrine disrupting chemicals area.

In addition, these results show also the need to collaborate with supermarkets in order to provide them with expertise allowing them to offer safer food to their consumers. PAN Europe has been working on this topic and we hope that we will be able to let you know more in the future about this campaign concerning retailers. For the moment, we would like to tell you that as consumers you may also take action sending a letter to your food retailers (here are some templates).

#### EDCs Free Europe Campaign

Finally, we also took part with more than 25 partners in the EDCs Free Europe Campaign. This call for action has been launched by an informal coalition including trade unions, public health and healthcare professionals, advocates for cancer prevention, environmentalists and women's groups.

The campaign call for action's demands is:

- A revamp of all relevant EU laws to reduce our exposure to EDCs.
- Set out a timetable to capture all sources of EDC exposure "across the board".
- Respond more swiftly to early warning signals.
- Enhance public awareness of EDCs.

You may become a campaign supporter here.

So, as you see PAN Europe has still a lot of work to do concerning EDCs, both to get good regulation to protect the environment and the European citizens and inform more and more consumers about the potential risks concerning EDCs. But we would like to remind you that it is only you, you, consumersactors, also take action, that we will be able to have a better future for our children, with less EDCs on their food and in many other products.



#### Brand new pesticides allowed on the market put birds at risk

Two new pesticides for seed treatment, Sedexane, a Syngenta fungicide for wheat, and Penflufen, a Bayer fungicide for potatoes, both show high risks for birds according to the EFSA opinions<sup>2</sup>,<sup>3</sup>. Health DG SANCO however proposes to approve these pesticides in the Standing Committee on 17th of May. A third pesticide with high risks for birds, Methiocarb, a Bayer insecticide for oil rape seed, has already been on the market since 2007 through a derogation allowing them to show that the high risks for birds aren't high. They failed to do so, but Methiocarb is still poised for continued market access. PAN Europe identified around 40 pesticides showing a high risk to birds according to the different EFSA opinions<sup>4</sup>, and regardless they were all approved in the pesticide Standing Committee in recent years. A landmark Europe-wide study Flavia Geiger et al.<sup>5</sup> investigated the negative influences of agricultural intensification on birds and showed that of the 13 components of intensification they measured, use of insecticides and fungicides had the largest negative effects. PAN Europe has sent out messages to all national representatives to vote for a ban on these three pesticides to help protect the birdsof Europe.

Two new substances also show carcinogenic properties in animal tests according to EFSA. Penflufen is linked to ovary and liver cancers in rats and with similar effects in mice. Additionally Penflufen delays sexual maturation and causes malformations in the foetus. Sedexane is classified by EFSA as "suspected of causing cancer'6. Animal tests show Sedexane is a multipotent carcinogen acting on liver, thyroid, and uterus.

PAN Europe concludes that even new substances such as Penflufen and Sedexane poses huge health risks like cancer. Brussels risk assessments however classified these risks as 'acceptable' based on questionable risk assessment tools. 'Historical control data' is such a flawed tool. It is an industry invention and when proper controls in animal testing fail, this tool creates a second chance for industry through the use of historical data. Nobody in academic science uses historical control data. The tool 'human relevance' (enabling disqualification of adverse effects in test animals) -again developed by industry- is even worse and lacks experimental data. It is purely speculation of

 European Food Safety Authority; Conclusion on the peer review of the pesticide risk assessment of theactive substance sedaxane.EFSA Journal 2012;10(7):2823. [76 pp.] doi:10.2903/j.efsa.2012.2823. Available online: www.efsa.europa.eu/efsajournal
Conclusion on the peer review of the pesticide risk assessment of the active substance penflufen. EFSA Journal 2012;10(8):2860. [74 pp.] doi:10.2903/j.efsa.2012.2860. Available online: www.efsa.europa.eu/efsajournal
Examples of these group of 40 are (based on EFSA opinions for these pesticides): ethoprofos, chlorpyrifos, hymexazole, pyridaben, oryzalin, oxamyl, glufosinate, triticonazole, tebufenpyrad, phosmet, fipronil, dazomet, cypermethrin, aclonifen, epoxiconazole, imidacloprid, sulcotrion, dichlroprop-P, dimethoate, chlormequat, tebuconazole, fenpropadin, prochloraz, triclopyr, captan, folpet, mancozeb, maneb, abamectine

5. Flavia Geiger, Jan Bengtsson, Frank Berendse, Wolfgang W.Weisser, Mark Emmerson, Manuel B.Morales, Piotr Ceryngier, Jaan Liira, Teja Tscharntke, Camilla Winqvist, Sönke Eggers, Riccardo Bommarco, Tomas Pa<sup>¬</sup>rt, Vincent Bretagnolle, Manuel Plantegenest, Lars W.Clement, Christopher Dennis, Catherine Palmer, Juan J.Onate, Irene Guerrero, Violetta Hawro, Tsipe Aavik, Carsten Thies, Andreas Flohre, Sebastian Hanke, Christina Fischer, Paul W.Goedhart, Pablo Inchausti, Persistent negative effects of pesticides on biodiversity and biological control potential on European farmland, Basic and Applied Ecology 11 (2010) 97[]105 6. European Food Safety Authority; Conclusion on the peer review of the pesticide risk assessment of the active substance sedaxane. EFSA Journal 2013;11(1):3057. [76 pp.] doi:10.2903/j.efsa.2013.3057. Available online: www.efsa.europa.eu/efsajournal those performing the assessment. European risk assessment should be revised and based purely on scientific methods".

Chemicals and cancer, how achieve an effective implementation of the rules.

Cancer incidence is rising all over Europe. A recently published WHO report (State of the science on endocrine disrupting chemicals) emphasized this fact yet again, with an emphasis on hormonerelated cancers. The increased incidence is likely to be related to altered environmental conditions of the human being as genetic factors cannot be changed. A combination of factors such as lifestyle and changing food habits is expected to be the cause of the rise, while the exposure to synthetic substances also likely plays an important role. This follows from the continuous publication of scientific studies that establish a link between chemicals and cancer risk.

The cancer risk of chemicals landed on the political agenda long ago. The starting point is the minimization of exposure (ALARA) and banning substances. There are generally also good EU regulations developed based on these principles. However, we have noticed that in the interpretation of these regulations (risk analysis), the rules are applied differently and carcinogens considered a 'normal' chemical and are still acceptable for use or under certain restrictions. The chemical industry has also chosen carcinogens as a major lobby priority and has invested greatly in methods that circumvent the rules or achieve the 'acceptable' outcome. It is dubious methods include 'human relevance', 'historical control data', 'Toxicological threshold of concern', 'margin of exposure' etc. Eventually, all these methods are applied at EU level 'comitology', avery opaque process where the actual decisions on admission to the market are taken.

PAN Europe follows the pesticide policy DG SANCO closely and we observe that by applying these methods to almost all pesticides (or degradation products) where animal studies show that cancer risk, the test ultimately finds that the exposure is acceptable or refutes the test's relevance. We have spoken to many independent experts who confirm that these methods are incorrect, and they assure us that these methods would never be applied by an independent academic researcher. DG SANCO / EFSA should be critically evaluated for a series of pesticides and the results from animal research assessed again. The results of this research should enable to show the discrepancy between good regulations and put poor execution on the political agenda.

Forget about Italian pasta.

25 Million kg of a very hazardous pesticide, the soil fumigant Metam Sodium, is released in the European environment every year based on an exception created by DG SANCO and even the EU Member States that have banned Metam still allow its application as "essential use". Italy is by far the biggest user of this pesticide with 11 Million kg used in 2011 in vegetables and fruit<sup>7</sup>. In practice, mandatory restrictions on the use were largely not applied by Member States. This is the conclusion of a new report of PAN Europe (PAN report metam 2011), evaluating the use of this loophole in 2011. Metam is used to keep monocultures in place and to serve outdated farming practices without proper crop rotations. This is in contrast with the EU Directive for the Sustainable Use of pesticides (2009/128/EC) as well as the spirit of Common Agricultural Policy (CAP) reform to promote good agricultural practices.

The use of Metam causes severe air pollution and endangers residents. Evidence has shown that Metam poses risks of cancer and other harmful effects for the unborn<sup>8</sup>. Furthermore, metam and the by-products left after its decomposition kill soil organisms like earthworms, pollute groundwater, and pose a high risk for birds and mammals, and a risk on pollution by long-range transport<sup>9</sup>. Fifteen EU Member states, including France, Spain, Italy, the Netherlands and Portugal, use this derogation and do not seem to care about its implications for sustainable agriculture. The fact that the 12 other Member states do not need Metam Sodium, clearly puts the need of this derogation as "essential use" into question.

The restrictions of the "essential use" derogation these MSs imposed on themselves to protect people and the environment against the risks of Metam were largely not applied in practice, as shown in the survey of PAN-Europe (see MS overview tables in this report). The obligations to draw up an Action Plan in order to phase out use of Metam were not fulfilled and the expressed intent of phasing out Metam remained just a theory since the use was generally at the same level as in 2010. Required relabelling and measures to protect people and the environment were not imposed or not reported. In 2012, EU Member States and DG SANCO managed to block the steps towards sustainable agricultural practices even further, by reversing their decision to ban Metam, giving it full approval until 2022. MSs ignored EFSA risk assessment and Metam's risks to citizens and to groundwater, voting to widen its market access.

7. Use is reported in rice, lettuce and like, tomatoes, peppers, aubergines, cucurbits, carrots, bulb & stem vegetables, potatoes, tobacco; replanting vines & orchards, flowers

<sup>8.</sup> Conclusion on the peer review of the pesticide risk assessment of the active substance metam, European Food Safety Authority, EFSA Journal 2011;9(9):2334

<sup>9.</sup> Conclusion regarding the peer review of the pesticide risk assessment of the active substance metam, EFSA Scientific Report (2008) 203, 1-97



#### ILSI's 'human relevance' tool

Industry lobby club ILSI (Meek/Syngenta, 2003<sup>10</sup>) have developed a risk assessment tool based on existing practice in the US. The intention of the tool is to disregard adverse effects observed in (animal) studies and to qualify them irrelevant for humans. This focus on alleged "false positives" by industry is of course no surprise, given their mission of cost reduction and unlimited market access. It is however a surprise that this industry tool made it to the WHO<sup>11</sup>. This could only happen

when the same people involved in developing the industry tool, managed to infiltrate the WHO working group -posing as academics or civil servants (Bette Meek, Alan Boobis<sup>12</sup>, Joseph Schlatter). As proudly they acknowledge,<sup>13</sup> they state it is the "same framework".

A peer-review conducted on this WHO/IPCS framework<sup>14</sup> however shows that the framework has many shortcomings and is simply not operational. Science declined to use it in practice and for now it is mainly based on the shaky ground of assumptions and speculation.

Shortcomings are (among others):

• The assessment is based on expert judgement ('plausibility could reasonably be excluded'), and will, depending on the knowledge and judgement of the persons involved, have a different outcome; the framework is not standardised and decisions subjective

• The potential for chemical effects to act additively with background exposures creates extra uncertainty and this is disregarded by the IPCS/WHOtool

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• The tool disregards multiple MOA as well as MOA that function in an interactive manner; the assumption in the IPCS/WHO-tool that MOA are mutually exclusive has no scientific basis; a system biology approach to the chemical's toxicology, the entire physiology of cell, organ, and organism should be chosen instead

• The level of evidence needed to establish reasonable exclusion is not specified (extent of quantitative differences for instance) • The lack of knowledge of the known causes of human diseases and makes it generally impossible to use the tool and base it on experimental data

the contributing modes would give a better picture of adverse outcomes including across duration of exposure, life stages, developmental events, disease status, and ranges of susceptibility; the IPCS/WHOtool's mono-focus is therefore inadequate

A more complete picture of

 How MOA-based cross-talkwithdifferent outcomes should be used in regulation remains unclear

10. Meek, M. E., Bucher, J. R., Cohen, S. M., Dellarco, V., Hill, R. N., Lehman-McKeeman, L. D., Longfellow, D. G., Pastoor, T., Seed, J., and Patton, D. E. 2003. A framework for human relevance analysis of information on carcinogenic modes of action.Crit. Rev. Toxicol33:591–653.

11. Boobis, A. R., Cohen, S. M., Dellarco, V., McGregor, D., Meek, M. E., Vickers, C., Willcocks, D., and Farland, W. 2006. IPCS framework for analyzing the relevance of a cancer mode of action for humans.Crit. Rev. Toxicol. 36:781–792. 12. See background Boobis and Schlatter, PAN report on TTC

13. Journal of Toxicology and Environmental Health, Part B: Critical Reviews, Re: Guyton, Kathryn Z., Barone, Stanley, Jr., Brown, Rebecca C., Euling, Susan Y., Jinot, Jennifer, Makris, Susan (2008). Mode of Action Frameworks: A Critical Analysis. Journal of Toxicology and Environmental Health, Part B, 11(1): 16–31

Journal of Toxicology and Environmental Health, Part B, 11(1): 16–31 14. Journal of Toxicology and Environmental Health, Part B: Critical Reviews Mode of Action Frameworks: A Critical Analysis Kathryn Z. Guyton, Stanley Barone Jr., Rebecca C. Brown, Susan Y. Euling, Jennifer Jinot& Susan Makris.



## The European Food Authority EFSA falsely claims that"pesticide residues pose no long-term risk to humans"

Food Authority EFSA claims in their recently released 2010-pesticides residue European monitoring report<sup>15</sup> that pesticide residues in food pose no long-term risks to humans. PAN Europe feels this claim is totally unjustified since EFSA doesn't calculate the numerous mixtures of pesticides in the food sold in European shops and assumes people are exposed to only one single pesticide in their entire life. However, about half of our food contains pesticide residues and more than 26% of all vegetables and fruit sold even more than one pesticide (see Figure below, based on EFSA data). On a daily basis, European consumers will eat dozens of different pesticides. The pollution in some products is very high; in one sample of food one can find up to 26 pesticide residues. Calculating the risk just based on one pesticide makes no sense and is unscientific. The EFSA claim should therefore be abandoned since it creates a false feeling of safety.



In general the pollution of European food with pesticide residues remains at very high levels and there has been no improvement visible the past few years. Not only are multiple residues at a historical high level, but the percentage of vegetables and fruit without detectable pesticides have also decreased. This percentage in 2010 (55%) went down 2, 5% compared to 2009 and even 10% compared to 10 years ago (see Figure below, based on EFSA data).



Also the EFSA claim that the compliance rate remains high is misleading. In 2009 the standards for pesticide residues were relaxed on a massive scale, 10, and 100 up to 1000 x. Therefore the high compliance rate is artificial and has nothing to do with better achievement.

15. www.efsa.europa.eu/en/press/news/130312.htm?utm\_source=homepage&utm\_medium=infocus&utm\_ca mpaign=pesticideresidues



## THE SILENT TAKEOVER: Dutch Wageningen University moves to sell their independence to industry

An employee of German chemical multinational BASF, Mr. Bernhard van Ravenzwaay, has officially obtained a professor post at the Dutch agricultural university of Wageningen<sup>16</sup> in exchange for BASFfunding. Since he joined BASF, Mr. Van Ravenzwaay has a track record of studies published with a favourable outcome for industry. By acquiring a professor post in university, BASF will try to buy credibility for the views of industry, esp. cost reduction by substituting animal testing by statistics such as TTC<sup>17</sup>. Similar 'unhealthy relations' have been seen with a range of joint programmes with industry at Wageningen University such as 'Green genetics' (Bayer, Syngenta<sup>18</sup>), with another group of Wageningen University (Alterra) where researchers (Theo Brock, Paul van den Brink) showed pesticide industry methods to relax water standards and Bayer and Syngenta partly paid for a professor chair at Wageningen for Paul van den Brink in 2008<sup>19</sup>. University employee Blacquière was supported by Bayer and Syngenta<sup>20</sup> and (now) as one of their supporters, claims that the -just banned- neonicotinoids are not harmful to bees. Toxicology professor Yvonne Rietjens is another example of someone having close ties to industry<sup>21</sup> like Nestle and BASF. Not coincidentally, several of these Wageningen university personnel (Brock, Rietjens, van den Brink) act in international institutes such as EFSA and SETAC to sell their ideas.

Mr. Van Ravenzwaay, after being an employee of the German cancer institute, started his career at BASF in the mid-90s. Reading his published studies,<sup>22</sup> it is clear that the outcomes of his studies since that time are all favourable to industry and have a certain spin towards the industry's agenda. In his studies on the BASF-herbicide MCPA he argues that safe use is possible. Van Ravenzwaay also published a study on the BASF fungicide Vinclozolin<sup>23</sup>, saying it is safe at low dose, while EU banned the substance in 2006 because of severe reprotoxic effects over several generations. More recently Van Ravenzwaay started defending industry-babies such as TTC (Threshold of Toxicological Concern<sup>24</sup>), substituting (expensive) experimental studies by calculations, exactly the topic of his professor postat Wageningen University.



- 16. Seat on "Innovative approaches to reduce animal testing", www.wageningenur.nl/nl/agenda-wageningen-ur.htm 17. PAN report on TTC
- 18. Profundo report 2011, www.google.nl/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CC4QFjAA&url=http%3A%2 F%2Fzembla.vara.nl%2Ffileadmin%2Fuploads%2FVARA%2Fbe\_users%2Fdocuments%2Ftv%2Fpip%2Fzembla%2F2011%2FMoor d\_op\_de\_honingbij%2Ffinanciele\_banden\_wageningen\_ur\_bedrijfsleven.pdf&ei=MOB6UZjgD8jAOJWegKgE&usg=AFQjCNGKXP zP3e3RuRWkz2CgxfYQtGo3yA&bvm=bv.45645796,d.ZWU
- 19. Vrij Nederland, NL magazine, 28-11-12.
- 20. Vrij Nederland, NL magazine, 28-11-12
- 21. https://ess.efsa.europa.eu/doi/?wicket:interface=:0:1:::
- 22. 48 studies are shown on on-line search machine 'Science Direct'.
- 23. J. Hellwig, B. van Ravenzwaay, M. Mayer, and C. Gembardt, Pre- and Postnatal Oral Toxicity of Vinclozolin in Wistar and Long-Evans Rats, Regulatory Toxicology and Pharmacology 32, 42–50 (2000)

24. B. van Ravenzwaay, M. Dammann, R. Buesen, B. Flick, S. Schneider, The threshold of toxicological concern for prenatal developmental toxicity in rabbits and comparison to TTC values in rats, Regulatory Toxicology and Pharmacology 64 (2012) 1–8

## FROM OUR 5. NETWORK



A few numbers concerning the event:

Nearly 1000 events were organized; mostly in France but also in 16 other countries: Europe: France, Belgium, Germany, Spain, Switzerland, Luxembourg, and Turkey. Africa: Morocco, Senegal, Burkina Faso, Uganda, Mali, Togo, Benin, Congo and elsewhere: Pakistan, Malaysia **35** national and international partners including 13 new partners this year, therefore involving new actors on this issue that concerns everyone: Association of Mayors of France, Slow Food, Greenpeace, Confédération Paysanne, the School and Nature Network... More than **400 partners** *in France* have taken part with new actors such as Rural Family Houses, tourist offices, regional parks...

Hundreds of articles in the local press and on the Net as well as French National TV news.

PESTICIDES ACTION WEEK Great success for the 8th edition of the Pesticide Action Week... see you for the 9th edition in 2014!

This year, the Pesticide Action Week was a great success, confirming the rise of this event that is becoming increasingly important in the public agenda, for the journalists as well as the political and economic decisionmakers.

Launched in 2006 by the French Organisation Générations Futures and ACAP - a group of 170 organizations *Citizen Action for Alternative to Pesticides*- the Pesticide Action Week is now supported by 35 national and international organisations, with 13 new partners this year.

Since conception in 2006, the event is coordinated by the Organisation Générations Futures, which specializesin pesticides issues.

During the first 10 days of spring, the public is invited to inform themselves about the risks liked to pesticides for both the environment and their health as well as on the alternatives to these products. This is done via hundreds of events throughout France and in more and more countries in the world.

Finally, with few resources, but a lot of motivation and effort bringing nearly 40 national structures and hundreds of local partners together, Générations Futures has coordinated a major and unique event in the world. In fact, the event has grown every year including in several countries abroad where we also noticed a strong call for international expansion.



#### A week that touched the minds

In addition, this week was an opportunity in France to:

- Start a postcard campaign "Pesticides Alert!"targeting the Ministers of Agriculture and Health for a drastic reduction in use of pesticides and the protection of victims of the chemical industry.<sup>25</sup>
- Publish a call alerting **85 doctors** from Limousin on the dangers of pesticides.<sup>26</sup>
- Publish an unprecedented investigation concerning the potential exposure of children and pregnant women with suspected endocrine disrupting pesticides in food and non-food channel (Survey EXPPERT 1).<sup>27</sup>
- Launch a website **www.zones-in-pesticides. fr** inviting everyone to show a pesticide-free area on a map of France. Nearly 2,000 areas have already been identified.
- Launch a **Politicians Club** (Deputies, Senators, Mayors ...) committed for Alternatives to Pesticides, organizing an organic breakfast in the French Parliament.<sup>28</sup>

And hundreds of events throughout France with regions particularly active (Alsace, Brittany, the Eastern Pyrenees ...) with natural gardening workshops, film screenings, lectures, educational animations, training, equipment demonstrations, sitevisits, organicmeals, exhibitions, performances, information stands, communication campaigns ....

This year was again a great success and an event which is highly useful to demonstrate that we can and should do without pesticides.

You may find the detailed report and some photos here:

www.semaine-sans-pesticides.fr/non-classe/unebelle-moisson-darticles-passages-radio-et-telepour-cette-8eme-edition/

Nadine Lauvergeat, Générations Futures

25. www.semaine-sans-pesticides.fr/non-classe/alerte-aux-pesticides-les-cartes-petitions-a-diffuser-et-faire-signer/

- 26. www.semaine-sans-pesticides.fr/non-classe/alerte-aux-pesticides-lancee-par-85-medecins-du-limousin/
- 27. www.generations-futures.fr/pesticides/etude-exppert-1-exposition-aux-pesticides-perturbateurs-
- endocriniens/

28. www.comiteeluspesticides.fr/

### The Belgian Pesticide Action Week

The sixth Pesticide-Free Week was also held in Belgium from 20 to 30 March 2013. It was timed to coincide with "Alternatives to pesticides week" organised mainly in France. Since 2008 Adalia, a non-profit association has coordinated the campaign in Wallonia (Belgium).

On this occasion, local authorities, associations, and gardeners came together to discuss the impact of pesticides on the environment and on health, and to put forward alternatives allowing the use of pesticides to be reduced. For the first time Brussels joined the campaign, making it a major event throughout the French speaking part of the country.

This year 200 activities were organised such as conferences, exhibitions, visits, demonstrations and debates. Adalia encouraged people to bring their old pesticides to specialised facilities by rewarding them with some flower seeds. This unique campaign was made possible thanks to the collaboration with the waste management association. People now know what to do with certain pesticides that are no longer authorised.

During our activities, local authorities were invited to see a demonstration of machines for weed control. They were told by the Wallonian government that in 2019, no more pesticides will allow in public areas. Good news!

We are very happy to see that the Belgian Pesticide-free week has strong public support and has expanded each year. We hope that one day this campaign won't be needed any more since everyone has gone pesticide-free!

### The Spanish Pesticide Action Week

Fundación Vivo Sano launched its second Pesticides Action Week in Spain with different events across the country informing the public about the pesticide use and alternatives. The week event's highlights included the launch of the Documentary "In Small Print" on endocrine disruptors in Madrid, Barcelona, and Valencia as well as an organic cooking class in Madrid and a workshop on organic agriculture (natural preparations for diseases and pests in horticulture and alternatives to pesticides). Our partners Josenea from the North of Spain, organized visits of their organic farm in the Pyrenees. There were more than 130 people attending the events.

Our main events have been:

15 March: Launch of the documentary "In small print" on endocrine disruptors, Fundación Once (Madrid), 21 March launch in Valencia, 22 March launch in Barcelona

20 March: **Organic Cooking**: A cooking course with Marisa Fernández, Origen, Madrid

#### 22 March Workshop on natural preparations for diseases and pests in horticulture, Paracuellos

20-30 March: **Organic agriculture**: Visits of organic farm of Josenea, Finca Bordablanca, Lumbier (Navarra).

And Andrew Andre

Vivo Sano's Video for the launch of the Pesticides Action Week in Spain www.youtube.com/watch?v=LiXRKTYpz\_w&list=UUj9u3Lx sUeEtmh9mD67PK0Q&index=2

Events during the Pesticides Action Week www.vivosano.org/es\_ES/Proyectos/Proyectosfinalizados/ Semanasinpesticidas2013.aspx

More information in Spanish www.vivosano.org/es\_ES/Proyectos/Proyectosfinalizados/ Semanasinpesticidas2013.aspx

Trailers Documentary In Small Print: www.vivosano.org/es\_ES/Proyectos/InternationalProjects/ DocumentaryInSmallPrint.aspx

Our websites in English www.vivosano.org/es\_ES/Proyectos/InternationalProjects/ PesticidesActionWeek.aspx



### **ABOLISH THE USE OF HERBICIDES**

It seems that, 50 years after the publication of Silent Spring, the curse of the self-destructive madness that Rachel Carson foresaw, at the beginning of the sixties, witnessing the first effects of the irrational abuse of herbicides in rural America (Silent Spring, 1962), is now also reaching alarming urgency in our Italian regions, which should see culture, traditions, produce of the land, landscape and environment among its most valuable resources.

There are more and more farmers who systematically resort to the use of herbicides (generally of no use to increase produce, and harmful to us and to the natural environment). Moreover, these chemical products are also used outside cultivated lands, destroying the grassland habitats of bands of uncultivated land. Even ordinary citizens spray the grass strips around their houses with herbicides to prevent the development of weeds. The practice of using herbicides, originating in the wish to stimulate the produce of food-crops, mistakenly considered as an alternative to mowing, is now also used by such local organs as ANAS and Autostrade, not least because of pressure from the chemical industries that produce the most aggressive and least selective herbicide now on market (glyphosate), for the systematic maintenance of public roads (sometimes with the excuse of fighting pollen-caused allergies - though in reality, rather than reducing the sources of pollen, the proliferation of grasses and neophytes significantly increases), also knowing that, once treatment is initiated, one will have to continue this practice in subsequent years in order to avoid the proliferation of more aggressive herbs, which are now free to expand, after the disappearance of the vegetation that once covered the soil.



Fig. 1: Orchid rich road-boarder damaged by the use of herbicides. These boarders often represent the only refugia for plant and animal life in extended agricultural areas. Italy, Sicily, SS 121 km 176-177 ca 2 km W of Stazione Valledolmo, 3-5-2009. (fot. R. Lorenz).

Only insiders, and a minority of well-informed citizens, today know that a common practice of the agriculture of our time is chemical weed control. The so-called weeds are no longer eradicated manually or mechanically, as in the past, but their destruction is carried out by chemical molecules that are responsible for destroying their hormonal system, to give optimal space to their crops. It is a practice that has begun to spread in our country after the Second World War and is now universally accepted as a normal practice. It offers the opportunity to save on labor and thus reduce business costs. It belongs to the technical innovations inaugurated by industrial agriculture in the twentieth century, which made our agriculture more competitive. At the same time our farmers, subject to diminishing profit margins, have become increasingly dependent on chemical weedkillers. Today, even on small plots of land, in every region of Italy, a systematically selective poisoning of the land is practiced. Even the personnel of municipalities and provinces, responsible for keeping roadsides in order, resort to chemical means.

Those who can read the landscape and the conditions of the soil, see the visible traces of a silent chemical warfare now in progress. More and more frequently the soil between rows of vineyards and orchards appears completely naked, except for sparse reddish tufts of grass that seem to have survived the passage of fire. All this happens despite the fact that organic farming has long since discovered and tested - using the old traditional knowledge of farming the advantages of controlled maintenance of grass in the fields (green cover). In fact, this technique ensures the protection of the soil

against the action of rain and erosion, conserves the biological humus of the soil, protects the biodiversity, grows healthy plants, and ensures a superior quality of fruit, etc..

But the use of chemical weed control continues also because it is part of a system that has imposed the rules of profit on the sphere of life. Industrial agriculture, in fact, has abolished the old crop rotations - with which one cared for soil fertility and contained the proliferation of weeds - and has entrusted the agricultural producing process entirely to chemical agents, with its synthetic fertilizers and herbicides to destroy unwanted plants. The latter are part of a vicious circle: the side effects produced by the alteration of the natural balance responds with a further submission to the chemistry of organic life.

Apart from the considerations above, there are at least four fundamental reasons for speaking out against this violent and barbaric way of farming:

1) Herbicides are highly harmful to human health, especially to the farmers who use them. Some components such as 2,4\_D and 2,4,5\_T (the latter present in defoliants used by the Americans in the war against Vietnam) are seriously suspected of causing cancer and non-Hodgkin lymphoma-(H. Norberg -Hodge / P. Goering / J. Page, From the ground up. Rethinking industrial agriculture, Zed Books, London 2001, p. 19). Soil in which these poisons circulate is destined more and more frequently to become a place which is highly unhealthy for both the farmers and for all of us;

2) herbicides are not only seriously harmful to the fauna of the fields (birds, snakes, moles, hedgehogs, toads, crickets, cicadas, etc..), but also suppress much of the biological life of the soil. The ground is not simply a neutral support for crops, which our agriculture industry has made it, but a living organism on which the plants grow from which we get our food. It is, to think of it, the very basis of life, of all life on earth. It is hard to imagine that it can long endure the selective chemical poisoning of herbicides. Just as it is difficult to imagine that you can produce healthy food in a habitat where life is so systematically eliminated.

3) Herbicides severely pollute aquifers. We do not know what will happen - and that happens even now - to the sources from which we draw drinking water for our citizens. After years of increasingly intense chemical weed control it is easy to predict that the poisons are now widely present in our aquifers. That one of the most valuable assets of our lives and our economies - and becoming ever more scarce as a strategic resource for the future - should be destroyed by one of the most misguided practices that man has recently introduced in agriculture is a paradox that is repugnant to all elementary common sense.

4) Finally, a paradox to which science and technology have made us get used to today. Herbicides prove unnecessary and counterproductive in the long run for the same purpose for which they are used. Witness the testimony of two Italian experts in the field of conventional agriculture: "The introduction of the practice of chemical weed control has caused a profound change in the structure of the spontaneous vegetation. The main effects of this change can be summarized by a reduction of floristic richness and the abundance of a few species. Therefore, our agro-ecosystems have reduced the total number of weed species, and those which have adapted to the new conditions, a phenomenon of compensation, have produced a high density of individuals. The result of this process is a progressive eco-physiological approach between weeds and crops, reaching, in practice, narrow associations between weed species and crop species, all which are little effected by chemical treatment. Weeds have been able to evolve strategies to escape the action of ecological treatments. It must be taken into account that chemical weed control is able to act only on the infestation in place, but leaves substantially undisturbed that not visible, defined potential, due to the seeds and organs of agamic propagation in the soil. The infestation potential can represent over 90% of the total infestation" (P. Catizone-G. Dinelli, Control of weeds, in National Academy of Agriculture, Agriculture towards the third millennium through the great changes of the twentieth century, Edagricole, Bologna 2002, p. 596-97).

The practice of chemical weed control is in the long run one of the most useless, pollutants, harmful and expensive (for farmers and consumers) now present in the agriculture of our time.

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It must be fully eradicated from our agriculture and even more from areas outside cultivated areas as one of the wrong choices of our contemporary techno science. There is no reason why this form of poisoning of our countryside should last a day longer. The saving of labor that the chemical weed control allows can no longer be calculated in purely economic or business terms, as has been done senselessly so far. If one calculates the many social, economic, biological, environmental costs, the balancesheet brings out our no longer concealable blindness.



Fig. 2-3: Orchid rich road-boarder damaged by the use of herbicides. Italy, Molise, Isernia, SS 17 km 164, 2011 (fot. Rolando Romolini).



Fig. 4-5 Orchid rich road-boarder damaged by the use of herbicides. Italy, Molise, Isernia, SS 17 km 164, 2011, (fot. Rolando Romolini).

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Fig. 6: Former orchid rich road-boarder damaged by the use of herbicides. Italy, Marche, Pesaro/ Urbino, SS 73bis, 5.6.2012 (fot. Ivo Klaver).



Fig. 10: Orchid rich road-boarder damaged by the use of herbicides. Italy, Sardinia, 2012, (fot. Alessandra Manca).



Fig. 7: Orchid damaged by the use of herbicides on road-boarder. Italy, Marche, Pesaro/Urbino, SS 73bis, 5.6.2012 (fot. Ivo Klaver).



Fig. 11: Orchid damaged by the use of herbicides on road-boarder. Italy, Sardinia, 2012, (fot. Alessandra Manca)



Fig. 8: Former orchid rich road-boarder damaged by the use of herbicides. Italy, Veneto, Vicenza, Colli berici, 2012, (fot. Daniele Doro).



Fig. 9: Orchids damaged by the use of herbicides on road-boarder. Italy, Veneto, Vicenza, Colli berici, 2012, (fot. Daniele Doro).:



Fig. 12: Porcupine killed by a car along the Direttissima del Conero, april 2010, Ancona, Marche. On this boarder of the road shortly before were applied herbicides. The killed animal is a symbol for the irresponsible destruction of nature by the use of herbicides promoted by the authorities of the province of Ancona instead of promoting natur conservation by nature friendly methods within road-boarder management (fot. F. Taffetani).

Fabio Taffetani, Accademia delle Erbe Spontanee



#### PAN Swiss is born

Late in the afternoon of January 31st this year, six people walked into a conference room of a major law firm in Lausanne. On the table lay the statute about to be signed. *PAN Swiss.* 

Three founding members: Constance Trianzoni an owner of probably the best SPA in Switzerland, who designed her own pure (totally synthetic organic chemical free) cosmetics which never even touch plastic; Sacha Bonvin - a snowboarding legend in the Alps of Crans Montana and Verbier, who can talk you through major environmental issues of the planet in 10 minutes as gently as Santa Clause and leave you asking for more; and Dioni Bouropoulos the party star dude among students of economy of the university here who can nail a classical toxicologist on endocrine disrupters or a finance professor of on the carrying capacity of a continent in seconds. They got together because they wanted to do something do fix the frivolous use of pesticides in this country. That afternoon they double checked the statures of the new association and signed the documents. Then all of them and the other three wide-eved observers asked themselves: now what? Well, now the party will start.

Since then these have been such interesting, fun times. Wherever we turn, there is support. It is almost like people have been waiting for someone to speak up. True, we have instantaneous credibility simply because PAN is so well known and respected among NGOs, farmer's associations and professionals. They recognize the years of solid work and wise presence on the regulatory scene PAN has. We at the newly founded PAN Swiss branch are enormously thankful. It is not to say that an average person in Switzerland is aware of the dire pesticide situation we are in. The Swiss trust that our always very rational government protects us.

We like it clean, too. Visibly clean. There is no litter on the roads, people recycle trash, clean the beaches on the lakes and do their best to have a small carbon footprint. We want to buy local food so that it does not have to travel long distances by planes. Many chose not to drive cars.

Most people are acutely aware of the need to protect the environment, and respect the beauty of our surroundings. After the national referendum of 1993 called Agriculture Close to the Environment people are convinced our farmers are doing their best to protect nature.

And we spray. The lawns, gardens and vineyards all manicured to perfection with what we call weed killers. Our famous velvety apricots from the Valley are smooth and spotless. The strawberries are all shapely, large, red very aromatic and last for a good couple of days on the table.

We spray in pure goodwill because we were taught in schools to do so. Our parents did so. Our villages have publically displayed agendas carefully managed by experts (salesmen) from the suppliers depicting what to use and on which days. We think most mainstream people spray.

#### **Conventional agriculture**

People really care - and actually do their best to treat plant with the so called phytosanitary products without disturbing the birds too much.



To very precisely apply *The Products*, helicopters fly regularly over picturesque residential areas in the stunningly beautiful valleys so known for their skiing or on the gentle slopes around the lakes where multimillion dollar homes are nestled among the vineyards. We call it *sulphating*.

The government has taken measures to ban some pesticides. Atrazine was even banned four years ago (though just a couple of years later than in Europe). The government even spent some time studying endocrine disrupters. Regretfully for the time being, it still claims that this is an unfounded hypothesis. So, at least for now most mothers are uninformed. Doctors can't pronounce "Endocrine disruptor". Kids are fed "conventional" food in schools. High end restaurants serve beautifully arranged and elegantly served food with pesticide residues because the notion of organic is still not in the mainstream of the people's awareness.

PAN Swiss wants to change these perceptions. We know that people care. We want to work with them. We want to work to support farmers who produce pesticide-free, those who value and respect their own top soil. We want to support restaurants who don't serve pesticide residues in their food; mothers who want to give the kids pesticide free water; communes who don't spray pesticides in parks, playgrounds and football fields where children roll and kick ball on pesticide free grass. We want to support golf courses which don't want to be exposing their employees and their clients to the invisible chemical cloud hovering just above their greens. (And some clients like to lick the little white ball for luck).

We want to encourage the state to take measures to limit the seeping of pesticides into the ground waters and into our drinking water. We actually want Switzerland to go pesticide-free.

We have some good things going our way. There is an almost complete absence of the predatory retail chains. The two dominant food retailers - COOP and MIGROS are both cooperatives, both are now making an effort to provide a larger choice of local, organic food. The Swiss Bio organization is sound, experienced, and very vibrant. Demeter, the association of biodynamic farmers is also well established here. There is Fib, a powerful research institute which provides science to organic farming. And a great deal of discretely influential, well established organizations with huge member base.

Add to this a population of highly educated and sophisticated citizens used to finding solutions through a balanced civil dialogues, a rational government which has a long term perspective, and a country where intense industrial agriculture has never taken root (also thanks to the mountainous topography which encourages smaller; family farms) and you have a landscape full of potential for change. The change would be towards a new era of enlightened agriculture free of chemical inputs. And a society protected from their unconscious exposure to frivolously used pesticides.

The size of the country also makes it a setting in which would be especially feasible to roll out a long term, multi faced communications campaign alerting the society about the harmful effects of synthetic organic pesticides.



#### **EXPPERT Reports on EDCs**

The issue of endocrine disrupters (EDs) is now central to debates related to environmental health. France is preparing a national strategy on endocrine disrupters (SNPE – Stratégie Nationale sur les Pertubarteurs Endocriniens) due to be published this summer. Generations Futures is a member of the steering group of this SNPE. At the same time, the EU should have its own strategy published in September and has to agree on a definition of endocrine disruptors to be excluded under the European pesticides Regulation by mid-December.

To show the urgency of preventive and political action in this area of EDs, Generations Futures, in collaboration with PAN Europe and with the support of the EEHI Foundation, decided to publish the EXPPERT reports (for exposition on endocrine disrupting pesticides), a series of several reports based on analyses to show the ubiquity of many EDs pesticides in our food and environment leading to a significant exposure of the population.

Our work focused on several aspects of this issue and is to be published in several parts. Part 1, published in March, focused on Ed's insecticides in cereals and at home and Part 2, released in July, to demonstrate exposure to Ed's pesticides through fresh food. A third part will follow later this autumn.

The EXPPERT 1<sup>29</sup> report showed that we are exposed to EDs insecticides daily,

especially through two families of chemicals: organophosphates and pyrethrinoids. This exposure may be through food (in this report we studied the presence of EDs insecticide residues in cereals products), but also by the exposure to household insecticides, pesticides used for garden, in bedding, textiles, veterinary or human use.

For cereals based food products, 75% of the samples contained residues of pesticides - none exceeding MRLs - and in these 75%, all contained one or more substances, organophosphate or pyrethroid, suspected of being endocrine disrupters.

For non-food products, of the 181 commercial products studied, 108 contained one or several organophosphate or pyrethroid substances which are suspected EDs.

The EXPPERT 2<sup>30</sup> report focused on strawberries because it is a favorite for children. Of 49 samples analyzed, 91.83% contained one or more pesticide residues and in total, 71.42% of the samples contained EDs pesticides! (35/49)

65.38% of the French sample had at least one ED pesticide residue (17/26)

78.26% of Spanish samples have at least one ED pesticide residue (18/23)

Similarly, we found a total of 37 different molecules with 8 different endocrine disruptors

 <sup>29.</sup> www.generations-futures.fr/pesticides/etude-exppert-1-exposition-aux-pesticides-perturbateurs-endocriniens/
30. www.generations-futures.fr/pesticides/enquete-exppert-2-des-pesticides-interdits-et-des-perturbateurs-endocriniens-pe-dans-des-fraises/

(chlorpyrifos-ethyl, endosulfan, Flutriafol, iprodione, myclobutanil, penconazole, pirimicarb, triadimenol).

Note that the concentration of residues of all but one of the molecules found was compliant with the MRL legislation. We have identified only one residue exceeding the Maximum Residue Limit (MRL): acrinathrin, which makes an overall rate of non-compliance of 2.04%.

These surveys have been written to alert our policy makers about the need to take immediate and strong measures to reduce human exposure to EDs pesticides and to adopt an ambitious national strategy for EDs.

While the text of the SNPE is supposed to affirm the key role that France claims to play on the endocrine disruptors issue, pesticides lobbies might succeed in significantly weakening the text! Indeed, one of the parts of the text, still to be validated as of today, calls for a "review the criteria of exclusion" of certain substances after an "impact study" taking into account "the consequences for the protection of health, the environment as well as the available active ingredients. " In other words, it opens the door to a major step back that could badly weaken the principles of the 1107/2009 Regulation which is based on the a priori exclusion of recognized EDs. This part of the text of the SNPE reintroduces a certain form of risk assessment which is not present in the European text, in which the exclusion of ED pesticides is based on hazard criteria

At the time we're writing this article (16 July 2013), the final strategy has not yet been published. We hope that our work will help skip this paragraph and improve the final text!

For each EXPPERT report, press releases in English and Spanish were written and are available online on related pages of our website www.generations-futures.fr.

Nadine Lauvergeat, Génerations Futures

#### Actions against EDCs in Spain

Fundación Vivo Sano in Madrid has been actively campaigning with several initiatives on EDCs in Spain over the past months.

With the launch of its campaign "Hogar sin Tóxicos" ("Toxic-free Home"), Vivo Sano wishes to raise awareness about the chemical pollution in our households being a serious public health problem that needs immediate response, Western especially considering that the population spends on average about 90% of their time indoors, much of which is in the home. With this campaign, Vivo Sano aims to inform the population about the health impacts and improve government policies and measures that protect health and to influence companies to eliminate or significantly reduce the toxic substances that they use, which are present in a wide range of household products. In this context, Vivo Sano calls for support for their Campaign to remove BPA from food contact material in Spain.

In the spring, Vivo Sano launched the Pesticides Action Week in Spain with several activities, ranging from an organic cooking class to visits to organic farms all around Spain. The highlight of the week was the launch of Vivo Sano's documentary "In Small Print" which has been screened in Madrid, Barcelona and Valencia. Scientific experts, who took part in the documentary, attended the official launch to answer questions from the general public. **In Small-Print**" shows how we are affected by the chemicals with which we are in contact every day. Many of these substances have a direct impact on our hormonal system by mimicking hormones and with it altering the system, the socalled *endocrine disruptors*.

Vivo Sano's research for this documentary revealed a significant increase in cases of cancer and infertility, but also of neurological diseases such as Parkinson's or autism, which are related to chemical exposure. The documentary involved travelling all over Spain to interview internationally recognized experts to speak about their work, investigation and see their laboratory. They shared with us their concerns and challenges for the generations to come.

The aim of "**In Small-Print**", is to inform and raise awareness of the risks from chemical substances and its health effects, showing where you can find endocrine disruptors and what can we do to protect ourselves and our children. The trailers to the documentary (in English) can be found here

Nadia Bennich - Vivosano

**Biocides – counteract the rising needless use** 

Products that combat pests and which are not used as plant protection products or as pharmaceuticals are so called biocides. Since 2000, specific regulations apply to make biocide products available on the market within the European Union. Disinfectants, preservatives, protective substances, or household pesticides are subject to an authorization process.

With the introduction of the new Biocidal Product Regulation (BPR) 528/2012/EC the EU now also regulates the use phase of biocidal products and articles that have been treated with biocides. PAN Germany followed the revision process as stakeholder since 2008 and called for concrete improvements of environmental and health protection standards. PAN Germany summarized the new provisions of the BPR in the fact sheet "The European Union's new Regulation on biocides" (also available in German).

The BPR must be enacted by 1 September 2013 and consumer protection being hopefully - improved by several new provisions. Organizations of the civil society should observe their implementation in the Member States, for example, how the administration bodies provide the general public with information on the risks of biocidal products and opportunities for use reduction or if suppliers implement the new label and information requirements accordingly. Biocides are not harmless, rather there are real risks for human health and for the environment and in addition, the use of biocidal products and biocide-treated goods for private use is unnecessary. Furthermore, many of these products are not compatible with the goal of sustainable and environmentally-sound consumption.

An example: More and more articles of daily use are treated with biocides to produce

specific functions such as antimicrobial or odor-inhibition properties (e.g. textiles, shoes, bed mattresses and a great variety of plastic goods used in kitchen, bathrooms or offices). Consumer but also suppliers are not well informed and their awareness on the issue is limited. PAN Germany therefore published a brochure which summarized the new legislative provisions on biocide-treated articles, identifies important unresolved issues in implementation, and formulates recommendations for further action. An online-survey carried out by PAN Germany shows the wide range of "antibacterial" consumer products. With the brochure we aim to stimulate the discourse unnecessary use of problematic biocides such as triclosan, silver or nanoscale materials in consumer products: "Biocide-treated Consumer Products: Markets - Policies - Risks" (also available in German). A new easy-to-read consumer guide helps to raise consumer awareness about this issue (in German only): "Giften auf der Spur - Biozide erkennen und vermeiden".

We recommend the reassessment and adaptation of quality seals and certificate, among other measures. Regarding the currently review of the EU Ecolabel, PAN Germany calls for clear restrictions includingan exclusion of biocidetreated textiles and bed mattresses from the Ecolabel and an extension of the criteria list for hazardous substances in order to consider the risks of nanoscale materials and the risks of the promotion of bacterial (antibiotic) resistance (see: "PAN Germany comments on the EU Ecolabel criteria for textiles and bed mattresses").

Print versions of the materials are free of charge for NGOs and other stakeholder, please contact Susanne.smolka@pan-germany.org or by phone +49 40 399 19 10-0.

Susanne Smolka – PAN Germany



#### Illegal HCB and DDT waste storage in Gdansk, Poland

Greenpeace was informed during the early summer 2012 about illegal pesticide waste, including POP wastes storage in Gdansk just 30-50 meters from the Baltic See. According to the Basel Convention guidelines, POP waste should be stored in closed buildings or in containers and absolutely no leakage is allowed. We found the hazardous waste in loose, leaking plastic bags, so the POP wastes are polluting the environment. According to the BC guidelines, waste types should be stored separately whereas in this case all waste types are stored together.

Most of the HCB waste was transported to Gdansk from Kalush, a well-known Ukrainian contaminated site. Five hundred trucks and two ships of waste arrived to the Polish city through the Baltic see. According to the official papers, the HCB concentration did not exceed 1,6% of HCB in this waste. However, in Poland some samples indicated even around 30% of HCB in waste.

Greenpeace took samples in summer 2012 around the area of Port Service in Gdansk. We took nine soil samples both from inside and outside the facility in the storage area. In all samples, even 20 to 50 meters from the fence of Port Service, we measured HCB (Hexachlorobenzene), which is one of the "dirty dozen chemicals" from the Stockholm Convention. HCB is carcinogenic (2B), teratogenic -disturb the development of an embryo or foetus-, an endocrine disrupting substance. Furthermore HCB is a POP, as it is very persistent and accumulates in the animal as well as human body.

Beside this area is not an agricultural area, Greenpeace found several other pesticides in the top of the soil. We can be almost sure that the pollutants came from Port Service facility, and the pollution is the consequence of the inappropriate storage. The most dangerous substances were alpha-HCH, HCB and DDT. All these substances are restricted for many years; HCB and DDT are banned under the Stockholm Convention. The Polish HCB limit is surprisingly high for industrial areas. In many countries the maximum limit value is 1 mg/kg, but the Polish law allows 15 mg/kg. For atrazine, which is a hazardous substance as well, but does not accumulate in human tissues, the limit value is just 0,05 mg/kg. For that reason, HCB levels did not reach the limit value for industrial areas, but atrazine exceeded the Polish maximum limits almost 20 times outside the plant and 50 times inside the plant. Stricter alpha-HCH and DDT industrial limits were exceeded in the sample from inside the plant. We measured several other pollutants like prometryn, simazine, but there is no limit value for most hazardous pollutants.

Greenpeace informed local Authorities & Basel Conv. Secretariat about the testing results and asked for the immediate clean-up of the contaminated area inside and outside the plant; repackaging and proper storage as well as hazardous substances handling at Port Service and a complete monitoring of the whole area for all possible pollutants.

Supported by the pressure from Greenpeace and from the media, the whole management of Voivodship Environment Protection Inspectorate in Gdansk has been dismissed. The chairman of Port Service Company has been fired by the owners: German Blum Gruppe. The company's chairman has been accused to endanger the environment because National Environment Protection Office has withdrawn its previous decision, which would have allowed Port Service to import another 4.000 tons of waste from Ukraine. Pesticides and HCB waste left for incineration were temporarily secured with foil sheets. The local environment inspectorate undertook a serious inspection at Port Service. A number of additional irregularities, such as transgression of emission standards by the company, have also been noted. An expert study stated that in Elganow, where the toxic slag, ashes from incineration got disposed, that toxic substances can reach surface waters in 1.5 years, reaching groundwater would take about 3 tears. The authority therefore decided that the waste have to be removed from there to a safer storage place.

Bust still, as of August 2013, 12.000 tons of ash contaminated with HCB and other pesticides ares still in the unsealed pit in Ełganow. And there is no one to pay for the clean-up. So instead of one toxic time bomb we have now two, one in Kalush and one near Gdansk.

Gergely Simon – Greenpeace CEE, PAN Europe Individual Member