





Counterfeit Pesticides Across Europe - 2008

Facts, Consequences and Actions Needed





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INTRODUCTION

There is a rapid growth in Europe and worldwide of counterfeit and illegally-traded pesticides. These illegal products are produced and distributed by criminal gangs. They are untested, unregulated and threaten farmers and consumers health and the environment.

The scale and scope of counterfeit pesticides differs from market to market depending on countries' specificities. This report gives a detailed overview of the problem and solutions. It provides useful and insightful information on the overall problem as well as for a number of European countries.

Fighting counterfeit pesticides is a complex task. In Europe, we see the dichotomy of more and more regulation related to pesticide use, yet less and less attention devoted to enforcement of these regulations. This is leading to more and more abuse.

The grave nature of the problem requires urgent actions by all stakeholders – governments, supranational entities, farmers and food chain and the legitimate pesticide industry.

GROWING COUNTERFEIT IN ALL SECTORS

According to the latest international reports on counterfeiting by the OECD and the European Commission, international trade of counterfeit products amounted to around US\$200 billion in 2005¹. This huge amount is larger than the GDPs of 150 economies.

Counterfeiting happens in all economies and with an increasing number and type of products. Customs authorities say about 70% of seizures of imported counterfeit and pirated products come from Asia.

Seizures of counterfeit and pirated products from the top 20 source economies		
Region of top 20 source economies	Number of source economies in region	Seizures (% of total)
Asia (excl. Middle East)	12	69.7
Middle East	2	4.1
Africa	2	1.8
Europe	2	1.7
North America	1	1.1
South America	1	0.8

Source: Report on the Economic impact of Counterfeiting and Piracy, OECD, June 2007

Observations about counterfeiting

- 1. **There is more and more counterfeiting.** Counterfeit goods seized at external EU borders increased by 330% between 2005 to 2006, and this trend is continuing . 250 million goods were seized in 2006 compared to 75 million in 2005. By its very nature, accurate measurement of illegal activities is difficult. Therefore, this increasing trend is extremely worrying since these numbers probably only reflect the tip of the iceberg.
- 2. The types of products being counterfeited are growing. The growth has been accompanied by a shift from high-value luxury items (upscale watches, designer clothing, and expensive perfumes) to common products. Counterfeit electrical components, food, beverages, toiletries and household products are appearing. Piracy of music, movies and software is significant in all economies. Over 150 million cigarette packets were seized in 2006 worth duty and tax losses over €460 million².
- 3. **Counterfeit activity varies per region and country**. Counterfeit pharmaceutical products are distributed mainly in Africa but also in Europe and North America. Counterfeit pesticides have been found across the world and in almost every European country.
- 4. Consumers play an essential role in fighting counterfeit activities. Depending on the type of product, consumers might not be able to distinguish a fake from an original because of the sophistication of pirate copies or because they are available through legitimate distributors. Other consumers consciously break the law and buy counterfeits. In that sense, the latest report on luxury counterfeited goods³ refers to the growing trend of counterfeit product acceptance habits by UK consumers. According to this report two thirds of UK consumers were happy to own and buy luxury fake clothing, footwear, perfumes, watches etc.

¹ Without counting pirated digital products distributed via the Internet and domestically produced and consumed counterfeit products.

² See European Commission, DG Taxation and Custom Union Report on Activities on counterfeit and piracy, Results of the European border 2006.

³ Davenport Lyons Counterfeiting Luxury Report 2007: Fake Luxury Goods Shift into Social Acceptance; But Who Benefits? Exposing the Myths

MORE AND MORE COUNTERFEIT PESTICIDES IN EUROPE

In Europe, the growth of counterfeit plant protection products is worrying. The European Crop Protection Association (ECPA) estimates that 5% - 7% of annual turnover is affected by counterfeiting and illegal trade. This is about €360 - €510 million of the European pesticide business across Europe. In some regional hot spots, 25% or more of the market is estimated to be counterfeit. These are estimates based on statistics, market dynamics, percentage of customs seizures and case-by-case country studies. And the problem is growing.

In China and India, illegal pesticides are deemed to make up about 30% and 20% of these markets, respectively. The rapid growth of chemical manufacturing capabilities in these countries has made this possible.

Pesticide imports from China into the EU are growing 8 times faster than average worldwide pesticides imports into the EU. This is worrying, especially in light of the fact that 86% of counterfeited goods seized in 2006 came from China. The chart below show how imports from China are increasing rapidly.

	2000	2007	% change	
US	27658300	46233600	67.20%	
China	3460300	16590000	379.40%	+
Israel	18949700	46468100	145.20%	
India	3570100	6241600	74.80%	
South Africa	5793900	681500	-88.20%	
Switzerland	28010300	25613800	-8.60%	

Chinese imports into the EU growing exponentially compared to other countries.

* data from the European Commission DG Trade database

Chart: Imports into the EU of pesticide products (in 1000 kg)

In terms of pesticide manufacturing, China is the big growth area in terms of capacity, with an average growth of 12.5% year on year from 2000 to 2007 in tonnage. There are over 2000 companies formulating pesticides and over 400 involved in manufacturing. Active substances are readily supplied and exported with no controls to countries around the world where they are formulated and labelled for onward distribution. Likewise sophisticated copies of proprietary products are manufactured and shipped with fraudulent documentation to countries around the world with growing emphasis on Europe.



Source: European Commission – Community Customs seizure activities on Counterfeit and piracy 2006

TYPES OF COUNTERFEIT AND ILLEGAL PESTICIDES

The nature and extent of counterfeit products and illegal trade varies per market and can originate from many different sources in many different forms. The three main areas of illegal activity are:

- 1. **Fakes:** containing anything, from water or talc, to diluted and outdated or obsolete stocks, including banned or restricted materials. Some fakes may provide a degree of biological control, as they sometimes contain an illegal and untested copy of the proprietary active substance. These products are often sold in simple packs (white bottles) with minimal labelling on there use and no health and environmental precautions. (Example 1)
- 2. Counterfeits: sophisticated copies of legitimate branded products usually with high quality labelling and packaging. Most will contain a copy of the original active substance; however its biological efficacy is often diminished owing to high levels impurities of manufacturing and process by-products. Such products, often difficult even for experts to distinguish between legitimate and counterfeit ones, are sold to farmers and only show adverse side effects such as crop damage after application. (Example 2)
- 3. Illegal parallel imports: legitimate parallel traded products substituted with illegal generic copies, repackaged and sold as legitimate products. Parallel trade of plant protection products has been a contentious issue for several years however the recent ruling by the European Court of Justice, ECJ, Case C102-06 has lead to the re-adoption of "common origin" thus precluding the legitimate substitution of an equivalent registered product . The repackaging of plant protection products is still contested by the plant protection industry as repackaging compromises the products integrity, allows for contamination and the use of unacceptable packaging leading to an inferior product that may cause harm to crops and pose risks to consumers.

Pesticides and plant protection products sold and used in Europe are extremely well regulated through EU and national regulations and legislation and as such are thoroughly tested to ensure the maximum safety to farmers, the environment and consumers purchasing and eating fresh produce treated with any pesticide.

All counterfeits and illegally traded pesticides are completely untested, commonly contain toxic and untested byproducts and manufacturing impurities and other ingredients that pose a significant threat:-

- to the safety and livelihood of farmers,
- the risk of environmental contamination and adverse effects on groundwater, following crops and biodiversity,
- pose increased risks to consumers through unknown and untested residues.

The manufacture and distribution of counterfeit and illegal products is often complex involving many different countries, however, there is growing evidence that the sophisticated counterfeits are produced and distributed by large organised criminal groups.



LEFT: Legitimate product on right, illegal fakes on left

RIGHT: Legitimate product on right, counterfeit on left

NEGATIVE EFFECTS OF ILLEGAL TRADE AND COUNTERFEIT PESTICIDES

 <u>Consumers' and farmers' health are in danger.</u> Unlike legal, registered products, which undergo rigorous government testing, illegal products have not been tested for human health impact and could contain unknown toxic impurities. Residues of unknown and untested substances could be carried into harvested food and compromise consumer health, whilst also posing health threats to farmers through exposure during application.

Pesticide packaged like vegetable cooking oil In Italy, in 2006 boxes containing 5 litre bottles disguised as normal vegetable cooking oil were found. Thankfully these were discovered prior to distribution. Should a consumer have used the "oil" they would have become seriously ill.

RIGHT: Herbicide product contained in a 5-litre vegetable oil container ready for sale in Italy.



- 2. <u>Harm to the environment.</u> Many active substances and other constituents used in illegal products are untested for environmental safety and can contain highly toxic impurities. Their increasing use can compromise ground and surface water purity, negatively affect natural habitats for indigenous species, flora and the fauna, and leave residues in soil that could be detrimental to subsequent crops.
- 3. <u>Farmers' economic and reputation damage.</u> Illegal products can severely damage crops decreasing yield or destroying a field. Farmers who use illegal products can, and have had, produce rejected by food companies. The farmer must pay for disposal and destruction and will have insurance claims rejected. All of these threaten farmers' incomes and reputation.

Russian and Ukrainian harvests destroyed

In 2005, five farms in Russia and Ukraine reported large areas of their sugar beet crops had been destroyed after using what they thought was Caribou, a legitimate herbicide. The farmers reported the damage and investigations of the containers showed the herbicide was a fake. There was no chance to analyse the contaminants in the fake products as the farmers had applied the entire product to their crops. The fake product was most probably a sulfonylurea impurity or contaminant. The farmers obviously suffered significant economic damage with each one losing income up to 75 hectares of sugar crop.

BELOW: Examples of crop damage following the use of counterfeit and illegal plant protection products.





4. <u>Economic damage to governments</u>. Counterfeits defraud governments and their taxpayers through lost taxes and levies from the sale of genuine products (estimated at €21 - €30 million annually across Europe). It

stifles innovation and competitiveness, leads to jobs losses, undermines the EU's knowledge-based economy, and acts as a investment deterrent.

5. <u>Economic and reputation damage to the food value chain.</u> Threats to the health and well-being of consumers who buy fresh fruits and vegetables will negatively impact supermarkets' reputations, and erode public confidence in governments' ability to regulate the agricultural sector effectively.

Spanish food producers suffer from reputation of illegal pesticide use

The crisis in 2007 regarding the use of illegal isofenphos methyl, a product never authorised in the EU, in the Spanish pepper greenhouse sector in the Almeria region, caused major economic damage. Pepper shipments were exported throughout Europe from Spain. After the scandal broke, Spanish pepper exports declined by 19% over the first 6 months of 2007. Major European food importers/retailers reacted and limited purchases from Almeria. This case is described in depth on page 16.

6. Economic and reputation damage to the plant protection industry. The negative effect of counterfeiting includes loss of sales, patent and trademark infringement, erosion of data protection, damage to reputation and the undermining of industry stewardship activities. It negatively effects companies' value and reduces farmers' confidence in legitimate products. All these undermine economic growth and job creation, and stifle innovation and competitiveness.

Criminal gang importing from China busted in Spain

In 2005, Spanish police dismantled a gang that introduced illegal pesticides. They arrested 11 and seized 24 tons of illegal pesticides imported from China. The police said the gang, organised like a military structure, may have introduced about 150 tons of illegal pesticides into Spain. The gang leader was accused of distributing products to businessmen who then sold them to farmers cheaply. The police said the gang made about 60 import transactions with a total value of €30 million annually. Two multinationals in the sector discovered the irregularities and reported the situation to the police.

Substantial seizure of counterfeit products made in Poland 2008

In May 2008 the Polish special police forces raided several premises in the town of Lubaczow, some 35 km from the Ukraine boarder. Many products were recovered and out of over 30 samples taken 29 were found to be counterfeits. Some of the products had been imported and flown in from China whilst others had been brought over the Ukraine/Poland boarder.

BELOW: Examples of counterfeit products found at Lubaczow Poland in 2008.



WHY FIGHTING COUNTERFEIT PESTICIDES IS DIFFICULT

The fight against counterfeit pesticides is difficult for the following reasons.

Politicians don't recognize the problem.

Many politicians still do not recognise the seriousness and extent of the problem. Consequently, civil service administrations are not devoting the attention and resources required. Many politicians do not want to admit that there is a problem as this reflects badly on their country or region's ability to fight illegal activity. Some politicians are hesitant to take bold steps to fight the problem because they see this as a public admission that fake untested pesticides are used in their country– something which local producers and exporters often want to keep quiet. There may also be a mis-perception among some politicians that because pesticides are heavily regulated, the type of problem is being addressed.

National enforcement is weak.

National and regional governments are responsible for the fighting counterfeits. There are four problems here.

- 1. **Focus on high-profile sectors.** National anti-counterfeit activities tend of focus on high profile sectors where VAT losses are largest (luxury goods, CDs, clothing, software, pharmaceuticals). Less high profile sectors do not get the resources required despite the acute environmental and health threats of counterfeit pesticides.
- 2. Too many departments no responsibility. The complexity of the problem means that many different government ministries and agencies are involved. This has lead to a fracturing of responsibility between different parts of government many ministries are involved but non leads and coordinates. In most countries, at least six different ministries play a role: agriculture and environment departments for inspections and use, justice and police regarding criminal prosecution and pursuit, finance/treasury regarding VAT and duties, trade/customs regarding imports and controls and public health regarding contaminations, harbour authorities.
- 3. **Regional versus national divisions.** In some countries, responsibility for enforcement is divided between regional and national authorities. Political divisions and sensitivities have lead to weak enforcement coordination and action.
- 4. Complex problem solutions multi-facetted. The nature of the pesticide counterfeiting problem is complex and wide-ranging. At national levels, this requires multi-disciplined specialists teams with skills in policing and prosecution, chemicals, agriculture, customs, environment, etc. These skills are available, but more often than not are not working together.
- 5. **No European leadership.** Despite concern and some actions in some European Commission departments, to date no single entity at European level has been charged with taking a leadership, coordination and information-sharing role.

Inadequate judicial frameworks and penalties.

Some countries do not have adequate legislation to properly prosecute counterfeiting. For example, in some countries, it is illegal to buy or sell counterfeits, but not to possess them. Other countries have inadequate penalties. In one known case, a convicted counterfeiter found in possession of hundreds of tones of illegal pesticides was only given a very small fine.

Challenges of quantifying the problem.

It is difficult to present detailed data of the extent and growth of the problem because of its illegal nature. This is the same problem encountered by all sectors who face counterfeiting. Even in areas where judicial authorities devote significant resources, like illegal cigarette smuggling or narcotics, the estimates of the size of the problem vary wildly.

Increasingly easy to operate across borders in Europe. The single market has decreased internal EU border controls making it easier to move illegal pesticides around. This is of particular concern when considering parallel trade abuse. Parallel trade of pesticides is legal, but there has been a steep increase in abuse, with counterfeiters substituting legitimate products with fakes. The growing sophistication of cross border criminal activity makes cross border enforcement activity even more critical.

Challenges in the food and supply chain.

There are a number of challenges to fighting counterfeit pesticides in the food and supply chain. Food manufacturers and producers are consumer-oriented companies and they do not like speaking publicly about this problem. Many food companies do recognize the challenges but prefer to resolve these quietly directly with their suppliers. The disadvantage of this is that it does not bring the problem into the open and consequently the thousands of food producers are not benefiting from shared knowledge of the problem and how to deal with it. Farmers are under increasing pressure to provide quality produce for better prices. For some farmers, this has led

to the use of illegal pesticides because of the low prices. In some countries, as a result of dysfunctional approval processes, few appropriate pesticides are available. This has led some farmers to use illegal products.

Negative influence of revision of EU pesticides legislation.

Europe has slowly diminished the number of existing products that farmers have at their disposal for pest and disease control and not helped companies bring new products to the market in a timely manner. It is reasonable to fear that the revision of the legislation governing pesticides at European level (Directive 91/414) will take many currently available and registered products off the market, leading to a sharp increase in illegal pesticide use.

FIGHTING COUNTERFEITS – WHO NEEDS TO DO WHAT?

Pesticide producers are dedicating significant human and financial resources to fighting illegal trade and counterfeits. But they cannot succeed alone. Those responsible, and affected, need to lead - governments, farmers, the food value chain and the plant protection industry. The growing problem urgently requires increased attention and intensified human and financial resources.

National governments and authorities

- 1. Politicians need to recognise the problem and instruct their administrations to devote more resources to the problem.
- 2. National authorities need to:
 - step up their anti-counterfeit enforcement activities, including better enforcement of existing anticounterfeit and plant protection product regulations.
 - coordinate and exchange information on better enforcement,
 - ensure that appropriate legislation to tackle the problem is in place,
 - improve registration and authorisation timings for new products, enforce new EU legislation on anticounterfeiting and intellectual property rights and make the use of legitimate products a mandatory requirement in farmer cross compliance programmes,
 - adopt FAO specifications for active substances/products as a minimum requirement, and monitor them
 regularly.

European authorities

- 1. The European Commission and national authorities need to harmonise and codify parallel trade guidelines to stop illegal traders' abuse of parallel trade rules, and enhance registration procedures across the EU.
- 2. The European levels (Commission) needs to instruct their administration to designate a coordination point at European level, acting as centre for best practice sharing on how to fight counterfeit and illegal products.
- 3. The European Commission should:
 - should better monitor the proper implementation of EU legislation, by expanding the mandate of the Food and Veterinary Office (FVO),
 - integrate the awareness and control of illegal pesticides as part of the sustainable use initiative,
 - ensure continued monitoring of implementation and enforcement of relevant EU legislation.

Farmers and the food chain

- 1. Farmers need to be more vigilant about what products they buy and from whom, and report illegal sellers/distributors to authorities. They should ensure they buy from trusted sources, check that the product is approved, and be vigilant towards suspicious labels, odours, colours, low price, etc.
- 2. Farmer organisations and Co-ops should play a leading role in increasing awareness about risks of using counterfeits.
- 3. The food chain should:
 - actively promote only the use of registered and approved products in their supplier contracts
 - report incidents of illegal products to authorities,
 - strengthen traceability and audit programmes,
 - play an active role in raising awareness and educating growers on the risks.
- 4. Pesticide distributors need to be more vigilant about illegal products and need to report them, eventually through anonymous channels.

Plant protection industry

- 1. The industry is actively engaged to increase awareness and enforcement. At European level, industry is working to broaden awareness across a wide audience and to improve legislation to control counterfeit and illegal imports.
- 2. At national levels, it is working with enforcement agencies to fight counterfeit and is working to develop dialogue with appropriate enforcement authorities and provide training and technical support. The industry is lobbying to increase penalties for counterfeiting.

- 3. Industry is raising awareness of the problems and solutions throughout the supply chain.
- 4. Companies are working on innovative product design, packaging and labelling measures to counter illegal activities and are developing best practises through the supply chain.
- 5. Developing new policy proposals to allow better management of the whole supply chain from manufacture, customs, exporter/importer, suppliers/distributors, plus the proposal to stop the re-packaging of legitimate plant protection products when this relates to parallel imports.

BULGARIA		
Population	7,6 million	
Main agricultural products	vegetables, fruits, tobacco, wine, wheat, barley, sunflowers, sugar beet	
External EU entry points	Turkey, Former Yugoslav Republic of Macedonia, Serbia, Black Sea	

Counterfeit pesticides are estimated to account for 7-10 % of the pesticides market. Low prices, higher profits for traders are the main motivators for the use of illegal pesticides. Controls are poor. Most counterfeits are believed to be directly imported from China, India and Malaysia and then locally repackaged. To date there has been little success in securing prosecutions against counterfeiters. The Ministry of Agriculture and the National Service for Plant Protection (NSPP) are the departments responsible.

CZECH REPUBLIC		
Population	10 million	
Main agricultural products	wheat, potatoes, sugar beets, hops, fruit; pigs, poultry	
Arable land	over 3 million hectares	
Size of pesticide market	€146 million	

Counterfeit pesticides are estimated to account for at least 2% of the pesticides market, and probably more. The problem is predominately located in the South Moravia and Central Bohemia regions. Most agricultural products are consumed internally, but food is exported to Central Asia and neighbouring countries, the Mediterranean region, and smaller amounts go to North America and South-eastern Europe. The most important export commodities are: malt, wheat, hops and food preparations.

In the Czech Republic, the predominant problem is the abuse of parallel import, as well as counterfeits imported from other countries: e.g. Italian and the Netherlands ports via Germany. The main authorities involved in dealing with the issue are the Czech Ministry of Agriculture, State Phytosanitary Administration, Department of Plant Protection Products in Brno.

Counterfeits crossing borders in central Europe

In 2005, a local company imported a counterfeit product from Poland to the Czech Republic in time for the spring 2005 sugar beet season. It was claimed that the product was a legal parallel import of the same registered product in Poland. Laboratory analysis showed impurities in the imported product. The Czech authorities decided, based on the packaging information, that it was in fact an illegal import, and that the patent had not been granted in the Czech Republic. The authorities decided to remove the product from the market, but when the local company objected, the product was allowed to be distributed in time for the growing season, pending further action by the authorities. Despite clear indications that the product was illegally imported, 2005 was the second year in a row that these sales have been allowed to proceed. In 2005 the amount was estimated at about 14 tons. The case is pending.

DENMARK		
Population	5,4 million	
Main agricultural products	barley, wheat, potatoes, sugar beets; pork, dairy products; fish	
External EU entry points	North Sea, Baltic Sea	

Counterfeit pesticides are estimated to account for about 2% of the market, but some companies estimate that up to 15% of some of their products' market is counterfeit. The key drivers for counterfeit/fake products are price and profit. In some cases, reputable distributors have been involved with counterfeits and there is increasing concern about this. It is believed fake products are both imported from China and India and formulated somewhere in EU, or formulated product is imported directly from same countries. Fake fungicides and herbicides were discovered and verified by the original producers. In the past, there have also been cases of illegal Clopyralid and Floroxypyr.

Danish government crack down on counterfeits

In 2007, the Danish Tax and Custom Authority (SKAT) completed a 2-year investigation into the illegal import of pesticides from Germany to Denmark. The investigation was triggered when Customs authorities discovered a truck of illegal products trying to make its way into Denmark. As a result of the investigation, the Danish authorities fined 87 farmers for illegal import and failure to pay the Danish pesticide duty, and they will pay about €250,000 in total. On top of this, they will pay fines for VAT fraud. SKAT stated that they believe this type of activity is not unique and that it is likely that several trucks with illegal products enter Denmark every year. As a result of this investigation, SKAT will intensify the surveillance of the crop protection market, working even closer with the German and Swedish authorities.

The authorities involved dealing with the issue are the Environmental Ministry dealing with chemicals inspection, the Plant Directorate at the Ministry of Food, Agriculture and fisheries looking at cross compliance rules and the Danish Tax and Custom Authority mentioned above. The Plant directorate in 2006 for the first time made inspections of pesticide storage at farm level. Authorities are kept informed about the fast-growing problem in other EU countries and have notified customs authorities about which trademarks to watch out for during inspections and information on "normal" shipment routes.

FINLAND	
Population	5,2 million
Main agricultural products	barley, wheat, sugar beets, potatoes; dairy cattle; fish
Arable land	2,26 million ha
Size of pesticide market	€56,9 million, 1,6 Million kg
External EU entry points	Russia, Norway, Gulf of Bothnia, Baltic Sea, Gulf of Finland

Counterfeit pesticides are estimated to account for over 1% of the market value. They are smuggled in from neighbouring countries for own use. The main problem in Finland relates to counterfeits being used in the cultivation of cereals and horticultural crops. The problem is predominately located in the southern and western region. 96% of agricultural products are consumed internally and 4% is exported, primarily to the Russian Federation.

The predominant problem in Finland is the abuse of parallel trade for own use. Due to its location as a gateway for goods from Asia to the Russian market, the Finnish Customs plays a key role. The main authorities involved dealing with the issue are Elintarviketurvallisuusvirasto EVIRA (the authority responsible for the approval, sales and use of PPPs), Suomen Tulli (Finnish Customs) and the Ministry of Agriculture and Forestry. EVIRA has actively communicated on the risks of illegal / counterfeiting products.

FRANCE		
Population	63 million	
Main agricultural products	wheat, cereals, sugar beets, potatoes, wine grapes, beef, dairy products	
Arable land	18,338 664 Hectares (2006)	
Size of pesticide market	71,600 tons ai and 1,721 billions euros	
External EU entry points	Switzerland, Atlantic Ocean, Mediterranean Sea, English Channel	

It is unknown how much of the French pesticide market consists of illegal or counterfeit pesticides. The existing cases do not provide sufficient basis to extrapolate a percentage figure for all of France. The problem relates to counterfeits being used in the cultivation of crops, predominantly cereals, grapes and vegetables. The problem is mostly located in the south and northern region borders. It's believed that most illegal substances come in from Asia through Spain and Italy, with smaller quantities coming in through Germany and Belgium.

The principal authorities involved are the Ministry of Agriculture, the Minister of Economy and Finances and the Ministry of Agriculture (Brigade Nationale Des Controles Phytosanitaires). The government has a working group in place which includes all stakeholders, which considers proposals to improve legislation and provide input into European level deliberations. Individual pesticide companies and the association UIPP are taking action to counter the trade. This includes legal proceedings and awareness raising activities. Most farmers are aware of the problem, but some of them are still price driven, and don't consider health and environment risks. Attention for the problem is growing among the media.

In 2005, a crop protection company discovered that a company was parallel importing into France a product which used their patent protected active ingredient. The smaller company had registered the product with the French authorities, but had broken French regulations on at least three counts: 1) the original package was repacked into new inner jars, which is prohibited in France, 2) the trademark was misused on the packaging, 3) the use-rate of the product indicated on the label was actually higher than that recommended on the original label. The refilling of containers is of great concern to the French authorities as in their view it presents an opportunity for fake products to enter into the French agricultural market. The label on the product was very confusing as it recommended a higher rate of usage than was legally registered. The use of products at higher than advocated rates is not supported by authorities or the original manufacturer and presented safety issues. The French regulatory authorities withdrew the registration from the marketplace. The product was widely available in many parts of France, but exact quantities are unknown.

GERMANY		
Population	82 million	
Main agricultural products	potatoes, wheat, barley, sugar beets, fruit, cabbage	
Arable land	11.9 MM Ha	
Size of pesticide market	€1,233 M	
External EU entry points	North Sea, Baltic Sea, Switzerland	

Counterfeit pesticides are estimated to account for $\leq 25-30$ million or around 3% of the agricultural market. Lower prices are the main driver of counterfeit business, and the major problem is illegal parallel trade. Most counterfeits come from Asia, especially India, but there is an increasing trend from China. Most formulation is believed to be done in Eastern Europe.

There are different legal interpretations of the parallel import rules covered by the German Plant Protection Act which complicates matters. The first problem is the interpretation of "identicality". Importers are of the opinion that this means "similar" and that they are allowed to change co-formulants or active substances. The second problem is that importers state that they make a "re-import". For a "re-import" no import-permit of the German registration authority BVL is needed. But the importers do not import the original German product in the original German packaging but a refilled product in a different packaging. Large and smaller pesticide producers are equally negatively affected by the illegal activity though it depends on companies product ranges. Reputable distributors and dealers are also increasingly concerned about the problem.

Abuse of parallel trade rules

One example relates to a product called Granstar 75 WG which was being imported under parallel import rules from Poland into Germany. The product was repackaged and relabelled and significant amounts were sold in Germany. Lab tests showed levels of a compound not in compliance with the FAO limits, and significantly different co-formulants and different impurity profiles. The labs concluded that the product was not the same as the original, and that during repackaging unapproved materials were added. This was therefore abuse of parallel import rules. The German regulatory authorities are currently looking into case and legal actions are pending.

Individual companies in Germany have a high success rate in securing prosecutions. In September 2007 the German Association IVA organized an import symposium in Frankfurt with 130 participants. It involved all groups interested. IVA believes imports of pesticides have to meet the same level of consumer and environmental protection as the pesticides which are authorized under German law. It therefore pleads for strengthening the rules in the German Plant Protection Act governing imports.

GREECE		
Population	11 million	
Main agricultural products	wheat, corn, barley, sugar beets, olives, tomatoes, wine, tobacco, potatoes; beef, dairy products	
Arable land	28,06 Million ha (3,7 Million ha in actual use)	
Size of pesticide market	€154.5 million	
External EU entry points	Former Yugoslav Republic of Macedonia, Albania, Turkey, Aegean Sea, Ionian Sea.	

Counterfeit pesticides are estimated to account for 6% of the current market and there are signs this is increasing. Approximately 3% of trade is estimated to be illegal parallel trade. The main problem in Greece is counterfeits being used in the cultivation of rice, cotton, wheat, corn, potato, and tobacco crops. The problem is predominately located in the northern region of Greece, but is spreading all over the country. The prime driver for counterfeits is price, but long regulatory delays are also motivating farmers to use illegal products. Counterfeits do not have a great effect on SMEs producing pesticides, but some suppliers are affected, and some are part of the counterfeit trade. In some cases reputable distributors and dealers were found to be involved. Most counterfeit products are

imported into Greece as formulated products, mainly directly from Italy, Bulgaria, Turkey, FYROM, Albania and China.

Success in prosecution of illegal importers Fake herbicides for rice have been found. One specific example is a major company who took legal action against the importer company of illegal products and succeeded in getting a court decision that would not allow the importer to sell the remaining stock. The Ministry of Agriculture has imposed administrative penalties to the importer of €10,000, ordered him to export the seized quantity to the declared country of origin on his expense. It also sent the case to the Justice department for further penalties.

Both the Ministry of Rural Development and the Ministry of Economy and Finance are positive regarding fighting counterfeits and trying to alter the situation. But progress is slow and there has been no discernable increase in activity in the last few years. Media coverage has increased in the last two years and the Greece association will draw further attention to this issue. The association is involved in conferences, publicity, radio and TV spots, production and distribution of posters and booklets.

HUNGARY	
Population	10 million
Main agricultural products	wheat, corn, sunflower seed, potatoes, sugar beets, fruits and vegetables, wine; pigs, cattle, poultry, dairy products
Arable land	5,864,000 ha
Size of pesticide market	€230 million
External EU entry points	Serbia, Ukraine, Croatia

Counterfeit pesticides are estimated to account for around 2% of the pesticide market. The main problem in Hungary relates to counterfeits being used in the cultivation of corn and sunflower crops. The main driver for counterfeit use is price and it is believed most illegal products come in from Ukraine, Poland and the Czech Republic as formulated products. In Hungary, the nature of the problem is predominately abuse of parallel trade. In the past illegal Arade Haloxyfop and Arade Klopiralid 300 SL have been found in the market. The Hungarian Association has distributed leaflets and organised a press conference on illegal products.

IRELAND	
Population	4,2 million
Main agricultural products	Barley, potatoes, oats, wheat; beef, dairy products
Arable land	288.000 Ha
Size of pesticide market	€40 million
External EU entry points	North Atlantic Ocean, Irish Sea, English Channel

It is unknown what percentage of pesticides in Ireland is fake. The problem in Ireland relates to counterfeits being used in the cultivation of wheat and barley crops, and it is predominately located in the southern and North East region. Abuse of parallel trade rules is the main problem. Lower prices for farmers and profits for distributors and importers are the main motivators for illegal counterfeits. Most illegal products are directly imported as formulated products. Private investigations by companies and the crop protection association have provided useful information which has been provided to the authorities.

ITALY		
Population	58 million	
Main agricultural products	fruits, vegetables, grapes, potatoes, sugar beets, soybeans, grain, olives; beef, dairy products; fish	
External EU entry points	Switzerland, Adriatic Sea, Mediterranean Sea	

Counterfeit pesticides account for 2% - 7% of the pesticides market. The key drivers of counterfeiting are lower prices, restrictions related to organic farming rules and the products available. In some cases SME producers are also affected by counterfeits. Counterfeit products get to Italy through parallel import from Spain, Portugal, and Greece; or they are formulated in Italy.

1000 - 2000 litres of illegal herbicides found

An example from 2006 relates a herbicide called Topic. An anonymous source provided a sample of an herbicide labelled as Topik, but lab tests showed the content to be Supracid, a genuine product supplied through legitimate supply chain in Italy. Counterfeiters had bought Supracid, removed the original labels and applied counterfeit labels. Their motivation was financial - Supracid sells for €10 and Topik for €100, and an estimated 1000 - 2000 litres were sold on the market. Italian police is currently investigating and an information campaign was launched in Italy to warn farmers of dangers.

The NAS national police are helpful and interested and have increased activities in the last few years. The ICRF are also interested and helpful. One challenge is the difficulty of securing prosecutions. The Italian association has set up a toll free number and training courses for NAS and ICRF are planned.

Farmer's fields destroyed

In 2004, in Italy, France and Spain, hundreds of hectares of maize, potatoes and tomatoes were damaged by farmers who were using a fake product. The case came to light when a distributor indicated that there was product being offered in the market at a 20% lower cost than the original product and the distributor wanted to know if this was a special offer, or whether something more sinister was going on. Subsequent investigations discovered that the crops of farmers who had treated their produce with the product were dying. Fake copies of the product were being packaged to look identical to the original. The fake product contained metsulfuron-methyl instead of rimsulfuron. Rimsulfuron is perfectly safe for use on maize, potatoes and tomatoes, but metsulfuron-methyl is not appropriate on these crops. There was extensive economic damage to farmers.

NETHERLANDS	
Population	16 million
Main agricultural products	potatoes, ornamentals, fruits, vegetables, cereals, livestock, dairy
Arable land	1,007,301 ha
Size of Pesticides market	€350 million
External EU entry points	North Sea

Counterfeit pesticides are a minor problem in the Netherlands. Nefyto, the pesticide producers association has an anti-Counterfeit Task Force which focused on the role of the harbours (Rotterdam and Amsterdam) in the transit of counterfeit products. The Association is pushing to create awareness amongst ministries, authorities and enforcement services, in order to identify illegal networks. It is vital to seek the full cooperation of the custom and harbour authorities through e.g. a rapid alert scenario. Nefyto hopes to deliver a blue print that can be used in other associations.

POLAND		
Population	38 million	
Main agricultural products	potatoes, fruits, vegetables, wheat; poultry, eggs, pork, dairy	
Arable land	15,957,300 hectares	
Size of pesticide market	€400 million	
External EU entry points	Belarus, Russia, Ukraine, Baltic Sea, Gulf of Gdansk.	

Counterfeit pesticides are estimated to account for 3-5% of the pesticides market in Poland. The main problem in Poland relates to counterfeits being used in the cultivation of grain, sugar beets, corn and cash crops. The problem is predominately located in the highly developed agricultural regions in Western and South Western Poland. 90% of agricultural products are consumed internally and 10% is exported, primarily to Lithuania and Czech Rep.

In Poland, the main forms of counterfeiting are: 1) the repackaging of old stocks of pesticides into sachets of wellsold multinational products, 2) the packing of unknown chemicals in bags and bottles with photocopied label, and 3) the packing of low price products into high price, high reputation labelled products. Farmers are willing to buy "special sales" products delivered and the legal distribution networks are seeking "additional profits".

The national association has developed awareness and information campaign focussed on the Polish Parliament, judicial and enforcement authorities, farmers and the media. Recently, the Minister of Agriculture requested additional controls of the market and additional certification of sales points was undertaken. Police and prosecution have received training and farmers organizations help to inform their members.

German – Polish illegal trade under the guise of parallel trade

In Germany in 2005, a small German company imported, from a Polish "broker", about 50 tons of a supposed registered product claiming that the product was a product registered for use in the EU. After detailed analysis, it was proved that the product was not an authentic product. The parallel import was therefore illegal; the product a fake, as was proved by laboratory tests and this was an obvious case of patent infringement. Of the 50 tons, about 10 tons were seized. Investigations discovered from which company in Poland the product was bought but not who had manufactured or produced it. The fake products were good copies or refilled containers. The subsequent court case was won by the company who owns the patent but only small damage payments were made.

Illegal Counterfeit Plant Protection Products Seized

In April 2008 several tons of counterfeit and illegal plant protection products were seized in Lubaczow close to the Ukraine boarder. Of the 34 samples tested 29 were found to be illegal or counterfeit and covered products from

many companies. Most of the products examined were manufactured and packed in China before being flown into Europe and then on to Warsaw. Other products appeared to have come from the Ukraine. The plant protection association in Poland PSOR and the special police forces responsible for the raid are working in close cooperation and subsequent prosecution should emerge from the case.

RUSSIAN FEDERATION	
Population 144 million	
Main agricultural products	grain , sugar-beet, sunflower
External EU entry points Kaliningrad region	

Counterfeit pesticides are estimated to account for 10-20% of the market. The main problems relates to counterfeits being used in the cultivation of grain and sugar-beet crops. The problem is predominately located in the south and Far East. 85% of agricultural products are consumed internally and 15% is exported, primarily to EU and Arab country. The main problem is the import of ready for use products from China and India as active ingredients with fake labels meant to look like original brands.

In June 2008 regional police in the Kursk Oblast, Russia, uncovered a major pesticide counterfeiting facility. The police raided premises last week near the city of Kursk, where around 100 tonnes of counterfeit and illegal pesticide products were found with an estimated market value of over 1 million Euros. Most of the products are illegal copies of patented and branded products from major legitimate global manufacturers and were pre-packed into containers ready for commercial sale.

Adjacent to the warehouse the police uncovered equipment designed to apply labels and stickers to the bottles, as well as other packaging equipment. Initial examination of the symbols on the seized product containers indicate that the products were manufactured in China. There are also indications that the transport routes to Kursk may be different for differing consignments with some arriving by sea and others by road, and some possibly running through an EU port. The case remains open with possible prosecutions later this year.

SLOVENIA		
Population	2 million	
Main agricultural products	potatoes, hops, wheat, sugar beets, corn, grapes, apples	
Arable land	196000	
Size of pesticide market	€20 million	
External EU entry points	Croatia	

Illegal pesticides are estimated to account for 10% of the crop protection market and are believed to be concentrated in the cultivation of vineyards in the west. Most of the illegal products are imported directly by the farmers. 90% of agricultural products are consumed internally and 10% is exported, primarily to Croatia and Italy.

In Slovenia, the nature of the problem is the abuse of parallel import – mostly from Italy. The motive for illegal imports is the lower prices for some fungicides and the lack of minor use pesticides – specially for vegetable and fruits. In 2005 the illegal imports increased dramatically. The imported fungicides were cheaper because of lower active ingredient levels or because they were beyond their usage date.

The Ministry of Agriculture Phythosanitary administration ran a campaign in 2005/06 to create awareness of the risks of using illegal products. The industry association SLOCPA regularly informs the Phythosanithary inspection about new cases of illegal imports.

SPAIN		
Population	44 million	
Main agricultural products	grain, vegetables, olives, wine grapes, sugar beets, citrus; beef, pork, poultry, dairy products; fish.	
Arable land	25,2 million ha	
Size of pesticide market	€800 million	
External EU entry points	Mediterranean sea, Atlantic Ocean, (Morocco)	

Counterfeit pesticides are estimated to account for 8-10% of the pesticide market. Counterfeit products in Spain are particularly prevalent in the Almeria and Murcia regions in the vegetable crops grown mostly in greenhouses. The most frequent pests in the areas and major causes for the use of illegal products are white fly and thrips. The worst cases of illegal products started in 2000/01 when a devastating plague of thrips hit the region. Products appeared on the market that were not yet registered in Spain but which turned out to be extremely efficient.

The most common types of illegal practices are: non-authorised products for greenhouse use, products used in crops other than those they are authorised for, use of products that have lost their authorisation, illegal copies of legal products, products sold in bulk, non-labelled containers with active substances formulations mainly of Asian

legal products, products sold in bulk, non-labelled containers with active substances formulations mainly of Asian origin. A 2005 study estimated that in the 5 south-east provinces around €35 million of insecticide and acaricide products are used with an estimated value for the illegal products ranging from 24% to 28% of this total insecticide market. The same study found that 98% of farmers interviewed said they had easy access to illegal products. Since April 2003 many products for greenhouse use are pending of registration in Spain due to lack of proper resources and expertise for their evaluation. This situation has encouraged the use of illegal products.

The great Spanish pepper scandal

In December 2006, the Spanish media reported that traces of the illegal substance isofenphos-methyl on peppers imported from Spain had been found by German authorities. The illegal substance was detected in analyses carried out on samples of peppers produced in Almería in south-eastern Spain. Isofenphos-methyl originated in China and has never been approved for use in the EU. The UK, Netherlands and Finland also detected traces. The Spanish government stopped the sale of peppers and vigorous inspections were carried out. 13 greenhouses were sealed off and production halted. Farmers have been charged with crimes against public health and face fines of up to €120,000. The Spanish authorities stated that there were no health risks associated with the contaminated peppers.

The story received ample media coverage and the consequences in terms of financial loss for Spanish agriculture are serious; pepper exports during January-March 2006 decreased with almost 20%, and the price decreased from 1 euro to 40 cent compared to the same period in 2005. Even more serious are the long-term effects in terms of the reputation of Spanish agriculture and the trust in its food safety record. The fresh pepper market has only recovered through the intervention of the Andalusian government with financial support for integrated control measures as an alternative to pesticides. The Spanish Crop Protection Association (AEPLA) had been calling for proper enforcement of the law for years, and has on numerous occasions warned that a crisis like this one could occur.

In December 2007, Seprona, the environmental police made another seizure of over 2200 litres of mixed pesticides and arrested eleven people associated with them.

UKRAINE		
Population 48 million		
Main agricultural products	n agricultural products cereals, sugar beet, sunflowers, soybean, oilseed rape, corn	
External EU entry points	Odessa, Lvov, Kiev	

Counterfeit pesticides are estimated to account for 20% of the market. The main problem in Ukraine relates to counterfeits being used in the cultivation of cereals, sugar beet, corn, sunflowers, potatoes, vegetables, orchards. The problem is predominately located in the southern, central, eastern and western regions, bordering Poland, Russia, Transnistria. Main entry points are the port of Odessa, and the Russian, Polish and Transnistrian borders.

In Ukraine, the nature of the problem is predominately counterfeit imports from China and corruption at official (customs) level. There is a lack of awareness at farm level related to the risk to human health and the environment. Consumer awareness regarding ecological or green issues is generally low. Economic benefits are the main reasons to buy fakes, coupled with corruption at the farm and distribution level.

Ukraine is not a major exporter of goods to the EU and residue issues are not on the government agenda. No proper legislation regarding prosecution and penalties exist nor is being enforced. Previous seizures of illegal product have re-appearing on the market. The European Business Association is managing a public awareness campaign and joint investigative activities.

500 tons of illegal pesticides

In December 2006 the State Security Service seized over 500 tons of counterfeit products, the largest ever recorded in Europe. Reportedly, attempts were made to bribe officials with \$200,000 to release the goods. The generic product from China had been smuggled in and repackaged. The State Security Service and industry were in regular contact since the seizure. The seized products were secured at a unused military warehouse in Uzin outside of Kiev. According to Ukrainian law, the products could be auctioned off by court decision should they be found not to pose a threat to health, environment and agricultural production. ECPA and EBA consider this a serious issue and expect the Ukrainian government to adopt legislation and assume responsibility in this matter. The Uzin case is a precedence case and could be an indication of which direction the government will take in future seizures.

UNITED KINGDOM		
Population	60 million	
Main agricultural products	cereals, oilseed, potatoes, vegetables; cattle, sheep, poultry; fish	
External EU entry points	English Channel, North Atlantic Ocean, North Sea, Irish Sea.	

Counterfeit pesticides are estimated to account for 2% of agricultural plant protection products. Targets of counterfeiting are products with high selling volumes independent of their field of application. The key drivers of counterfeits are price for buyers and very low development costs for manufacturers. Regulatory delays have a negative impact on the introduction of innovative products into the market place. Reputable distributors and dealers are concerned about counterfeit products, in particular about legal implications of selling counterfeit products and health and safety issues.

Most fakes come from outside the EU and they are generally imported as finished products. Active ingredients can be manufactured and formulated in different countries. Companies have the full support from the UK legal system when evidence can be produced but finding samples of illegal products is the rate-determining step of the process.

Courts prosecute importer

In June 2007, a British court found an importer guilty on three counts of illegally storing foreign pesticides. The three illegal products included Carbaryl containing pesticides, a product banned in the UK in 2001 following safety review, as well as a product containing the insecticide tebufenpyrad at a concentration significantly different to any UK approved product. The importer admitted that he had deliberately not applied for parallel import approval for any of the products. The importer was given 2 year conditional discharges for the offences and was ordered to pay prosecution costs in addition to his own legal costs.

There has been an increase in enforcement activities in the past few years and this reflects the increase in counterfeit cases. There is close contact and collaboration with enforcement agencies, but there are some challenges in getting evidence together and CPA maintain regular liaison with enforcement authorities to encourage action and communication exchange. Individual companies are closely involved in defence of intellectual property when counterfeits are found.

Glasgow pesticides trade fair - an example of how companies are openly selling pesticides in the EU Every year there is a plant protection products trade fair in Glasgow called the Crop Science and Technology Exhibition. Hundreds of companies exhibit their products, make contact with buyers and sell pesticides. In 2005, 37 injunctions were served on 20 Chinese companies and two stands advertising illegal substances or infringing patents were closed down. It 2006, exhibitors were required to undersign a written agreement not to undertake such activities. Despite this, 24 companies, 23 of which were Chinese, were given injunctions and 3 were ordered to close for promoting illegal products.

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