



**Pesticide
Action
Network**
Europe

Newsletter

Autumn 2008

PAN Europe News



PAN Europe and N&M launch legal challenge to new MRLs

On 28 August 2008, PAN Europe and Natuur en Milieu launched a joint legal challenge aimed at blocking substantial increases in the level of pesticides allowed in food produce. According to an analysis by Global 2000, Commission Regulation 149/2008, which sets Maximum Residue Levels for food products, could see two thirds of legal limits on pesticides greatly relaxed.

'The Commission has failed on its obligation to set legal limits at the lowest achievable level', said Hans Muilerman, spokesperson for Natuur en Milieu.

'Legal action is now necessary to force a rethink'.

The joint challenge by PAN Europe and Natuur en Milieu follows a decision by DG SANCO issued 1 July to deny the NGOs' request for an Internal Review of the new Regulation (see PAN Europe Newsletter: Summer 2008). PAN Europe and Natuur en Milieu will now ask the Court of First Instance to annul the Commission's decision and force DG SANCO to re-examine the legitimacy of the incoming MRL protocols.

A study by Greenpeace/Global 2000 published on the same day identified several hundred residue limits that are rendered unsafe by new legislation – under the EU's own safety standards and methodologies. In particular the consumption of apples, pears, grapes, tomatoes and peppers could now pose health risks for children. 'By raising the legal limits the European Commission expects us to put up with more and more pesticides in our food. Children should be safe to eat as much fruit and

vegetables as they like. The EU must revise these unsafe residue limits immediately,' demanded Greenpeace chemicals expert, Ulrike Kallee.

A network getting noticed...

News of the joint legal challenge was carried by media outlets across the European Union. Francois Veillerette (MDRGF) gave interviews to TF1, and Radio France International (RFI) while the story was also reported by Le Monde and Liberation. Janos Pal (Levego) gave interviews to Hungarian media outlets: Ózd Városi TV, Sláger radio, Rádióplusz, Szent István radio, and Klubrádió. In Italy, Francesco Ferrante and Rina Guadagnini (Legambiente) spoke with Corriere della sera Radio, Econews, Radiocapital and EcoRadio while Daniel Lesinsky (CEPTA) was interviewed by National Radio in Slovakia. Newspapers in Germany, Austria, Switzerland, Belgium Luxembourg and Slovenia also covered the story.

Briefings to the European Parliament

In September, PAN Europe issued a series of briefings designed to better inform Members of the European Parliament with regard to the

proposal for Regulation and Framework Directive on pesticides. These documents are essential in dispelling the increasingly hysterical claims of the pesticides industry, while at the same time

highlighting the need for tougher EU legislation on the authorisation and use of pesticides. The ENVI committee is scheduled to vote on both pieces of legislation on 5 November.



From left, clockwise: Hans Muilerman (Natuur en Milieu), Emelie Hansson (SSNC), Daniel Lesinsky (CEPTA) and Monica Guarinoni (HEAL)



Henriette Christensen explains the political calendar for autumn 2008...

PAN Europe's Annual Network Conference

Hosted by Brussels-based 'Health and Environment Alliance' (HEAL), this year's PAN Europe Annual Network Conference took place on 15-16 September in the Belgian

capital. Situated directly opposite the Commission's Headquarters and just a short walk from the European Parliament, HEAL's offices provided the perfect location for members to reflect on the future of EU pesticides legislation.

The PAN Europe conference was attended by 26 delegates from 17 European countries and provided a useful opportunity to share experiences with one another and to plan joint initiatives to be scheduled for the coming weeks and months.

PAN Europe welcomes three new members

Following their official endorsement at the Annual General Meeting (16 September), PAN Europe offers a warm welcome to three new associate members.

From Slovenia: 'ECHO' – an NGO working to promote ecology, cultural diversity, and health. This summer, ECHO teamed up with PAN Germany to co-host a meeting of Central and Eastern European NGOs in Maribor. In the first six months of 2008, ECHO also played a lead role in informing the Slovenian



Presidency of the need for progressive EU legislation on pesticides. Greetings also to 'Global 2000' (Friends of the Earth, Austria). Founded in Vienna in 1982, Global 2000 is the largest and best known environmental organisation in Austria, and has a long track record in working to address the use of hazardous pesticides. In March 2008, Global 2000 collaborated with other network members in investigating the presence of pesticides in wine. More recently Global 2000 has conducted detailed analysis of the impacts of new EU legislation on MRLs.

In addition, PAN Europe welcomes Polski Klub Ekologiczny (PKE). Based in Gliwice in Upper Silesia, PKE has worked to promote sustainable and organic farming throughout Poland since 1980. In 2004 PKE and PAN Europe prepared a joint report entitled: Pesticide use in Poland. PKE's current projects include: the promotion of ecological agriculture and agro-tourism, working to protect Polish nature reserves, and raising public awareness of the need for sustainable development.

For more information, visit:

- www.ech-o.org
- www.global2000.at
- www.pkegliwice.pl



Valentina Lukova: PAN Europe's new board member

Following her successful election at the Annual General Meeting, PAN Europe welcomes Valentina Lukova as new member of the board.

Already well known to many within the PAN Europe network, Valentina is Chair of



Valentina Lukova, Chair of NM FOE, in her office in Sofia, Bulgaria

Bulgarian environmental NGO 'National Movement Friends of the Earth (NM FOE) based in Sofia. The organisation's major themes include working to address Climate Change, Water Resources, Environmental Awareness and the use of Toxic Substances.

Valentina has a background in science having gained a PhD in chemistry at the University of Sofia, before working as an Assistant Professor of Organic Synthesis, and later becoming Director of an analytical laboratory in Moscow.

In 2002, Lukova took a position as pesticides campaigner at Bulgarian NGO Ecoglasnost and has since worked both to raise awareness of the presence of pesticides in foods, and to promote action in addressing

the abandonment of stockpiles of obsolete pesticides across Bulgaria.

Valentina now leads NM FOE's Toxic Substances programme and has built strong links with FOE Europe, the International POPs Elimination Network, and Pesticide Action Network International.

Her appointment lends added charisma to an already dynamic PAN Europe board, and increases the total board-level representation of NGOs from Central & Eastern Europe to three.

On becoming a board member, Valentina explained: 'For some years my work in Bulgaria has been greatly enhanced though membership of the PAN Europe network. I believe I am now able to repay a small part of that loan by serving as a member of the PAN Europe board.'

News from the Network

PAN Germany/ PAN UK project 'Fibre, Food and Beauty: Make it move' to open with workshops in September

On 24th-25th September, PAN Germany, PAN UK, OBEPAB from Benin, and Enda Pronat from Senegal launched their 'Fibre, Food and Beauty' project with two workshops in Hamburg, Germany. These events aimed to explore the social, environmental and ethical issues relating to smallholder livelihoods and ethical consumption, and to support businesses in broadening the market for organic cotton.

For many farmers in the developing world, cotton is an essential cash crop. In Africa alone, 20 million people depend on cotton farming as a key source of income. However, dependency on cotton carries severe adverse

impacts for farmers when market conditions deteriorate. Organic cotton production offers proven opportunities to reduce dependency on conventional cotton markets and to help cotton growing communities to escape from poverty. Its value is especially relevant in today's current climate of food price escalation, rising costs of agricultural inputs, including pesticide and synthetic fertiliser costs, and unstable cotton prices.

It is against this backdrop that the joint PAN Germany/ PAN UK project was established. Funded by EuropeAid, the initiative will run from 2008 to 2010 and work with African partners OBEPAB from Benin and ENDA Pronat from Senegal. It aims to raise awareness among European businesses, donors, NGOs and consumers, and to build support for better market



models to help reduce dependency on cotton within organic farming systems. It also collaborates with Organic Exchange's Farm System Crops Market Development Programme. The first workshop which was held in Hamburg on 24 September was aimed at NGOs and public and private donors and was entitled 'Using diversity to reduce dependency on cotton and combat poverty'. The second workshop on 25 September, also in Hamburg, was addressed to businesses and was entitled, 'Corporate Social Responsibility in a development context: Using diversity to reduce dependency on cotton and combat poverty'.

Greenpeace/ Global 2000: EU pesticide limits a health risk to consumers (28 August)

From September, fruits and vegetables with higher levels of pesticide contamination will legally be allowed onto the market as a result of the European harmonisation of pesticide limits.

According to a joint study co-published on 28 August by Greenpeace, and Global 2000, almost 700 of the EU legal limits on pesticides in fruits and vegetables will be too high. The authorised pesticide



contamination in apples, pears, grapes, tomatoes and sweet peppers in particular is often so high as to threaten acute and chronic damage to health, especially in children.

'The EU Commission expects us to put up with more and more toxic chemicals in food,' said Greenpeace toxics expert, Ulrike Kallee. 'It is endangering the health of its citizens – children's health in particular. By being brought into line with maximum levels for pesticides in the EU, German limits are being replaced by EU limits which are mostly far higher.'

The study used the EU's own safety protocols to examine 170,000 pesticide limits set out by the Commission. In 570 examples for fruit and vegetables the acute reference dose (ARfD) for children is exceeded.

Apples, pears and grapes are particularly affected.

Almost 10 percent of the limits for these foods are potentially damaging to health for children. Long-term damage is also possible – 94 EU limits exceed the acceptable daily intake (ADI). When the ADI is exceeded there can be chronic damage to health such as cancer, or disruption to the hormonal and reproductive systems. The ARfD and ADI are basic toxicological data which must always be taken into account in setting limits.

'The EU Commission is ignoring its own safety standards,' says Ms Kallee. 'This is a scandal. Greenpeace recommends to consumers who want to avoid pesticides in food to buy organic food. Chemical pesticides are not allowed to be used in its production.'

The Greenpeace/ Global 2000 study complements a legal challenge brought by PAN Europe against the Commission's harmonised maximum residue limits.

Greenpeace Germany: 1 in 10 contaminated foods contains unauthorized pesticides (21 August)

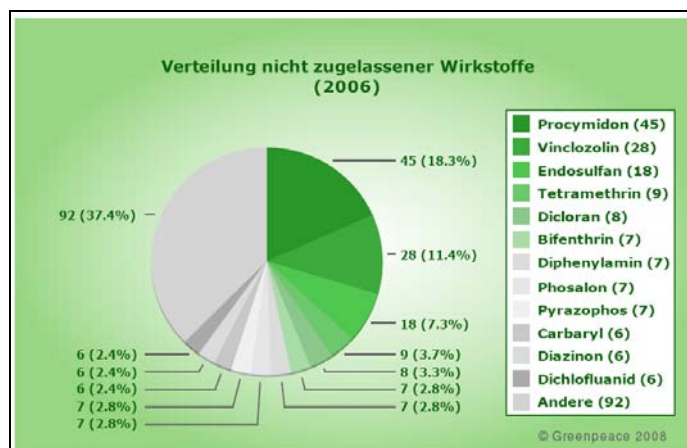
Analysis of German food produce contaminated with pesticides shows that 1 in 10 affected items contains unauthorized substances. This finding was published by Greenpeace Germany on 21 August and was based on data provided by Germany's national federal office for consumer protection and food security.

Of 6,750 contaminated food items detailed in Germany's 2006 national food monitoring reports, some 2,176 products were of German origin. Residues of pesticides not authorised for use in Germany were found

in 199 of these items – which equates to 9.1 % of the contaminated German foods listed.

In total, residues of 59 unauthorised substances were present in 39 different kinds of food. Foods worst affected

included fresh herbs, potatoes and raspberries. Residues exceeded the legally permitted limits in 11 cases. In another six cases the acute reference dose for children aged two to under five was breached.



Distribution of unauthorised substances: in total residues of 59 unauthorised substances were detected in German food samples. Procymidone, vinclozolin and endosulfan were the most common.

In the case of 21 substances found in a total of 44 samples, the European Commission had decided in 2003 or before not to place these on the EU list of approved substances. The two years of grace for these substances to be used up meant that they were not

permitted to be marketed anywhere in the EU in 2006. Six substances classified by the World Health Organisation as 'obsolete' were found among the substances detected. These substances are not permitted in any country and no longer to be marketed anywhere in the world.

Over three quarters of the samples with residues used without authorisation contained substances on Greenpeace's 'Black List of Pesticides'. These pesticides can have especially damaging effects on human health and the environment.

CEPTA uncovers rising pesticide use in Slovakia

Slovakia's dependence on pesticides has been steadily increasing over recent years according to government data recently obtained by CEPTA. Making use of a Slovakian law based on the Aarhus Convention, Daniel Lesinsky from CEPTA was able to apply to the government body responsible for pesticide use and authorization, the Central Controlling and Testing Institute for Agriculture in Bratislava, for the figures relating to pesticide use in the country since 2003.

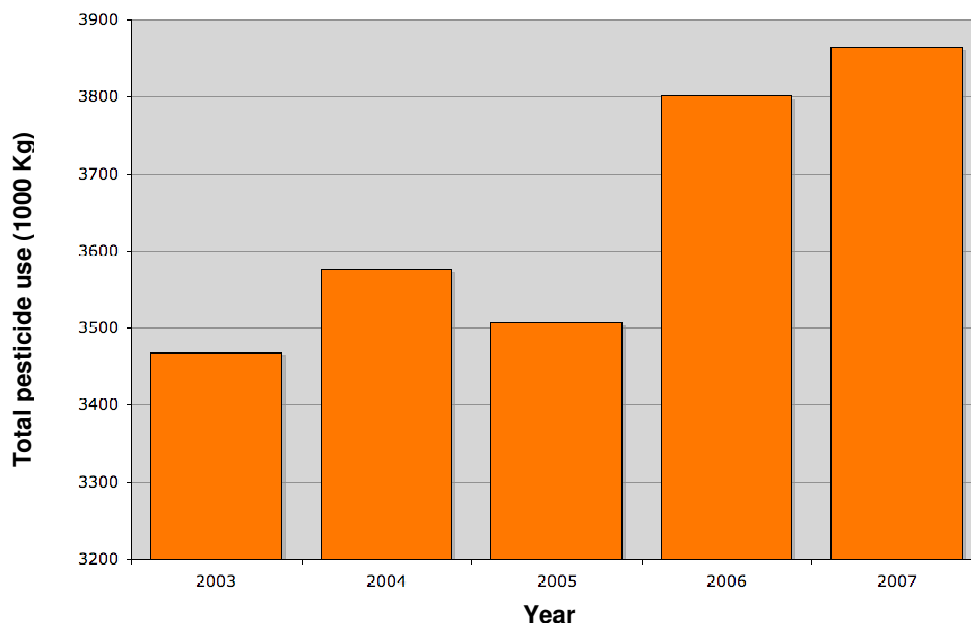
The data shows pesticide usage has risen significantly since 2003. Overall pesticide use has increased by 12% between 2003 and 2007. In particular the application of

fungicides and bactericides has gone up: rising from just over 570 000kg in 2003 to 760 000kg in 2007, an increase of 33%. While both insecticide and herbicide use has gradually increased, the most dramatic change was seen in insecticide seed treatments which rose by a staggering 200% (5 614kg – 17 001kg) over the five reported years. The only pesticide category to show a decrease up to 2007 was fungicide seed treatments, the use of which has gradually decreased to nearly half the quantity used in 2003.

Although in Slovakia all commercial pesticide users are obliged by law to report their annual pesticide usage

the Department of Plant Protection, who supplied the data, warned CEPTA it could only be counted as 70% accurate as not all farmers comply with the reporting requirement. Daniel Lesinsky advises organizations or individuals seeking similar data from their own government to set out the information they require in a letter and to be aware of the data's quality and range, 'If you are analysing the data from your country be aware of how the data is collected and calculated, the area it covers, from how many farmers/arable areas it comes from and if all pesticide categories are included. Ask for an effective, transparent and on-time monitoring and reporting information system to be implemented in your country'.

Pesticide Use in Slovakia 2003 - 2007





From top left going clockwise – the title short ‘Invisible Pesticides’, a stockpile of obsolete pesticides, Bulgarian residents buying fresh fruit at Sofia’s largest open market, laboratory analysis of pesticide residues in food

‘Invisible Pesticides’... as seen on Bulgarian National Television (12 August)

On 12 August, Bulgarian National Television, ‘Channel 1’ screened ‘Invisible Pesticides’ – a 30 minute documentary produced in association with Valentina Lukova, Head of the ‘Toxic Substances’ Programme at ‘National Movement Friends of the Earth’. The broadcast marked the culmination of weeks of filming across Bulgaria, not to mention months spent pitching the concept to commissioning editors at the country’s number one television channel.

‘The first day it seemed like making a film is a really stressful experience,’ explained Valentina Lukova. ‘I had to walk through the biggest open market in Sofia city and talk to the camera... which was itself moving forwards all the time. At noon the market is full of people – mainly old and not very rich. Fruit vendors were not always friendly. Customers behaved oppositely, cheerfully interacting with the camera

and explaining how difficult their lives are and how the sellers often cheat them... Amid all this turmoil I had to talk calmly about pesticides.’

Another major challenge was deciding what to include in the programme. ‘It was a hard job to choose. You know how much pesticides affect our lives. But if we put every topic in the film it would be 2 hours long – so we had to miss out many aspects that we would have wanted to include.’ In the final cut, the documentary focuses on the presence of pesticides in foods, the health impacts of pesticides, and water contamination. Those interviewed for the film include: representatives from the Ministry of Health, the Ministry of Agriculture, a Bulgarian MEP, as well as organic farmers, pesticide retailers, farmers and consumers.

‘Invisible Pesticides’ has now been screened many times in Bulgaria; not only on national and regional channels, but on several of the country’s cable TV networks.

‘At the same time, for weeks and months no one was quite sure whether the project would ever happen’, remembers Valentina. ‘Some time back in spring, they asked me for a short summary of what I would like to say in the film. Then more than three months passed by and nobody called or wrote to me, so I started to thinking the documentary had fallen through. Then suddenly the film company called and said “OK – we’re going to make the film, but we have to start immediately.”’

‘At first I was happy and very excited. It was a real challenge – it is so different to talk about pesticides when you know you are communicating with a public audience – most of who would know very little about the issues. Everything had to be ‘translated’ to make it accessible. I also had to get used to talking to the camera – which is not like talking to a person. The camera would just stare at me saying nothing. No smile, no approval, no arguments, no questions. At times I felt like I was going crazy – just walking around Bulgaria and talking to myself.

‘Making the documentary was about creating a public discussion on pesticides. For too long policy decisions relating to pesticides have been made in the dark... we wanted to shed light on the issues as well as the solutions – to influence the authorities, decision makers, farmers and the wider public. So far we’ve had numerous responses from the public... but no official response... I feel that kind of response has yet to come.’

PAN Germany demands ban on pesticides toxic to bees

On 17 July, PAN Germany, BUND (Friends of the Earth Germany) and the German Bee Keepers Association held a press conference in Berlin to draw attention to the impact of pesticides on German bee colonies. In May 2008 over 11,000 bee colonies in southern Germany were reportedly poisoned by the Bayer CropScience pesticide Poncho. Poncho is the European trade name for clothianidin, a neuro-active substance and a member of the neonicotinoid class of insecticides of which the widely used imidacloprid is also a member. Last year Bayer made 793 million euros with their sales of neonicotinoids alone. Neonicotinoids are systemic chemicals which, following application to seeds, work their way through the plant attacking the nervous system of any insect they come into contact with. The bees were killed after they came into contact with sweetcorn

treated with Poncho prior to planting. In response to this tragic drop in bee numbers the German Office for Consumer Protection and Food Safety (BVL) immediately ordered the suspension of the approval for use of eight seed treatment products containing active ingredients toxic to bees. Antarc (imidacloprid and cyfluthrin), Chinook (imidacloprid, cyfluthrin), Cruiser ORS (thiamethoxam, metalaxyl-M, fludioxonil), Cruiser 350 FS (thiamethoxam), Elado (clothianidin, cyfluthrin), Faibel (imidacloprid, methiocarb), Mesuro (methiocarb) and Poncho (clothianidin) were all withdrawn. But, incredibly, only one month later the approval for four of these products, all used to treat rapeseed, was reinstated. With the sowing of treated rapeseed imminent PAN Germany and its partners launched a media campaign in protest and the bee keepers expressed their fear of once again losing their bees due to pesticide poisoning.

PAN Germany and its partners are demanding:

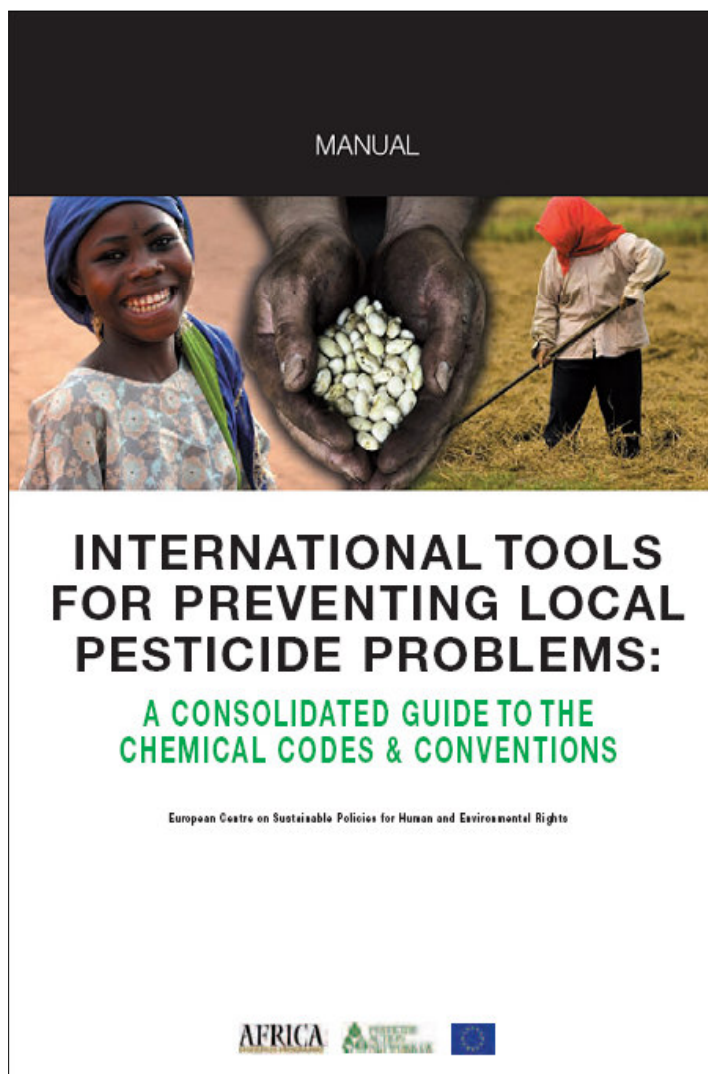
- At a national level – an immediate ban on the use of rapeseed treated with pesticides toxic to bees and a general suspension of the approval of pesticides toxic to bees;
 - At an EU level - Withdrawal of the approval for all active substances that are considered to be toxic for bees;
 - An improvement to the guidelines for testing bee toxicity as part of the assessment for pesticide approval;
 - A ban on cultivating sweetcorn in mono culture; and
 - Support of organic agriculture.
- Germany is not alone in this disaster: The collapse of bee colonies is a phenomenon known all over the world. Only this spring similar disasters were reported in Italy and Slovenia.



Berlin, 17 July media event. From the left: Manfred Hederer, German bee keepers association DBIB, Susan Haffmans, PAN Germany, Hubert Weiger, BUND.

PAN UK publishes new guide to international chemical legislation

In May 2008 PAN UK published *International Tools for Preventing Local Pesticide Problems: a consolidated guide to the chemical codes and conventions*. This guide gives a concise overview of the landscape of international chemicals legislation and marks the culmination of a three-year project financed by the EU. The project, Pesticides and Poverty: Implementing the Chemical Conventions for safe and just development, was undertaken by PAN UK in partnership with PAN Africa and PAN Asia-Pacific. Its aim was to assist developing countries in using international chemical codes and conventions in order to ensure environmental obligations are met, sustainable livelihoods supported, and the extensive and increasing problems caused by pesticides are tackled. The guide draws together a wealth of research undertaken by PAN UK and its partners. It was written with assistance of legal experts and has contributions from a host of international bodies including the FAO, African regulatory bodies and NGOs, including AGENDA in Tanzania. It provides practical legal information regarding the codes and conventions governing pesticide use and regulation; how the codes and conventions are implemented; and, ultimately, where to find assistance in meeting the obligations set by these codes and



conventions. The guide shows how the international obligations are linked to key points in the pesticide 'life cycle' and describes what needs to be in place in terms of legislation, technical infrastructure and human capacity in order to implement the obligations in practice. It is designed to be accessible to both officials and laypeople alike and gives suggestions for how different audiences, ranging from government officials

and the pesticide industry to NGOs and journalists, may benefit from its use.

Prior to publication the guide was piloted in Tanzania and Senegal. The response was overwhelmingly positive and, after taking on feedback from these countries, PAN UK distributed hard copies of the guide to target audiences in Africa and have now made the guide available to download for free from their website (www.pan-uk.org).

Pesticide News

Italy bans pesticides linked to bee deaths

(19 September)

The Italian government has banned the use of several neonicotinoid pesticides linked to the deaths of millions of honeybees. Seed treatment products clothianidin, imidacloprid, fipronil and thiamethoxam used in rapeseed oil, sunflowers and sweetcorn are all suspended with immediate effect. Italy follows Germany and Slovenia which banned sales of clothianidin and imidacloprid in May. Bayer's application for clothianidin has been rejected by French authorities.

Pre-natal exposure linked to obesity

(7 September)

In a groundbreaking study Spanish researchers have found evidence that pre-natal exposure to pesticides has links with child obesity. Scientists measured levels of hexachlorobenzene (HCB), a banned pesticide, in the umbilical cords of 403 children born on the island of Menorca. Children with the highest levels were twice as likely to be obese when they reached the age of six and a half.

India finds pesticides in Coke and Pepsi

(28 August)

Research by the Indian Government found samples of Pepsi and Coke contain much higher levels of pesticides like lindane and DDT than permissible under the European Union norms. The pesticide chlorpyrifos was present in all the samples and exceeded the EU limit in 75% of analysis.

Pesticides threaten US salmon stocks

(13 August)

From Los Angeles to the Canadian border, three pesticides are increasing the likelihood of extinction for more than two dozen imperiled salmon stocks, says a draft study by federal fisheries experts. 'Overwhelming evidence' suggests the pesticides are interfering with the salmon's ability to swim, find food, and reproduce, says an evaluation issued by the National Marine Fisheries Service. The pesticides in question are chlorpyrifos, diazinon and malathion.

EU judges maintain azinphos-methyl ban

(28 July)

Manufacturer Makhteshim-Agan has lost its legal battle with the European commission to overturn a ban on azinphos-methyl. In 2006, the European commission proposed to allow use of azinphos-methyl under certain restrictions by including it in a list of approved pesticide ingredients set out in the EU's 1991 plant protection products directive. But EU governments rejected the proposal.

Endosulfan faces US legal challenge

(24 July)

A coalition of US farmworker, public health, and environmental groups has launched a legal challenge aimed at terminating the continued use of endosulfan. Approximately 625,000 kilos of the insecticide is used annually in the United States. Endosulfan is banned for use in the European Union.

Manufacturers lose legal appeals

(14 July)

A group of pesticide manufacturers have lost legal appeals against the European Food Safety Authority (EFSA) over the fate of three pesticides banned from the EU market. Dow, FMC Chemical and Arysta Lifesciences launched separate cases at the European Court of Justice concerning haloxyfop-R, carbosulfan and carbofuran.

Pesticide use rises

(9 July)

Increased sales in eastern Europe, the intensification of agriculture in Brazil, and the growing use of pesticides as a preventative measure, lead to increases in global pesticide use. Analysts also report rising prices for pesticides as well as mounting corporate profits.

Dow herbicide wipes out gardeners' crops

(29 June)

UK gardeners have been warned not to eat home-grown vegetables contaminated by a powerful new herbicide that is destroying gardens and allotments nationwide. Concerned gardeners have seen potatoes, beans, peas, carrots and salad vegetables wither or become grossly deformed. The affected gardens and allotments have been contaminated by manure originating from farms where the hormone-based herbicide aminopyralid has been sprayed on fields.

For latest news updates as well as links to original news sources visit the PAN Europe website at <http://www.pan-europe.info>

Academic Review

Pesticides make you fat

Scientists in Spain have studied the link between pre-natal exposure to hexachlorobenzene (HCB) and obesity. Starting from mid-1997, all mothers presenting for antenatal exposure in Minorca were recruited. Doctors subsequently examined blood from the umbilical cords of over 400 children born on the island. All showed high levels of HCB and other organochlorine pesticides. Although it is banned globally under the Stockholm Convention, HCB continues to persist in the environment. The children's weight and height were measured both at birth and at age 6.5 years to determine their body mass index (BMI). The study found that children with the highest HCB levels (1.03 ng/ml in cord blood) were 2.5 to 3 times more likely to be overweight, or obese, at age 6.5 years than those with low levels (0.46 ng/ml). Other environmental pollutants, such as bisphenol A (used in baby bottles), and phthalates (found in plastic food wrappers) have also been linked to obesity. These 'obesogens' may be able to influence genes in the womb, turning stem cells into fat cells. Obesity is one of the biggest health challenges currently facing many developed countries. The current drive to fight obesity focuses on changing diet and lifestyle. It may also be necessary to reduce our 'body burden' of 'obesogens' for such lifestyle changes to be effective.

Exposure to hexachlorobenzene during pregnancy increases the risk of overweight in children aged 6 years. Smink A, Ribas-Fito N, Garcia R, Torrent M, Mendez MA, Grimalt JO, Sunyer J. Acta Paediatrica, 2008, 97(10):1465-1469.

Pesticide poisoning common in Guyana

A study of self-reported injury from agricultural chemical exposure was conducted in farmers in rural Guyana. One hundred and ninety agricultural workers were studied, of whom 167 (88%) were male. Eighty seven farmers (46%) reported having experienced at least one episode of illness after agricultural chemical exposure. Relatively few of the farmers sought medical assistance for their symptoms, with only 20 farmers (11%) visiting a local doctor and only two farmers (1%) reporting going to a hospital for treatment. Local farmer use of protective equipment was limited. Pyrethroids and herbicides paraquat and glyphosate were the most commonly used agricultural chemicals in the population studied. Data showed that exposure to agricultural chemicals remains frequent, with incidence of severe injury requiring medical attention less frequent.

Agricultural chemical exposure in small farmers in Guyana, Spiller HA, and Aleguas A, Toxicological and Environmental Chemistry, 2008, 90(2):361-365.

Genetic damage in Pakistani cotton pickers

Bhawalpur is a major cotton-growing area in Pakistan. Cotton picking in Pakistan is carried out by females and as a result of the intensive use of pesticides on cotton they are exposed to pesticide residues during this work. A study was carried out to assess the effect of pesticide exposure on genetic damage as well as on liver enzymes and serum cholinesterase. Peripheral blood was obtained from 69 cotton pickers and 69 unexposed females of similar age (average age was 37). On average the cotton pickers had been exposed for 10 years (10.26 ± 6.14 years). Subjects from the exposed group did not use any protective measures during their work activities. The levels of serum cholinesterase were lower and levels of liver enzymes (alkaline phosphatase, alanine aminotransferase, and aspartate aminotransferase) were higher in the exposed workers as compared with the control group. The exposed group exhibited significantly increased frequencies of genetic damage to their cells as determined by the incidence of binucleated cells with micronuclei (12.72 ± 3.48 vs. 4.35 ± 2.44 , $P < 0.001$), and the total number of micronuclei in binucleated lymphocytes (16.51 ± 4.27 vs. 5.86 ± 3.09 , $P < 0.001$) in comparison with subjects of the control group. Results from the present study indicate that occupational exposure to pesticide mixtures results in cytogenetic damage in exposed females.

Cytogenetic damage in female Pakistani agricultural workers exposed to pesticides. Ali T, Bhalli JA, Rana SM, Khan QM, Environmental and Molecular Mutagenesis, 49(5): 374-380.

To request a quarterly listing of peer reviewed scientific articles relating to pesticides and their impact on health and the environment, please contact Pesticide Action Network UK (admin@pan-uk.org)

PAN Europe in the News

The articles below represent a selection of media coverage of PAN Europe and its activities over the past three months. Links to the full articles are available from our website.

TF1: **Plus de pesticides dans nos aliments?** (28 August)

Interview with Francois Veillerette, President of MDRGF (PAN Europe board member)

RFI: **Pesticides: les ONG ne sont pas d'accord avec l'UE** (1 September)

Le Monde: **Pesticides: des ONG portent plainte contre les nouvelles normes de l'UE** (1 September)

Liberation: **Alerte aux pesticides dans les aliments** (1 September)

Euractiv: **Green groups take EU to court over 'dangerous' pesticide limits** (29 August)

De Morgen: **Nieuwe pesticidenormen risico voor gezondheid** (28 August)

Tageblatt: **Pesticides dans les aliments: des ONG tirent la sonnette d'alarme** (28 August)

Ózd Városi TV (28 August)

Interview with Janos Pal, Levego Munkacsoport

Sláger rádió (30 August)

Interview with Janos Pal, Levego Munkacsoport

Rádióplusz (1 September)

Interview with Janos Pal, Levego Munkacsoport

Slovak National Radio: **New EU limits for pesticides** (18 September)

Interview with Daniel Lesinsky, CEPTA (PAN Europe board member)

Ljubljanske Novice: **Nova pravila EU o ostankih pesticidov v hrani in krmi** (1 September)

Corriere della sera Radio: (29 August)

Interview with Francesco Ferrante, Legambiente

Radiocapital: (29 August)

Interview with Francesco Ferrante, Legambiente

Econews: (1 September)

Interview with Rina Guadagnini, Legambiente

TSR: **Pesticides dans les aliments: des ONG tirent la sonnette d'alarme**

(1 September)

ENDS Europe DAILY: **New EU pesticide residue rules enter force** (1 September)