

PAN Europe Newsletter: Winter 2007

PAN Europe News

Hazardous Pesticides in the European Parliament

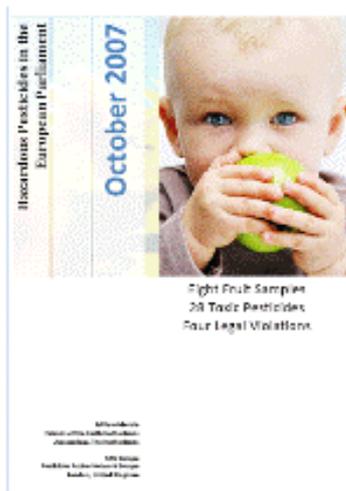
On 10 October, PAN Europe and Milieudefensie published an analysis of eight fruit items (strawberries, apricots, oranges, apples, pears and three bunches of grapes) purchased at the convenience store located inside the European Parliament in Brussels. In total the fruits were shown to contain 28 different pesticide residues including ten carcinogens, three neurotoxins, three reprotoxins, eight suspected endocrine disruptors, and two substances classified by the World Health Organisation as being 'Highly Hazardous'. Three of the food samples analysed contained pesticide



Press Conference in the European Parliament: (from left to right) Elliott Cannell (PAN Europe), Hiltrud Breyer MEP (Greens/ EFA), Dan Jorgensen (Socialist Group), Wouter van Eck (Milieudefensie)

in excess of Maximum Residue Limits making their sale illegal. The event was marked with a press conference chaired by Dan Jorgensen MEP, and featuring comments from Hiltrud Breyer MEP, the Parliamentary Rapporteur on the Pesticides Regulation, and Dr Ludo Holsbeek, an Ecotoxicologist based at the Vrije Universiteit Brussels. The results of the analysis were e-mailed to all 785 MEPs ahead of the Parliamentary vote on the 'Thematic Strategy on the Sustainable Use of Pesticides', and provided a timely reminder of the urgent

need for reform of European pesticides legislation. In total 324 different pesticides contaminate the European food chain. Some 43% of foods sold in the EU contain pesticide residues, with one food item in 30 exceeding EC legal limits. Fruit items are among the most contaminated foods in Europe. Those sold inside the European Parliament are clearly no exception. Had a five year old child eaten two of the oranges we purchased in the Parliamentary building, they would have consumed pesticide in excess of the Acute Reference Dose.

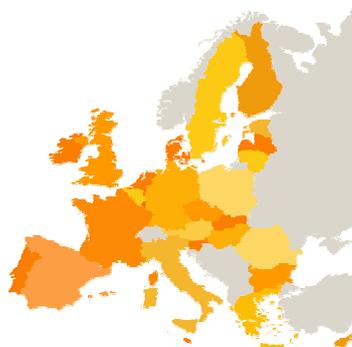


Pesticide Use Reduction Strategies in Europe

While agrochemicals lobbyists are busy making wild claims about decreased pesticide consumption threatening to jeopardise European agricultural productivity, many of Europe's farmers are working hard to prove otherwise. In Denmark for example farmers now use 50% less pesticides than they did 20 years ago. In Switzerland 40% reductions have been achieved. The UK's biggest farmer, the Cooperative Group, has voluntarily prohibited and restricted the use of dozens of the most hazardous pesticides. And in Italy, Belgium and Netherlands groups of farmers are dramatically reducing their use of pesticides. In September, PAN Europe documented these successes in its latest report, 'Pesticide Use Reduction Strategies in Europe', which is freely available to download from our website.



If you want to be heard in Brussels...



PesticideWatch

While recent surveys show that pesticide residues are *the* number one food concern among European consumers, few people actually take the opportunity to raise their concerns with their democratically elected representatives in Brussels... That's why 22 NGOs from throughout the European Union came together in October to launch www.pesticidewatch.eu – a site specifically designed to help Europeans communicate with their MEPs. In total some 5,000 citizens wrote messages on pesticides which were packaged together and sent on to their respective political representatives. PAN Europe is now working hard to analyse MEPs' voting results and will publish its findings shortly. Please note: PesticideWatch is a responsible communication initiative. Despite claims to the contrary, no MEP was 'bombarded' with e-mails. Instead citizens' messages were bundled together into a total of just 4 e-mails which were relayed to MEPs over a 10 day period. No MEP received more than one e-mail per day. These measures were taken with the specific intention of minimising disruption to European politicians.

News from PAN Europe partners

When Organic Cotton Farmers met with Fashion Students

While organic cotton is fast becoming the height of fashion in Western Europe, few clothing designers have ever met with an organic cotton farmer. Last month, in the first initiative of its kind, Damien Sanfilippo of PAN UK last month and Barnabas Guerra, a cotton farmer from northern Benin, undertook a three week speaking tour of fashion colleges in Germany, France and UK. Barnabas explained to students how going organic had transformed his life. With conventional cotton, he used to have no money left for him or his family once he had paid back his debt to agrochemical suppliers. He also used to go to the hospital every other week because of the negative health impacts of pesticides. Now he gets to keep all of his profits as he no longer uses

agrochemical inputs. Barnabas showed students a picture of his many children who all wear school uniform as their father can now afford to pay for their education. Barnabas also told students

that he recently bumped into some of the nurses he used to know from the hospital. They called out to him, "Barnabas! What is going on with you? We never see you at the hospital anymore".



Barnabas Guerra, an organic cotton farmer from Benin talks with fashion students at Central St Martins, London. For more information visit www.pan-uk.org/Projects/Cotton

MDRGF sparks a French Revolution on pesticides

Visit Paris and you're sure to notice it: there's definitely something unusual rushing through the air. No – I'm not referring to the 30 pesticides that atmospheric scientists found floating above the French capital this summer. I'm talking about the winds of change. For decades France has been the sick man of Europe. Responsible for a staggering 35% of EU pesticide use, and ranked as the third largest pesticide consumer in the world France has long suffered the serious environmental consequences of pesticide contamination. 96% of rivers are contaminated and 61% of French foods contain pesticide residues. Yet all this appears set to change – and due in no small part to the substantial contribution of French environmental NGO, 'Mouvement pour le Droit et le Respect des Générations Futures' (MDRGF), headed by charismatic French campaigner Francois Veillerette. MDRGF has worked for many years to highlight France's heavy over-reliance on hazardous pesticides with regular appearances in the French media, grass roots initiatives such as the 'Semaines San Pesticides' – a regular 7 day event aimed at promoting the adoption of safer pest management alternatives, and the publication of reports designed to draw substantial public attention to the problems of pesticides in France. In 2007 MDRGF was invited to participate in

France's 'Grenelle Environnement' – a 3 month long initiative launched by President Sarkozy: and an ideal forum in which to push for real term change. While representatives of MDRGF played a central role in negotiations on the shape of future pesticide regulation, others worked to highlight the issues in the media, staging high profile initiatives designed to further raise public awareness. At the conclusion of the consultation process, the French President announced plans to reduce pesticide use by 50% over the next 10 years, and to withdraw some 53 agrochemical substances from use in France – targets substantially more ambitious than those backed by the European Parliament. Commenting on the announcement, Francois Veillerette, President of MDRGF, was optimistic, observing that Sarkozy had

broken the 'taboo' regarding the establishment of targets for pesticide use reduction.

What's a 'Grenelle'?

For those unfamiliar with French post-war socio-political history the term 'Grenelle' refers to the 'Grenelle Accords' – a set of agreements negotiated at the French Labour Ministry (located on Paris' 'Rue de Grenelle') by the Government of Georges Pompidou, the trades unions, and representatives of industry, during the national uprising of May 1968. The term 'Grenelle' has subsequently been incorporated into mainstream French terminology and is now used to denote a multi-stakeholder engagement process involving representatives of the Government, trade unions, NGOs, and industry, instigated with the aim of achieving a common position on a specific theme.



'91% of French citizens support a 50% reduction in the use of pesticides'
To watch the video of this action, visit www.mdrgf.org

Armenian Women Teach Farmers about IPM

Conventional pesticides were first introduced to Armenia by the Soviet Ministry of Agriculture which organised the movement of agrochemicals throughout the USSR. Every year Moscow's central planners drew up lists of pesticides scheduled for use on Armenian collective farms, along with instructions on dose, frequency of usage, and date of expiration. By the end of the 1980s Armenia's farmers reportedly used up to 500,000 tonnes of pesticides, including a cocktail of hazardous organochlorines. In 1991, Armenia gained political independence from Russia, but the Soviet legacy of intensive pesticide use left Armenia with a chronic dependency on pesticides in agriculture, as well as a catalogue of serious agrochemical pollution problems. For almost a decade 'Armenian Women for Health and Healthy Environment' (AWHHE), an NGO comprising epidemiologists, ecologists, hygienists, paediatricians, and teachers, has worked to address the negative health impacts of Soviet era

pesticide use, and to tackle the root causes of pesticide pollution: the continued over-reliance on agrochemicals inputs. In 2007, AWHHE launched a new initiative designed to directly engage Armenian farming communities in converting to IPM methodologies. The project centred on the creation of an educational training leaflet which provides agricultural producers with detailed agronomic advice specific to Armenia. Entitled 'Alternatives to Pesticides' the document introduces the concept of IPM, and provides a raft of non-conventional strategies for pest management, as well as

means by which farmers may achieve pesticide use reduction. AWHHE then used the leaflet in holding farmer field schools in the mixed orchards of Fantan and Dzoraghbyur villages in order to help farmers explore alternative means of pest control. The NGO reported good end-of-year results with farmers achieving high agricultural yields without the use of hazardous pesticides. In 2008, AWHHE plans to translate their brochure into several other languages in order that farmers in other regions of Armenia can join the project. For further information please visit, www.awhhe.am



'Alternatives to Pesticides': a guide to pesticide use reduction in Armenia

CEPTA takes organic message to the streets of Slovakia

With over 6% of all agricultural produce certified as 'organic', Slovakia is a European leader in the field of sustainable farming. Yet

because the bulk of its organic produce is either related to grassland agriculture, or used in the manufacture of processed food products, many of Slovakia's urban shoppers seldom see organic products

in their shops. Consequently in some areas, awareness of organic farming is low. In 2007, the 'Centre for Sustainable Alternatives' (CEPTA) – a Slovakian NGO which works to promote greater sustainability in agriculture, forestry, and rural livelihoods, launched an initiative designed to better inform Slovakian town dwellers about the successes of their rural counterparts in growing organic food produce. Following the harvest CEPTA set up a mobile food information stall which toured the towns of central Slovakia. Visitors were able to sample organic produce, ask questions about organic food production, and complete questionnaires. The stalls were designed and maintained in collaboration with students from the Technical University in Zwolen. To find out more, visit www.cepta.sk



Learn while you eat: CEPTA's food information stall helps raise the profile of organic produce in Slovakia

The HEAL child health postcard campaign

Ahead of the European Parliamentary vote on 23 October, the Health & Environment Alliance launched a postcard campaign urging Members of the European Parliament (MEPs) to help eliminate the use of Europe's most dangerous pesticide products and to better protect public health by making children's playgrounds and schools pesticide-free. The HEAL postcard featured published

scientific evidence summarizing the severe negative impacts of pesticides on children's health: even at relatively low doses, pesticides can contribute to the occurrence of conditions such as cancer, leukaemia, neurological disorders, asthma and allergies. Postcards were sent to MEPs by patients' associations (including several asthma and allergy associations), women's groups, health professionals and other health and environmental organisations

across the EU. HEAL's postcard campaign gained substantial media coverage when several physicians raised their concerns on pesticides and public health in letters to editors of national newspapers. The October Parliamentary vote yielded the first successful campaign results as cut-off criteria were extended to include neurotoxic substances, and Parliamentarians endorsed a ban on pesticide use in and around areas used by children, such as residential areas, parks, public gardens, school grounds and playgrounds. Groups are now encouraged to raise their concerns on pesticides and public health with their respective national governments ahead of further decisions being taken on EU pesticides legislation by the Council of Ministers. To download the HEAL postcard in English or French, and to read the accompanying HEAL information release, visit www.env-health.org.



'A Vote for my Child's Health': The Health & Environment Alliance postcard

Supermarket gets tough on pesticides as Dutch NGOs launch their 'Supermarket Fruit and Vegetable Advisor'

On the December 11, Milieudefensie together with Natuur & Milieu, and Dutch consumer association Goede Waar & Co published a 'Supermarket Fruit & Vegetable Advisor'. This wallet sized shopping companion is designed to help consumers avoid fruit and vegetables containing pesticide residues by providing details of which supermarkets have the cleanest produce on their shelves and which produce is



The Dutch 'Supermarket Fruit and Vegetable Advisor'

least and most contaminated with pesticides. The advice set out in the leaflet is based on pesticide residue analysis data retrieved from the Dutch National Food Authority. (In February 2005, after years of campaigning for access to this information, Milieudefensie and Natuur & Milieu were finally able to use the newly implemented Aarhus convention, which dictates that EU governments must give public access to environmental information, including pesticides contamination of the food chain.) The publication of the Fruit & Vegetable Advisor was launched in a programme broadcast by the Dutch consumer television show 'Radar'. The broadcast featured Professor Sauer, Head of the Pediatrics Department of the State University of Groningen, who expressed his concerns that the current EU pesticides legislation lacks adequate protection for the most vulnerable groups like (unborn) children. The launch of the Advisor has been extensive and so far more than 20,000 people have

downloaded or applied for a copy of the advisory leaflet. As a result of this NGO initiative one of the Netherlands' largest food retailers, Super de Boer, announced more stringent measures to avoid exposing its customers to pesticide residues in fruit and vegetables. Super de Boer are now negotiating with their suppliers to set their own pesticide residue limits at just 50% of the Dutch legal limit. In addition the supermarket has demanded that pesticides residues do not exceed acute health standards and that the number of residues per product should be reduced. The supermarket also agreed to evaluate substances on the NGO's pesticide 'black list' with a view to removing them from its own food production chain. Milieudefensie and Natuur & Milieu welcome the response of Super de Boer and will continue to pressure other retailers to apply similar safety standards. For further information please visit, www.milieudefensie.nl or www.snm.nl

3. Pesticide News

European Parliament votes for tougher pesticides legislation

On 23 October, Members of the European Parliament (MEPs) met in Strasbourg to vote on new EU pesticides legislation. While evaluation by Parliament represents just one aspect of the EU legislative process (the others relate to the Commission, and the Council of Ministers), Parliament's collective decisions are often important in influencing the final outcome of EU policy decisions and are widely seen as providing the most accurate representation of the views of EU citizens. While the majority of MEPs failed to endorse the establishment of overall targets for pesticide use reduction, environmental and human health NGOs were broadly pleased with many of Parliament's key decisions. In voting on the 'Framework Directive on the Sustainable Use of Pesticides', MEPs voted to adopt the 'Precautionary Principle' as

the basis of the Directive, to endorse a 50% reduction target for pesticides of 'very high concern', to make IPM a mandatory consideration in the creation of 'National Action Plans', to support the creation of no-spray zones in areas used by vulnerable groups (children, the elderly, the sick), and to increase public access to information on pesticide use. On the 'Regulation concerning the placing of Plant Protection Products on the Market' MEPs voted to terminate the authorisation of carcinogenic, immunotoxic and neurotoxic pesticides, to include suspected endocrine disruptors as candidates for substitution, to retain the Member State veto on pesticide approvals, and to provide greater protection to vulnerable groups. At the same time MEPs failed to support stakeholder involvement in the formulation of National Action Plans, 10m buffer zones around water courses, a tax on the use of pesticides, the adoption of the 'Polluter



Pays' principle, and the requirement that farmers must inform rural residents prior to applying pesticides in areas close to their homes. Perhaps the biggest disappointment was Parliament's rejection of a last minute compromise on targets for 20% pesticide use reduction targets – tabled by the Socialist Group in the European Parliament. While NGOs were already certain that 50% targets were unlikely to gain overall Parliamentary support, 20% targets seemed a distinct possibility going into the vote. Sadly the bulk of MEPs decided to pass the buck on the proposal, instead insisting that individual Member States take up the issue in the formulation of National Action Plans.

EU Court revokes paraquat authorisation amid environmental and public health concerns

What do the Fairtrade Labelling Organisation, the Common Code for the Coffee Community, the Forest Stewardship Council, the Rainforest Alliance, the World Bank, Chiquita, and Dole all have in common? They've all acted to end the use of the herbicide paraquat. And now so too has the European Commission – albeit because it was forced to by the law courts. On 11 July the European Court of First Instance announced its verdict on a case first brought by PAN Europe, the EEB and the IUF, and subsequently taken up by the Kingdom of Sweden, finding in favour of the immediate annulment of the European authorisation of paraquat – a substance once described by the WHO as being the world's worst herbicide. The Court's decision led countries including France and Germany to suspend sales of paraquat with immediate effect. Meanwhile other Member States will have to end paraquat sales in 2008. For more information, visit www.pan-europe.info/Paraquat



Press and Information
PRESS RELEASE No 4507
 11 July 2007
 Judgment of the Court of First Instance in Case T-209/04
 Kingdom of Sweden v Commission of the European Communities
THE COURT OF FIRST INSTANCE ANNULS THE DIRECTIVE AUTHORIZING PARAQUAT AS AN ACTIVE PLANT PROTECTION SUBSTANCE
 The Commission's handling of the file does not satisfy the applicable procedural requirements and the directive fails to satisfy the requirement of protection of human and animal health
 Paraquat is an active substance which is a component of one of the three most widely-used weed-killers in the world. It acts as a non-selective, broad-spectrum herbicide particularly active against weeds. It destroys the green tissue of the plant by drying the leaves. It does not attack the root system. The active and destructive action is localized in the place of application of the product. It has been used on more than 50 varieties of crops in more than 120 countries and marketed in the form of a herbicide for some 60 years.
 This active substance has been licensed in 15 countries, including Sweden, Denmark, Austria and Finland.
 The Community provisions governing authorisation for plant protection products must ensure a high level of protection, which must avoid in particular situations where risks to health, ground water and the environment have not been properly assessed. Annex I to the directive is quoted in quotes in the list of authorised active substances.
 In 1991 a number of paraquat producers, including DuPont as the notifier, notified the Commission of their wish to have paraquat included in Annex I to Directive 94/44. After issuing an assessment report on paraquat in 1 December 2003 the Commission adopted Directive 2003/112¹ including paraquat in Annex I as an authorised substance, subject to certain conditions.
 Sweden, supported by Denmark, Austria and Finland, brought an action for nullity of Directive 2003/112 before the Court of First Instance. Sweden put forward a number of pleas.
¹ Council Directive 2003/112/EC of 13 July 2003 concerning the placing of plant protection products on the market (OJ 2003 L 28, p. 1).
 Commission Directive 2003/112/EC of 1 December 2003 amending Directive 90/484/EEC of 2003 L 31, p. 32.

The Court's decision document

President Sarkozy gets tough on pesticides

On 25 October, President Sarkozy concluded a national consultation on the future of the French environment by announcing a tough new raft of measures on pesticides. According to the proposals, 53 of the most hazardous agrochemicals are to be withdrawn from use in

France, while the country's overall use of pesticides is to be cut by 50% over the next 10 years. The development, which marks France's first attempt at instigating national targets for pesticide use reduction, is seen as being the beginning of a new era for French environmentalism and comes at the end of France's 'Grenelle

Environnement' – an unprecedented three month consultation process involving environmental NGOs, farmers and business leaders. "It is high time that we take seriously the growing use of pesticides, which first and foremost affects our farmers", said the French President. Commenting on the announcement, Francois Veillerette, of French NGO MDRGF, was optimistic, observing that Sarkozy had broken the 'taboo' regarding the establishment of targets for pesticide use reduction. Other environmental announcements included in Sarkozy's 'green revolution' are a moratorium on planting GM crops, and the requirement that all cafeterias in French schools and public buildings increase the organic content of their menus. Al Gore, former US Vice President and Nobel laureate was also present at the launch.



President Sarkozy sits in conference with former US Vice President Al Gore before announcing ambitious plans to cut French pesticide use by 50%

Still not quite the end of Endosulfan

On 21 November the POPs Review Committee convened in Geneva to assess whether the insecticide endosulfan meets the screening criteria for consideration under the Stockholm Convention. The insecticide was last year nominated for inclusion within the Convention by the European Union now said to be pushing for a global ban on the sale and use of the agrochemical. Sadly, just prior to the commencement of the discussion, and with no prior warning, the Chair of the POPs Review Committee announced the meeting's cancellation due to the absence of a key document: the 'Risk Assessment' conducted by the European Union, on the basis of which the EU has banned endosulfan. These records could not be used as evidence because they had not been released due to legal difficulties surrounding a challenge to the EU's ban. The Chair of the POPs

Review Committee has subsequently indicated that endosulfan will be taken up for discussion at next year's meeting of the POPs Review Committee to be held on 13-17 October 2008. While endosulfan is highly toxic, bioaccumulative, and is responsible for causing severe poisoning in numerous countries, leading to the deaths of many cotton growers in Africa, and severe developmental defects in India, it is unusual as a candidate for inclusion within the Stockholm Convention. While most of the other pesticides that have gone through, or are going through the POP Review Committee process are either obsolete (e.g. aldrin), are produced only for limited uses (DDT), or have already been all but eliminated from global agriculture (lindane), endosulfan is the first pesticide still in widespread use in both the developed and the developing world to enter the process. As such endosulfan's passage



through the Review Committee process is expected to be contested by industry and certain countries at every step of the way. Those campaigning for greater protection for the environment and human health must now wait a further year to begin the next round of negotiations on endosulfan. Good news though arrives from Benin where in an official speech the Minister for Agriculture recently recognised that endosulfan is responsible for many poisonings, and declared plans to eliminate the substance from use in Beninese cotton production.

Scientist warns of 'Health Disaster' in the French Caribbean

The indiscriminate use of toxic pesticides on banana plantations in the French Caribbean has left inhabitants of Martinique and Guadeloupe facing soaring rates of cancer and infertility, a report to the French Parliament warned on 18 September. Based on present trends, half of the 400,000 men who live on the two islands are likely to develop prostate cancer at some point in their lives, said the report's author Professor Dominique Belpomme, a

French cancer specialist. Birth defects in children were also becoming much more common, he warned. Studies reveal that all children born in Guadeloupe are contaminated with the organochlorine 'chlordecone' – an insecticide with known carcinogenic and reprotoxic properties which was banned in many countries in 1979 but still used legally in the French Caribbean until 1993. Publishing his report, Professor Belpomme declared, "The situation is extremely serious. The tests we carried out show there is a health disaster in the



Based on present trends 50% of men from Martinique and Guadeloupe will develop prostate cancer at some point in their lives



'Bananas from Guadeloupe and Martinique: unbeatable'

Caribbean. The word is not too strong. Martinique and Guadeloupe have literally been poisoned". The professor also highlighted the pesticide's longevity explaining that chlordecone establishes itself in the soil and would contaminate the food and water supply for up to a century. Politicians from the islands, which are still administered as overseas departments of France, were reportedly torn between accusing the professor of alarmism and calling for a full scale inquiry. Martinique and Guadeloupe produce more than 260,000 tonnes of bananas every year: a crop whose economic value stands at around €210 million. The industry employs some 15,000 people and receives €125 million in EU aid. The rate of prostate cancer in the French Caribbean is the second highest in the world.

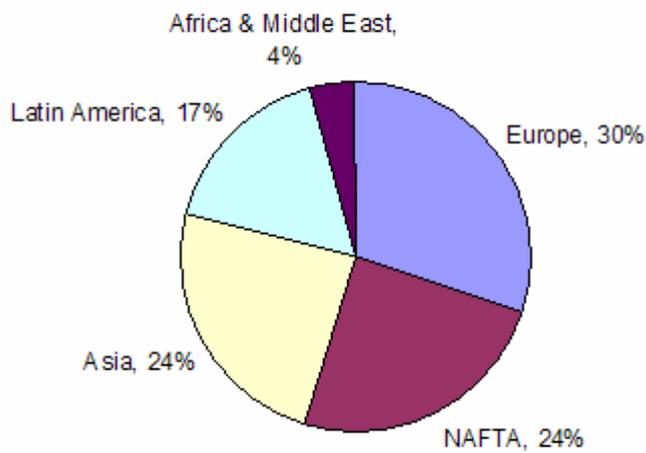
Market News

Six biggest companies account for 85% of world pesticide sales

Global pesticide sales continued to climb in 2006 totalling US\$30.425 billion –

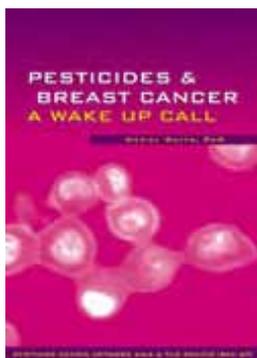
up 20% since 2002. Around US\$9 billion of pesticide sales occurred in Europe; which accounted for 30% of pesticides sold worldwide – a larger dollar share than any other continental block. Sales

data for 2006 also reveal the market dominance of the 'Big Six' (Bayer, Syngenta, Dow, BASF, Monsanto, DuPont): the world's largest pesticide manufacturers. Following a series of market mergers taking place between 1994 and 2003, these companies now account for some 85% of pesticide sales worldwide. 2006 also witnessed further growth in the sale of Genetically Modified seeds with worldwide sales amounting to US\$6 billion. Soybeans remained the world's biggest selling GM crop, closely followed by Maize. Smaller sales of GM cotton and canola were also recorded. In total 97% of GM sales related to just three companies: Monsanto, DuPont and Syngenta.



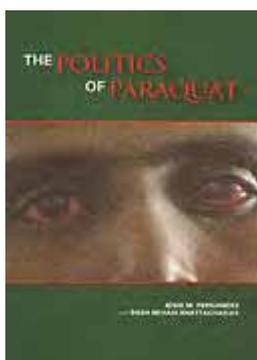
Europe spends more on pesticides than any other continental block

Pesticide Publications



'Pesticides and Breast Cancer: A Wake Up Call'

Breast cancer is by far the most common cause of cancer in women globally; and in many parts of the world its incidence is on the rise. In her recent book, Dr Meriel Watts, scientist and coordinator of PAN Aotearoa/ New Zealand, documents over 30 years of scientific evidence to build a compelling case for tougher restrictions on some of today's most widely used pesticides. While 'Pesticides and Breast Cancer' focuses primarily on the situation in Asia Pacific, the book provides essential reading for all those fighting for better pesticide legislation worldwide. For further information, and to order your copy, visit www.panap.net.



'The Politics of Paraquat'

Written by Josie Fernandez (PAN Asia Pacific) and Rash Behari Bhattacharjee (Tenaganita) 'The Politics of Paraquat' provides fresh insight into the struggle against paraquat use in Malaysia. Highly readable and authoritative, the book charts over 20 years of grass roots campaigning, as well as powerful counterlobbying by the agrochemicals giant, Syngenta, to provide a detailed understanding of the realities of life on a plantation, where total dependence on the plantation companies make it virtually impossible for labourers to challenge their inhuman working conditions. For further information, and to order your copy, visit www.tenaganita.net.

Academic Research

Pesticide residues of Italian ready-meals and dietary intake estimation

Analysis of 50 complete Italian ready-meals (comprising a first course, side dish, fruit, bread and wine) tested by state laboratories revealed pesticide contamination in 39 lunches, with an average of 2.4 pesticides in each meal and a maximum of 10. The most frequently occurring substances were pirimiphos-methyl (20 times), procymidone (17), pyrimethanil (7), iprodione (7), cyprodinil (7), fenitrothion (6), diphenylamine (6), chlorpyrifos (6), metalaxyl (5) and chlorpyrifos-methyl (5). 77.3% of the residues detected were present in the fruit, 14.9% in the wine, 3.0% in the main course, 2.8% in the bread and 2.1% in the side dish. Assuming that two meals are consumed per day, the average daily intake of pesticides in relation to ADIs for adults was 2.6% with a maximum of 73.3%; for teenagers it was 4.9% with a maximum of 109%, and for children it was 9.8% with a peak of 219%. [Lorenzin M. *Pesticide residues in Italian Ready-Meals and dietary intake estimation. Journal of Environmental Science and Health, Part B, Volume 42, Issue 7, September 2007, pages 823-833, 2007.*]

Hospital admission for accidental pesticide poisoning in England, 1998-2003

Researchers used Hospital Episode Statistics to identify 237 adults aged 16-69 admitted to UK hospitals between April 1998 and March 2003 for accidental pesticide poisoning. 62% of individuals took part in a survey: 89 cases of definite or possible accidental pesticide poisoning were confirmed. 54% of episodes arose due to an identifiable mishap while 26% were due to unsatisfactory storage or transport of pesticides. Two incidents resulted from spray drift. In total three patients needed intensive care. None died. [Leverton K, Cox V, Battershill J, Coggon D. *Hospital admission for accidental pesticide poisoning among adults of working age in England, 1998-2003. Clinical Toxicology, Volume 45, Issue 5, June – August 2007, pages 594-7*]

Pesticides poison pets in Austria

A six year retrospective study of pesticide poisonings in domestic animals and livestock from 1999 to 2004 identified 380 incidents in which a pesticide analysis was requested by regional or central governments, local police departments, district administrations, animal rights

groups, public health authorities and private clients. In total 175 (46%) such analyses tested positive for pesticides, with carbamate insecticides proving the most prominent among the substances detected, representing 50.3% of positive cases. Rodenticide-anticoagulants were responsible for a further 19% of positive results, organophosphate insecticides 5.1%, rodenticide-non-anticoagulants 3.4%, with the other 22.3% including molluscicides and herbicides, etc. Of the animals testing positive for pesticide intoxication 47.2% were dogs and 34.1% were cats. [Wang Y, Kruzik P, Helsberg A, Helsberg I, Rausch WD. *Pesticide poisoning in domestic animals and livestock in Austria: a 6 years retrospective study. Forensic Science International, Volume 169, Issue 2-3, 4 July 2007, pages 157-60*]

Impacts of pesticides European freshwater ecology: France, Finland and Germany

An analysis of 29 streams in agricultural regions of France and Finland found a marked correlation between levels of pesticide contamination and the relative abundance and number of sensitive freshwater species. Functional effects of pesticides were associated with a 2.5-fold reduction in the leaf-litter breakdown rate that closely matched structural changes in contaminated streams. Few effects were observed in Finnish streams due to low levels of pesticide residues. In follow up analysis, the SPEAR approach successfully discriminated between reference and contaminated sites across different biogeographical regions, including sites in North Germany. Changes in community structure were evident even where pesticide concentrations were as low as 1/100 to 1/1000 the acute 48h-LD50 for *Daphnia magna*. [Schäfer RB, Caquet T, Siimes K, Mueller R, Lagadic L, Liess M. *Effects of pesticides on community structure and ecosystem functions in agricultural streams of three biogeographical regions in Europe. The Science of the Total Environment, Volume 382, Issue 2-3, 1 September 2007, pages 272-85*]

Falling from the skies: pesticides in French rainwater

Rainwater samples collected on a weekly basis in Erstein (a typical rural town) and the city of Strasbourg were tested for the presence of pesticides commonly applied in the Alsace region of France. Comparison revealed higher levels of pesticides detected in rural areas, with the exception of diuron – a pesticide commonly applied in urban settings. In both areas fluctuations in the concentrations of pesticide detected correlated closely with periods of use. While many pesticide residues were identified, herbicides (alachlor, metolachlor and atrazine) were present at high concentrations. [Scheyer A, Morville S, Mirabel P, Millet M. *Pesticides analysed in rainwater in Alsace region (Eastern France): Comparison between urban and rural sites. Atmospheric Environment, Volume 41, Issue 34, November 2007, Pages 7241-7252*]

High levels of pesticides found in the home

Having collected dust matrices from living rooms and kitchens in 42 apartments, researchers based in the United States investigated the magnitude and distribution of 11 pyrethroid and 2 organophosphate pesticides in public housing dwellings in Boston. Permethrin and chlorpyrifos were detected in kitchen floor wipes in all homes, followed in detection frequency by diazinon (98%), cypermethrin (90%) and cyfluthrin (71%). At least six pesticides were detected in kitchen floor wipes in the majority of the homes (range 3–8). Positive and statistically significant correlations among dust matrices were observed between kitchen floor wipes and living room vacuum dust, including for diazinon and cyfluthrin. Detection of several pesticides including banned or restricted use products in some public housing units, underscores the need for alternative pest management strategies that embrace the safe and judicious use of pest control products. [Julien R, Adamkiewicz G, Levy J, Bennet D, Nishioka M, Spengler J. *Pesticide loadings of select organophosphate and pyrethroid pesticides in urban public housing. Journal of Exposure Science and Environmental Epidemiology, Published online 9 May 2007*]

Dutch greenhouse workers late to reach fatherhood

Researchers in the Netherlands recently recorded a prolonged time-to-fatherhood among male greenhouse workers exposed to pesticides before conception of their first pregnancy. The study used discrete proportional hazards regression analysis to compare 694 male greenhouse workers with a control group of 613 men. While the crude analyses showed no overall fecundity decrease among greenhouse workers compared to the non-exposed reference group, greenhouse workers were found to be significantly slower when trying to

assist their partners in achieving pregnancy. [Bretveld R, Kik S, Hooiveld M, van Rooij I, Zielhuis G, Roeleveld N. *Time-to-pregnancy among male greenhouse workers. Occupational and Environmental Medicine, Published online 12 September 2007*]

Polish households 'highly vulnerable to drinking water contamination'

Researchers conducting a 2 year study collected water samples from dug wells, deep wells and water mains of 81 randomly-selected rural households located in the Warka-Grójec region of central Poland: an area associated with extensive agriculture. Residue analysis found almost 100% of samples were contaminated with significant amounts of fenitrothion, a cholinesterase inhibitor and suspected endocrine disruptor used on orchard farms surrounding Warka. A high proportion (30%-70%) of samples taken during the spring also contained triazines (atrazine, simazine), while a small proportion also contained alpha cypermethrin. Surprisingly, the pesticide pollution profiles of water samples taken from dug wells and deep wells appeared virtually identical to water taken from the mains, indicating that the region's water treatment practices may be insufficient. Thus pesticides that leach into ground water resources are not efficiently removed by existing water delivery systems supplying households in the region. [Badach H, Nazimek T, Kamińska I. *Pesticide content in drinking water samples collected from orchard areas in central Poland. Annals of Agricultural and Environmental Medicine, Volume 14, 2007, pages 109-114*]

Widespread water pollution discovered in South Eastern England

Results of pesticide monitoring surveys in the Chalk of South East England reveal widespread pollution associated with the herbicide diuron, a known reprotoxin, which has penetrated to a depth of 30m within the regional aquifer. Analyses conducted between 2003 and 2004 showed diuron in 90% of ground waters analysed. The occurrence of the herbicide could be related to land use and amenity sources. Pesticide concentrations also showed a correlation with changes in groundwater level and residence time. Metabolites of diuron were more prevalent than the parent compound at 60% of sites examined. Should legislative requirements for drinking water change to include both parent compounds and their metabolites (as is increasingly the case in the USA) these results suggest there could be serious implications in terms of the future management and treatment of groundwater resources. [Lapworth D, Goody D, Harrison I. *Diuron and its metabolites in groundwater: an example from the Chalk aquifer of South East England. Geophysical Research Abstracts, Volume 9, 2007, Number 02997*]

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