



**Pesticide
Action
Network**
Europe

Newsletter

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PAN Europe News

Request for Internal Review of EU MRLs

On 10 April, PAN Europe and Dutch NGO Natuur en Milieu made a joint submission to the European Commissioner for Health requesting an Internal Review of Regulation 149/2008 which sets new Maximum Residue Levels (MRLs) for food produce. The demand follows evidence that upcoming legislation will dramatically increase the concentration of pesticides allowed in food items sold in the European Union.

PAN Europe's appeal is based on a set of legal obligations established in 2005 when the European Union agreed the principles by which national MRLs would be replaced with a new set of harmonised EU MRLs. According to Regulation 396/2005, EU MRLs must be set at the lowest level that

can be achieved, and take account of cumulative and synergistic effects.

Yet an analysis conducted by Austrian NGO Global 2000 shows that two thirds of legal limits on pesticides are set to rise under the new EU MRLs – in some cases by a factor of 1000. Most of the remainder will remain unchanged, while just 4% of MRLs will become stricter.

Documents from the European Food Standards Agency (EFSA) show the Commission approached the task of setting the new EU MRLs by first identifying the highest national MRL for each pesticide requiring a harmonized EU limit. Then for each pesticide/commodity combination the Commission sought to adopt the worst national safety standard as the EU legal limit – the opposite of what was



agreed in 2005. EFSA documents also suggest that cumulative and synergistic effects were not properly taken into account.

PAN Europe and Natuur en Milieu are seeking an Internal Review of Regulation 149/2008 with the aim of confirming the extent to which legal obligations have been honoured in setting EU MRLs and the potential impacts on human health.

The Commission has twelve weeks to respond.



Iztok Jarc, Slovenian Minister for Agriculture in Luxembourg giving details of the deal on 23 June

Council deal on EU Pesticide Blacklist

On 23 June, Agriculture Ministers approved the creation of an EU-wide pesticides blacklist. The deal represents a landmark in European health policy and could see some of Europe's most hazardous pesticides removed from food produce grown in the EU.

Meeting in Luxembourg, Ministers agreed to target pesticides linked with cancer, DNA mutation, reproductive toxicity, and hormonal

disruption - which together contaminate up to 22% of food items tested under the Community food monitoring programme. Such pesticides account for around 5% of those currently approved for use in the EU.

The Council's decision comes following months of hard work on the part of health and environmental NGOs who have worked to inform Ministers and the Commission of the need for tougher EU laws on pesticides.

News from the Network

Global 2000 warns of rising pesticide levels in food (29 May)

In May, Global 2000 published an investigation into the impact of new EU legislation on food standards. The study compared Austria's national Maximum Residue Limits (MRLs) with the new 'harmonized' EU MRLs set to replace them on 1 September 2008. Whilst 4% of MRLs will become stricter under the new legislation, 65% will be relaxed – in some cases by up to 1000-fold of the current legal maximum.

"Food products showing illegally high levels of pesticide contamination today could legally enter the food chain after 1 September", said Global 2000 biochemist Helmut Burtscher.

Scrutiny of the 'harmonized' EU MRLs found shocking results. The MRL

for fungicide propamocarb in pears, for example, will rise by a factor of 100 in September to stand at 10 mg/kg. But according to EU risk assessment models, at just 11 mg/kg propamocarb could pose a threat to children's health. "Since in this case there is almost no buffer between the legal and the health-endangering pesticide dose, setting such an MRL is a completely irresponsible act of the European Commission" Burtscher explains.

In addition the new MRLs take no account of the cumulative risks that pesticides pose. Food monitoring programmes commonly reveal a cocktail of pesticides which can mutually affect and strengthen one another in regard to their impact on human health. However, in establishing these new MRLs, this cumulative risk has been completely ignored



with the (weak) pretence that still no suitable models for cumulative risk assessment could be identified.

"All in all the forthcoming MRL legislation represents a serious health risk to European consumers. A detailed assessment of the new MRLs should be undertaken by national health authorities with the aim of eliminating at least those MRLs that pose a clear risk to consumers' health. Alternatively – if MRLs like that for propamocarb in pears come into force – food items should be labelled, saying: "The EU-Secretaries for Health: Consumption of Fruit and Vegetables Endangers Health" said Burtscher.

Legambiente: Pesticides on a Plate (23 May)

In Italy, fruit is the category of food worst affected by pesticide residues. This was the major finding of 'Pesticidi nel Piatto' (Pesticides on a Plate) – the 10th annual food monitoring report of Legambiente, published 23 May. Apples rank among Italy's most contaminated foods with three quarters showing pesticide residues, while one sample of white grapes contained nine different pesticides. Eleven samples of citrus fruits imported from Spain were also found to contain high

numbers of pesticide residues. Published in Florence at the 'Terrafutura' conference on sustainable living, 'Pesticidi nel Piatto' was this year presented in association with UNAAPI – the main national organization of Italian beekeepers. UNAAPI welcomed the report and urged for greater protection for Europe's pollinators, and for the withdrawal of pesticides toxic to bees.

Legambiente's analysis of Italy's national food supply chain is based on data published by state monitoring agencies and combines data



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relating to 10,048 different food samples. In total 45.8% of fruit samples tested were found to contain pesticides, while 1% exceeded legal limits on pesticide levels. By comparison vegetables showed far lower levels of contamination: 14.7% contained pesticide residues while 0.7% breached legal limits.



Greenpeace: Bayer's pesticides pose biggest threat (16 June)

Pesticides manufactured by German chemical multinational Bayer pose the biggest threat to human health and the environment, compared to other international producers, Greenpeace found in a report published on 16 June. Syngenta (Switzerland), Monsanto (USA), BASF (Germany) and Dow Chemical (USA) are the next to follow on the corporate ranking.

The Greenpeace report, 'The Dirty Portfolios of the Pesticides Industry', provides the first ever ranking of the world's leading agrochemical companies based on the hazards and risks of their pesticides on human health and the environment. The multinationals together account for 75 percent of the world market, and 243 (or 46 percent) of the 512

pesticides they sell worldwide are particularly hazardous for humans and for nature.

'Our ranking shows how toxic the business of the leading agrochemical companies still is,' said Greenpeace chemicals expert Manfred Krautter. 'Politicians must now tighten up EU pesticide laws to protect our health and to preserve biodiversity. Pesticides that can cause cancer, alter genes, and damage the reproductive, endocrine or nervous system must no longer be authorised. Pesticides that harm bees or life in aquatic environments must be banned from the market. The chemical industry is now using its significant lobbying power to try to secure authorisation even for toxins like these.'

On average, 46 percent of the multinationals' pesticide portfolios are made up of particularly dangerous substances. In terms of environmental and health protection, another worrying aspect is that only inadequate information is

available in public databases concerning the toxic effects of another 16 percent of the pesticide components. Even the best EU laboratories are unable to routinely detect the residues in food of 42 percent of pesticides on the market.

US company Monsanto has the portfolio with the highest proportion (60 percent) of pesticides that are particularly toxic to humans and the environment. However, Monsanto only ends up in the middle of the overall ranking due to its small share of the market. The overall ranking not only takes into account the hazardous properties of the various pesticides, but also the quantities that are sold worldwide.



IEW: My Healthy Garden – without pesticides

Last year saw the launch of 'My Healthy Garden' – a



public awareness campaign orchestrated by Federation Inter Environnement Wallonie (IEW). The Belgium-based network which draws together over 150 different environmental associations undertook the project with the aim of highlighting the short and longer term health risks associated with the use of pesticides in domestic gardens and public green spaces. Working with the cooperation of several bodies within the Belgian health sector, IEW placed 2000

posters and information materials in doctors' surgeries and clinics. The campaign also worked to promote the advantages of gardening without pesticides including positive impacts on biodiversity, decreased pollution as well as household savings. A third focus of the project was children's health since they are particularly vulnerable to the negative health effects of pesticides and are likely to risk pesticide exposure when playing outside.

FWFF: Marching for sustainable agriculture in Bulgaria (26 June)

Braving bears and tired after a fortnight's journey, campaigners at Bulgarian NGO 'Fund for Wild Fauna and Flora' (FWFF) finally arrived at the Central Balkan National Park on 26 June. With them came FWFF's flock of 650 Karakachan sheep – an ancient breed traditional in Bulgaria – as well as four guard dogs to mind the herd.

Entrance to the National Park, home to some of Europe's rarest wildlife, marked the end of a two week trek intended to help support Bulgaria's natural wildlife species and to showcase the ancient practice of 'transhumance'; once common throughout Bulgaria, but not practiced since the arrival of Communism

'The total distance we traveled was about 200 km – which witnessed a lot of challenges for the shepherds,' said Nadya Vangelova, President of FWFF. 'The worst hazard



The Central Balkan National Park is home to rare and endangered wildlife communities, natural ecosystems of high biodiversity, as well as historical sites of global cultural and scientific significance

was the bears which came among the sheep one night as we slept up in the mountains. Fortunately the guard dogs managed to scare them off and so prevented an attack on the herd.'

Transhumance is the vertical seasonal movement of livestock, typically to higher pastures in summer and to lower valleys in winter. Herding communities traditionally kept permanent settlements in the valleys. In summer the herd would journey up to the hills together with a small subset of people necessary to tend them.

For centuries this ancient practice lent a natural rhythm to the agricultural calendar of

the Balkan Peninsula – including Bulgaria. But in recent years it has all but disappeared. According to FWFF this has led to overgrazing in the country's lowlands, and an increased dependence on imported feed, agricultural inputs and veterinary products.

Mountain biodiversity has suffered too. The seasonal movement of cattle into the country's highlands worked to keep the mountain pastures open – thus providing valuable habitat for many native species of plants, birds and mammals. Endangered birds of prey such as the Imperial Eagle, Lesser Kestrel and European Soudlik are highly dependent on the existence of open habitats that are well grazed and so the diversity of plants and insects is high. Sheep manure also boosts growth of mountain vegetation.

FWFF is well placed to promote traditional farming methods in Bulgaria as it runs an Eco-farm and a medium sized flock of sheep in a typical pastoral landscape near to the Kotel Mountains. Following the success of the project the organizers plan to stage a photo exhibition promoting the Transhumance together with an accompanying book and film.



FWFF's flock of 650 sheep journey towards summer pastures

PAN Germany: Eco-Fair Fashion in Hamburg

(8 July)

On 8 July 2008, the 'Hamburg mal fair' launched an education and awareness campaign for better working conditions in the textile supply chain. As well as information materials, a broad range of organic and fair trade t-shirts were on show to demonstrate the compatibility of fashion and fairness. Germans are world leaders in textile consumption. Per capita every German, from babies to great-grandparents, uses 28 kg of textiles per year. Only a tiny proportion of these textiles are produced under healthy and fair labour conditions. Conventional cotton production is connected with a massive use of

hazardous pesticides and directly linked to poisonings of farmers, farm workers and their families. Low prices paid to cotton farmers in developing countries are forcing them into a vicious cycle of debt. And working conditions in sewing factories from Bangladesh to El Salvador are in most cases unacceptable. The 'Hamburg mal fair' campaign aims to raise awareness of the negative social and environmental impacts of the clothing industry, and to demonstrate how individual purchasing decisions can drive positive change throughout the supply chain. The different partners for the Hamburg campaign provide information materials (print, films, teaching materials etc.), organise exhibitions and other public events, and offer schools the



hamburg mal fair

opportunity to invite experts and work with them on the different issues. One of the highlights of the awareness raising activities is a design competition which challenges students to present a printable motif for a T-shirt which reflects their thoughts on 'Hamburg and Fairness'. The Hamburg-based fashion campaign has also led to the development of a range of T-shirts made from fairly traded organic cotton, produced by the Egyptian SEKEM Initiative. Eight fashionable designs, all with a link to the City of Hamburg, are now available in different colours and invite consumers to wear fair fashion. T-shirts can be purchased in retail outlets ranging from 'one world shops', branches of a Hamburg drugstore chain, smaller (eco) fashion shops in the hip quarters of the city, to the Hamburg Airport duty-free area.

More information (in German) on the campaign, T-shirts and allies is available on the website www.hamburgmalfair.de. Inquiries on how to organise such a supply chain for your own community are available from Alexandra Perschau (alexandra.perschau@pan-germany.org)



Regula Venske, Hamburg-based author and novelist (left) modelling fair trade organic T-shirts at the Hamburg mal fair. C Hadji Brown, musician, and Silva Lone Saländer, player in HSV women's soccer team and U-21 German International (right) also wearing Eco-Fair fashion designs in Hamburg

Pesticide News

Endosulfan halts Philippines ferry search (27 June)

The search for bodies trapped inside a capsized Philippines passenger ferry has been halted after the discovery that 10 tonnes of technical grade endosulfan was stowed on board. According to the Philippines' Fertiliser and Pesticides Authority (FPA) the endosulfan was bound for a Del Monte plantation in the south of the country.

Chlorinated pesticides linked to diabetes (4 June)

Licensed pesticide applicators using chlorinated pesticides are at greater risk of diabetes, according to researchers from the US National Institutes of Health (NIH). The associations between specific pesticides and incident diabetes ranged from a 20 percent to a 200 percent increase in risk, said the scientists behind the study.

INDIA: Brothers die in pesticide poisoning (2 June)

Two brothers died after eating cucumbers freshly sprayed with pesticides in their field in the village of Khanpur, Uttarakhand. Kuldeep and Sandeep were looking after their cucumber field when they picked two cucumbers and ate them. Local NGOs have urged the Government to help raise awareness of the dangers posed by pesticides.

Germany bans pesticides linked to bee deaths (23 May)

Eight pesticide seed treatment products are banned in Germany due to links with mass deaths

among bees. The move follows reports from German beekeepers in the Baden-Württemberg region that two thirds of their bees died earlier this month following the application of a pesticide called clothianidin

Pet shampoos linked to autism (20 May)

Mothers of children with autism are twice as likely to report shampooing their pets with pyrethrin-based shampoos around the time of their pregnancy. Pyrethrin came into use about 20 years ago to replace organophosphates.

DNA damage 'caused by pesticides' (19 May)

Research in India suggests exposure to pesticides could have damaged the DNA of people in farming communities, leading to higher rates of cancer. Professor Satbir Kaur, of the Patiala University, Punjab said the study ruled out other factors such as age, alcohol intake and smoking, concluding that the probable cause of this fundamental change in the building block of life was use of pesticide sprays.

Germans sue over dead bees (17 May)

Thousands of German beekeepers are readying claims for compensation against farmers and pesticide makers as mass deaths among bees are linked to the insecticide clothianidin. Vast numbers of bees were killed in Germany's Rhine valley by the chemical clothianidin, the Julius Kuehn Institute in the northern city of Braunschweig said. 29 out of 30 dead bees checked had been killed by contact with the pesticide.

Nigeria Bans 30 Agrochemical Products (May 14)

Nigeria has banned the sale and supply of 30 agrochemical products, according to the Nigeria-based Vanguard news service. Pesticides reportedly banned include endosulfan, parathion, phosphamidon, Methamidophos, monocrotophos as well as several chemicals already included under the POPs Convention.

UGANDA: Organic exporters in DDT scare (12 May)

Exporters of organic products are preparing to file a lawsuit against the government, accusing it of non-adherence to WHO guidelines on indoor spraying. The exporters contend that the manner in which the spraying is being done could contaminate the food chain, reviving fears that Uganda's organic exports, worth about \$500 million annually, will be rejected in American and European markets in their entirety if traces of DDT are found in any consignment.

DDT shows up in Antarctic penguins (9 May)

New research finds that DDT is still being detected in the body tissues of penguins in Antarctica, probably due to the chemical's accumulation in melting glaciers. Researchers were surprised to see that the level of DDT in Adelies' fat tissues had not declined, despite international restrictions on its use.

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

Dramatic reduction in pesticide risk through organic option

Without a doubt a lot of the food on our supermarket shelves contains traces of pesticide residues. But what is the associated health risk and what can be done about it? The Organic Center in the United States has just produced a new report addressing these and other questions.

Most of the pesticide residues we consume come from fresh produce and the US Department of Agriculture's Pesticide Data Program monitors residues on fresh fruit and vegetables. The Organic Center used this data to determine the worst offending items. They used the average concentration of each pesticide found and its relative toxicity to assign a Dietary Risk Index to each type of fruit and vegetable. The Dietary Risk Indices were used to produce a list of high risk domestic produce and high risk imported produce (imported produce generally has more residues than home grown and so the two were considered independently).

Avoiding high risk fruit and vegetables can help to reduce our exposure but is there anything else that can be done? Most pesticide residues are found on fresh fruit and vegetables and these are grown on only 8 million acres, or less than 3% of all US cropland. Previous research from 2002 demonstrated that organic produce contains substantially fewer residues than organic produce. If the 8 million acres producing fresh produce were to switch to organic production would this remove the risk? The Organic Center calculated that converting this relatively small amount of cropland to organic production would reduce the risk from dietary consumption by an impressive 97%. These figures present a compelling challenge. Will regulators and decision makers respond?

Benbrook C, Simplifying the pesticide risk equation: the organic option, Report from the Organic Center, www.organic-center.com, March 2008.

Low doses of diazinon affect brain development

Newborn rats were fed with doses of diazinon which were apparently non-toxic as they were too low to inhibit cholinesterase function in nerve cells. The rats were then assessed to determine if the number and size of their nerve cells were affected in different areas of the brain. The researchers found evidence of nerve cell loss in some areas of the brain including the temporal/occipital cortex. They also found evidence that synapses (the junctions between nerve cells) between cholinergic nerves in the hippocampus and cerebrocortical areas of the brain were reduced.

The research group had previously found that low doses of diazinon impaired thoughts processes and affected emotional responses. Taken together the results indicate that diazinon can disrupt normal development of the brain at very low doses.

*Slotkin TA, Bodwell BE, Levin ED and Seidler FJ, Neonatal exposure to low doses of diazinon: long-term effects on neural cell development and acetylcholine systems, *Environmental Health Perspectives*, 2008, 116 (3) 340-348.*

Organophosphates exacerbate asthma

The incidence of asthma has risen significantly over the past 25 years. This short time span suggests that some change in the environment is responsible. Recent studies have indicated that exposure to organophosphates at low environmentally-relevant concentrations may at least partly be responsible.

Airway tone is achieved by a balance between the contradictory action of two sets of nerves, one of which sends a signal to the muscles around the airway to contract and the other sends a signal to relax. Organophosphates inhibit one of these sets, the set responsible for relaxing the muscles, causing over constriction of the airways.

Sensitization to a particular allergen in the environment is a significant factor contributing to asthma. Researchers looked to see whether sensitization to an allergen would have an impact on the effect of organophosphates (parathion in particular) on asthma. They found that allergen sensitization makes the airway more vulnerable to organophosphates. As half of the

general population, and four out of five asthmatics are sensitive to an allergen these findings have significant implications for organophosphate risk assessments.

Proskocil BJ, Bruun DA, Lorton JK, Blensly KC, Jacoby DB, Lein PJ and Fryer AD, Antigen sensitization influences organophosphorus pesticide-induced airway hyperreactivity, Environmental Health Perspectives, 2008, 116 (3) 381-388.

New study confirms pesticide link to Parkinson's disease

A series of studies in the past few years have added weight to the theory that exposure to pesticides can contribute to the development of Parkinson's disease. A new study now adds further weight to this idea.

The new case-control study was conducted on 319 patients (the 'cases') with Parkinson's disease and 296 unaffected relatives (the 'controls'). The study looked at a number of lifestyle factors such as occupation, well-water consumption (previously shown to be associated with Parkinson's), history of pesticide application, age, gender, smoking and caffeine consumption. It found that the 'cases' were 60% more likely to have been directly involved in pesticide application than their healthy relatives. This study corroborates other studies pointing to pesticides as a significant risk factor for Parkinson's.

Hancock DB, Martin ER, Mayhew GM, Stajich JM, Jewett R, Stacy MA, Scott BL, Vance JM and Scott WK, Pesticide exposure and risk of Parkinson's disease: A family-based case-control study, BMC Neurology, 2008, 8 (6).

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.

*The Economist: **A balance of risk** (4 July)*

*BBC Radio 4 – Today Programme: **EU rules could 'reduce UK crops'** (3 July)
Dr Ian Denholm of Rothamsted Research Institute vs. Elliott Cannell, PAN Europe*

*Daily Mail: **Plans to ban dozens of pesticides will 'lead to food shortages and send prices rising further'** (3 July)*

*BBC Radio 4 – Farming Today: **Radio interview with Elliott Cannell, PAN Europe** (2 July)*

*Chemistry World: **EU pesticide threat** (25 June)*

*Euractiv: **Farm ministers back ban on toxic pesticides** (24 June)*

*Euractiv: **Pesticides: EU remains divided on substances** (20 May)*