Pesticide Anti-counterfeiting CropLife Leadership Global – Regional - Local

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SUMMARY

Pesticides counterfeiting and illegal trade is an issue of bad effects to human health, environment, economy and pesticides Industry. This business is estimated by 8-10% of total pesticides business worldwide. CropLife which represents plant science industry leads global, regional and national campaigns allying stakeholders to alleviate counterfeiters' activities.

INTRODUCTION

Needless to say: "Where there is a brand, there is a fake" and when you see a cockroach running across the table in daylight, there's a million more in the woodwork.

Pesticides Counterfeiting Value Dimensions and Hotspots: The value dimension of pesticides Industry is estimated at world market by US\$ 36 Billion. Percentage of counterfeiting survey in Europe is 5-7 % according 2 ECPA also OECD preliminary report refers to 5-7 %, while CLI survey (2009) expected 9 %.

I.e. Illegal Market: approx. US\$ 3 Billon: China, India, CIS/NBC, EU countries, ("Illegal" parallel imports)

LA "Bermuda Triangle" (import and sales w/o registration = smuggling) are considered the hotspots of the pesticide counterfeiting.

Definition

Illegal product activities can be clustered as:

- Counterfeit products (fake products)
- "Illegal" parallel imports (EU)
- Imports/sales without registration (unapproved products)
- IP violation (patents, trademarks, copyrights, design)
- Other illegal product activities (e.g. unfair competition)

The illegal and counterfeiting products are locally defined by laws no. 57 & 10–1966 and their new changes.

Damage and risk potential

The impact on using counterfeit and illegal pesticides:

- Human health for farmers and applicators is at risk e.g.
 - Due to lack of or wrong labelling/safety-/antidote-information
 - Due to cross-contaminants or unknown by-products and impurities in a.i. and/or formulation (unknown or e.g. banned solvents, surfactants, emulsifiers)
- Crops may be severely damaged (yield losses) or destroyed
 - Due to no or inadequate control
 - Due to phytotoxicity
- We as consumers face health risks via contaminated food
 - Due to unknown toxic residues
- Environment (wildlife, water soil) may be damaged severely and for years (!!)
- Toxic Waste Disposal Problem and Challenge

Why it is difficult to eliminate counterfeiting pesticides?

- No global view
- CF-ers have "global strategy" for CF pesticides
- Regulatory agencies not dealing with CFs

CropLife efforts to reduce business losses caused by CF products:

- lobbying for effective IPR and anti-CF legislation
- supporting industry brand protection activities
- enforcing existing regulatory laws

FACT gathering (investigations) on CF through:

- marketing research on threats to business
- part of business plan for companies
- shareholder questions re CF

Major Cases & Current Investigations:

The following countries have reported major cases of counterfeiting and illegal trade:

ItalyRussiaSpainPolandUkraineEgypt

China South Africa

Brazil Ghana Paraguay Morocco Yemen

The objective and goal of collecting such cases is to: Determine global links for CF pesticides.

Where are most of the CF products coming from?

- Global investigation and reports referred to China as a main source of counterfeiting and illegal trade pesticides
- 2,700 pesticide producing companies (mostly state-owned!)
 - Of which 450 are basic manufacturers of a.i.
 - All 2.700 are formulating companies
 - Pesticides exports US\$ 1.3 Billion in 2005
 - Export Markets are estimated as:
 - Asia ranked 1st
 - Europe ranked 2nd
 - Latin-America ranked 3rd

The China effect

Origin of counterfeit good seized across the EU through 2006

CropLife international is leading campaign in China with Institution for Control of Agrochemicals, MOA (ICAMA) to Ally against counterfeiters Facts indicated that there are no links between export & import documents for pesticides.

There should be transparency in shipping documents (export/import) Import customs need to know if the active ingredients / pesticides are:

- legal
- registered
- What is stated on the import documents
- from legal factories Registered with ICAMA exporter list

Other facts showed that factories in China don't always exist.

There should be also transparency in regulatory documents.

Do the import regulators know the A.I. manufacturer?

- Factory registered with ICAMA?
- Do regulators inspect the factories?

Other examples of group liability for crimes:

Bankers [money laundering]

Criminal conspiracy when 'knowledge a crime is committed'

To avoid the counterfeiters in China:

EXPORTERS / IMPORTERS
Foreign REGULATORS
Foreign CUSTOMS

(Know Your Customer)
(Work through ICAMA)
(Work through ICAMA)

The role of intellectual property:

Innovative product life cycle is as follows:

- 1. Discovery Researchers identify candidate molecule for use in product development. Patent Protection sought.
- 2. Development Researchers establish effectiveness and safety of various formulations including the patented active ingredient.
- 3. Registration Companies seek approval to sell the new compound from government regulators.

Intellectual Property covers:

- Patents
- Plant Variety Protection
- Regulatory Data (Data Protection)
- Confidential Business information and trade Secrets
- Trade Marks
- Copyright
- Designs

<u>World Trade Organization (WTO)</u> Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS)

- ❖ Intellectual property (IP) refers to creations of the mind: inventions, literary and artistic works, symbols, names, images, and designs used in commerce.
- ❖ Intellectual property is an "umbrella" term which covers different individual forms of such property, including patents, trade marks, and proprietary data protection, designs, copyright, confidential information, plant variety rights, etc.

- An intellectual property system is designed to encourage inventions and innovation by promoting their protection and utilization so as to contribute to the development of industry.
- ❖ Intellectual property can be used by developing countries as a strategic tool to promote innovation, boost small and medium size enterprise, facilitate investment and technology transfer, and generate wealth.
- Success stories such as the development and publicity of Ethiopian coffee to Ghanaian chocolate, demonstrate the importance of intellectual property in Africa.
- ❖ More than 80% of the African workforce is engaged in agriculture and agriculture-related sectors. By giving small scale farmers access to IP creations such as new seed varieties, agrochemicals and tools, it is estimated that crop yields could at least be doubled thereby substantially benefiting the small scale farmers.

The TRIPS Agreement is the most influential international intellectual property rights agreement. TRIPS was signed as part of the GATT Uruguay round which established the World Trade Organization (WTO) in 1995. All members of the WTO (including least developed, developing and developed countries) are bound by TRIPS provisions. Since entering into force, TRIPS has proven instrumental in enhancing the intellectual property laws of a considerable number of countries.

<u>TRIPS</u> set minimum standards for the protection of various forms of intellectual property.

Article 39 of TRIPS specifically includes the protection of regulatory data relating to "agricultural chemical products" as part of the proscribed protection of undisclosed information. TRIPS also provide minimum standards for enforcement of intellectual property and transitional arrangements for providing product patents for agrochemicals and pharmaceuticals.

According to TRIPS Article 27, WTO Members need to provide patent protection for plant varieties and agro-biotech inventions; but they might choose to exclude from patentability plants, animals, and other than microorganisms. In cases where Members opt to exclude plants from patentability, protection of these inventions must be provided by an effective alternative system. There is no further explanation of what this alternative system of protection should be; however, the UPOV Convention

(International Union for the Protection of New Varieties of Plants) is considered the preferred standard for plant variety protection.

They can also exclude from patentability essentially biological processes for the production of plants or animals other than non-biological and microbiological processes.

Types of intellectual property:

Patents: A patent is a form of IP protection granted by the government to an inventor for any invention that is a new and useful process, machine, article, manufacture, or composition of matter or any new and useful improvement thereof. For example, a patent may be granted for new chemicals, machines to produce those chemicals, or even a new use for a new chemical which has been developed.

The patent confers certain rights which include the right to exclude others from making, using, selling, or importing the invention in the country where the patent is granted. Legal standards require an invention must be novel, non-obvious, and commercially applicable (useful) in order to be patentable.

In return for patent protection, inventors agree to reveal all the technical information about their inventions. This information is available to everyone and allows anyone with a basic knowledge of the invention's field to reproduce the invention once the patent has lapsed or expired. In this way, patents help to spread new knowledge.

Patents provide rewards and protection for inventors but they also benefit society through access to innovations and new technologies. The patent system is intended to balance the interests of inventors and the interests of the general public.

- A patent is limited by the following:
 - 1- A patent is limited to the countries in which it is filed. A worldwide patent does not exist.
 - 2- A patent is generally limited to a maximum period of 20 years, subject to payment of maintenance fees to keep the patent in force
 - 3- The claims of the patent define the specific features of the invention that enjoy protection and inform other parties as to which exclusive right is claimed and what they may not do.

Plant variety protection

- The International Convention for the Protection of New Varieties of Plants (the UPOV Convention) was signed in Paris in 1961. UPOV provides a framework for intellectual property protection of plant varieties.
- These rights are most often referred to as plant variety protection (PVP) rights or plant breeders' rights (PBRs).
- PBRs are granted for new varieties of plants which have been cultivated, bred or developed by traditional methods. The duration of a plant breeders' right is at least 20 years.

To be eligible for protection, a plant variety must be novel, distinct, uniform and stable:

- To be "novel" the variety must not have been offered for sale or marketed, with the agreement of the breeder in the source country, or for longer than 4 years in any other country.
- To be distinct", the variety must be clearly distinguishable from any other variety of the same kind of plant, the existence of which is common knowledge at the time.
- To be "uniform", the variety must be sufficiently uniform with regard to the characteristics of the variety in question, subject to the variation that may be expected from the particular features of its propagation.
- To be "stable", the characteristics of the variety must remain unchanged after repeated propagation or, at the end of a particular cycle of propagation.

Regulatory data (data protection):

- Regulatory data are the research and test results generated by plant science companies to prove the safety and efficacy of a product, and which are required by a governing authority to allow companies to place their product on the market.
- Some of the data are confidential in nature and are communicated to government authorities with an obligation of non-disclosure.
- Producing data and obtaining regulatory approval accounts for a significant amount of time spent between discovery and commercialization of crop protection products.
- According to a study published in 2000, the development of a new agrochemical costs in excess of US\$200 million.
- It takes more than 9 years from the date of discovery to first market entry of a new product.

- Only one in approximately 140 000 molecules studied by the agrochemical industry will progress from the laboratory to the field.
- Over 120 tests for safety and efficacy are performed on each new product entering the market.
- The purpose of regulatory data protection is to prevent a third party from obtaining any unfair competitive advantage by using the data and to prevent poor quality products entering the market through reliance on proprietary data.
- Without effective rules and enforcement, countries could find that they are swamped with substandard products which in turn could have an adverse effect on human health and agricultural production.
- In practice, governments grant the data owner an exclusive period of use for the data (typically 10 years from the date of registration in that country).
- A strong regulatory framework for the protection of data fosters confidence and stimulates investment in research and development, making it possible to develop new crop protection products for sustainable agriculture.

Global protection of regulatory data:

Country	No. of years
Chile	10
China	6-10
Singapore	10
Australia	8+3
New Zealand	5
Korea	15
Japan	15
Mexico	5
Colombia	10
EU Members	6-10
US FTAs	10
CAFTA	10
Brazil	10

Confidential Business Information and Trade Secrets:

• Confidential Business Information (CBI) is perhaps the category of intellectual property that is most difficult to define. It can be described

loosely as the knowledge possessed exclusively by an individual or a company, which provides the individual or company with a competitive advantage.

- CBI is also sometimes called a "trade secret," because the value of the information is protected exclusively through confidentiality, rather than through patents, copyrights or other proprietary law.
- Trade secret protection covers products, processes, methods or even business information used to provide a competitive advantage in business.
- Unlike trademarks, patents and copyright, trade secret law provides non-exclusive protection for the trade secret. There are many risks involved in deciding to go with trade secret protection and one must consider the consequences if the trade secret is ever made public.
- The advantage of deciding to choose to to protect one's information as a trade secret (even with it's attendant risks) is that if the secrecy can be maintained, it can provide enormous value well beyond the life of any limited intellectual property right.
- A good example of a successful trade secret is the formula for making Coca Cola®.

Trade Marks:

Trade marks are words or other marks (such as logos) that are used to distinguish the goods or services of the trade mark owner from the goods and services of other manufacturers and suppliers.

A trade mark can, for example, be "any sign capable of being represented graphically", or in other words, capable of visual representation. <u>Thus, a</u> mark can be:

- •A symbol which may or may not have any particular significance.
- •A person's name or image.
- •A corporate logo.
- •An invented word or an ordinary word.
- •A distinctive container for goods.
- •something applied to the surface of goods, or incorporated in their shape or structure.
- •a musical jingle or a slogan, or a combination of colours in a particular format
- •The owner of a registered trade mark can stop the use or registration of another trade mark in respect of the same or similar goods or services if the other trade marks so nearly resemble the registered trade mark as to

be likely to deceive or cause confusion, without having to prove prior use of the trade mark.

- •Registered trade marks endure indefinitely, subject only to the payment of renewal fees every ten years.
- •Unregistered trade marks may only enjoy a limited form of protection.
- •There are systems which make it possible to file a single application for registration of a trade mark in a number of countries. These systems are the international "Madrid" system, the Community Trade Mark (CTM) system in Europe, and the Organisation Africaine de la Propriété Intellectuelle (OAPI) system in Africa.

Copyright

Copyright is a legal concept giving the creator of an original work exclusive right to it, usually for a limited time.

Unlike other forms of intellectual property protection, copyright does not need to be registered and arises as soon as the work is reduced to material form.

For copyright to subsist the relevant subject-matter must constitute a "work", the work must be original —meaning that it was not copied from another source, and the work must be in a material form.

Examples of "works" which one may obtain copyright protection for include:

- Literary works (for example novels, poems, tables and manuals)
- Artistic works (for example photographs, paintings and drawings)
- Musical works (for example music, exclusive of any words or action, reduced to writing or musical notations preserved in a material form such as a disc or a tape)
- Sound recordings (for example a compact disc or tape on which sounds are embodied)
- Movies or motion picture films
- Broadcasts (for example radio and television)
- Programme-carrying signals (for example a signal being emitted passing through a satellite)
- Published editions (such as the first print of a particular typographical arrangement of a literary or musical work), and
- Computer programs.

Designs

- A design relates to the physical appearance of an item or part of it, and can apply to industrial as well as handicraft items.
- Design rights are granted on the outward appearance of an object. Protection is offered in terms of the look of an object -as opposed to patents that protect inventions, or the way in which something is made or the manner in which it works.
- A design right is not concerned with how an item works but is directed to the appearance, which results from the features of the product or the way it looks, such as the shape of a bottle. A good example is the shape of the Coca Cola® bottle.
- Designs are usually directed to the aesthetic features of a product, which may include one or more of the shape, configuration, pattern, ornamentation, lines, contours, colours, texture, material, etc. of the product.
- Depending on the country, a design is generally limited to a maximum period of 10 to 25 years.
- There are also international agreements which make it possible to file a single application for the registration of a design in a number of countries. The Hague Agreement provides for the registration of designs in a number of countries by filing a single design application at WIPO in Geneva. The African Regional Intellectual Property Organization (ARIPO) and the African Intellectual Property Organization (Organisation Africaine de la Propriété Intellectuelle –or OAPI) also provide for the filing of a single design application.
- In as much as it only protects the appearance of an article, a registered design offers only a limited form of protection. This can nevertheless be extremely useful in specific circumstances. Registration prevents the blatant copying of a design and is often used in conjunction with other forms of IP protection.

CropLife Egypt Activities

Historical development of pesticides counterfeiting and illegal trade in Egypt:

Period of 1988 – 1996:

- Over stock in Agro-bank.
- Most of stocks were expired.

Abdella, S.

- Tamaron (methamidophos), Malathion, Dimethoate
 ,Monocrotophos, Dennate (Methomyl + diflubenzuron), Cotton
 herbicideetc
- · Selling to private sector certain dealers.
- Selling at very low prices (50% 75%) less price.
- · Allowing validation of expiry date.
- · Allowing re-packing and re-labeling.

Results

- · Over 10 KT released to the market.
- Low prices poor quality.
- · Good shape, packs, labels.

Period of 1996-2000:

- De-registering of 39 common names (162 trade names) (Decree No. 874).
- · Immediate implementation for the above decree.

Results:

- · Over 20 KT of banned stocks became illegally traded.
- · CLE and others requested period to consume the stocking.
- 2 years were given, but the stocks were inflated by smuggling operations.
- Exclusive importation for banned products.
- Far East suppliers appeared in the market through two main sources.

Period of 2000-2005:

- Encouraging and introducing the "ME TOO" system.
- · Increasing the role of local formulators.
- · All local formulators established free zone areas.

Results:

- Over 188 common names (469 trade names) invaded the market ... low price poor quality.
- · Minimum of 3 copies of each original product were marketed, in some cases copies reached to 20 trade names (Mancozeb Cypermethrin Malathion Dimethoate Abamectinetc)

Period of 2005-2006:

· Canceling "ME TOO" system 'Unrecognized'.

[&]quot;The Appearance of counterfeiting group"

[&]quot;That was a real threat to industry"

• Re-(de-registering) of 47 common names (Decree No 719).

Results:

- Reducing No of common names from 202 to 151, Trade names from 631 to 302.
- · No. of major smugglers increased from 2 to 15.
- · Developing smuggling, counterfeiting techniques.
- · Public Health materials in Agro-use.
- Documents of industrial chemicals to be used for Agro-chemicals.

Period of 2007 to date:

- · Impropriate/misunderstanding of following EU system.
- Neglecting all other recognized systems of registration (EPA, Japan...etc.).
- Complications due to fears and doubts control the authority behavior in the area of pesticides.

Results:

- Reducing No. of a.s from 151 to 124 in phase one.
- · Increasing No. of a.s to 185 in phase 2 and 3.

Sources of smuggling and counterfeiting:

- · Uncommitted Free zone formulators.
- · Borders and airports "goods village".
- · Uncommitted Public health formulators.
- · Industrial chemicals importers.
- The untouchable local formulators ... (Mr. X).

CropLife Egypt Strategy:

• Alleviate Pesticide Counterfeiting and illegal Trade

Strategy objectives

- Protect consumers, Environment and Agricultural production from risks associated with using faked and smuggled products
- Indicate and promote industry commitment to provide PPP's up to rules and regulations laid down by international organization / national authorities.
- Urge the authorities and stakeholders to detect and control counterfeiting and illegally traded PPP's
- Promote usage of officially recommended PPP's

Ally for national campaign

- · Collaborate with governmental and non-governmental stakeholders
- · Prepare and conduct training programs / awareness campaign
- Activate and clarify IPR legislation prevailing control measures at national level
- Urge CropLife Egypt members to adopt the awareness campaign in their activities
- · Identify illegally traded sources in neighbour countries and advise local authorities
- Urge dealers and farmers groups to use official recommended products.

Actions

 Preparation of course structure and training materials: Pesticide Anti-counterfeiting and illegal trade "Training Manual".

Five main topics

- 1. CropLife Egypt identification / activities / strategy
- 2. Bad business practice
- 3. Good business practice
- 4. Rules governing pesticide trade and handling
- 5. Legislation frame facing pesticide counterfeiting and illegal trade
 - Certified Trainers (24)
 - 9 rounds of training workshops.

24 certified trainers to support training/workshop.

- Certifications were endorsed by Central Agricultural Pesticide Laboratory (CAPL)
- Trainers are from

CropLife Egypt members

CAPL

PPRI (MOA officials)

Extension service

Some disturbing facts:

- No official data available.
- All products either registered or under registration or banned are available in market at commercial level.
- Copied products are sold at 75 % 25 % less than the original ones (Granstar Mancozeb).
- Farmers are much in believe of the efficiency of such products due it's low cost where they can use double or triple the dose at reasonable cost.
- Weakness of control at all levels or places.
- The legal frame governing smuggling or counterfeiting is too much soft and wide.
- Absence of co-ordinal and role play of officials, industry, NGO's etc
- Reports referring to the phenomenon indicate that volume of 30 40
 % is illegally traded. Others refer to procedure of 60 % are covered by illegal trade.