

The enforcement of pesticides  
Residues in Europe

January 2000

**Members of the Working Party “Pesticides Residues”:**

Hans Jeuring (The Netherlands); Chairman

Petr Baudyš (Czech Republic)

Célia Beguet (France)

Ellen Scherbaum (Germany)

Christine Vinkx (Belgium)

Franz Vojir (Austria)

# THE ENFORCEMENT OF PESTICIDES RESIDUES LEGISLATION IN EUROPE

## **Flep Working Party 'Pesticides Residues'**

### **1. Background**

Food practitioners involved in the enforcement of the legislation on 'pesticide residues' have raised a number of questions. The legislation is being harmonised more and more. For hundreds of compounds, Maximum Residue Limits (MRLs) for pesticides are formulated. Enforcement of the legislation is however not harmonised at all.

Among the questions that have raised are the following:

- What is the total number of different pesticides that are analysed each year in the membercountries of the EU?,
- Are consignments hold under control until the results of analysis are known?
- What is the height of the penalties?,
- How do enforcement bodies act, when a product does not fulfil the pesticide-legislation of its country, but is in line with legislation in the country of origin?

According to the EU-directive 90/642/EC, every member-state has to perform every year the monitoring for pesticides residues in vegetables and fruits. Based on this directive, in several EU-directives maximum residue limits have been set.

### **2. Working Party and Terms of Reference**

In light of the above considerations, the FLEP Forum-meeting decided to create a Working Party 'Pesticides Residues' with the following terms of reference:

- To study the reporting of monitoring plans by enforcement bodies,
- To evaluate the measures that are taken by the enforcement bodies,
- To study the import controls of vegetables and fruits from third countries,
- To study the level of penalties.

The Working Party decided at its first meeting to have a discussion on these items. Based on this discussion a questionnaire was set up and was sent to all contact points of FLEP. In a second meeting of the Working Party, the outcomes of the questionnaire were studied. Based on the study, recommendations were formulated in this draft end-report.

In reading this report, it has to be taken into account, that not all of the responding countries are member countries of the EU.

### **3. Questionnaire**

A questionnaire on 'Pesticides Residues' was distributed through the FLEP contact points during the initial part of this project. This questionnaire was presented before at a FLEP Forum-meeting in spring 1999.

The Working Party received answers from 14 countries. These were: The Netherlands, United Kingdom, Germany, Ireland, Portugal, Iceland, Norway, France, Tjechie, Austria, Belgium, Luxembourg, Finland and Slovenia.

Not responded: Greece, Malta, Spain and Italy.

#### **4. General findings concerning monitoring and enforcement**

##### **4.1 Monitoring**

All countries develop monitoring plans concerning residues of pesticides. The results of these monitoring plans are sent to the European Commission.

However, all countries use these monitoring plans also for enforcement. Germany has a special statistical plan for the sampling of samples for enforcement.

All countries have developed certain own criteria for developing the monitoring plan. This means that the plan is usually based on experiences of the last few years. The sampling of vegetables and fruits is consequently not at random.

The total number of samples (fruits and vegetables), the enforcement bodies analysed in the year 1997 ranges from 220 to 9500. The number is strongly dependent on the number of inhabitants in a country. It also depends on the agricultural production of vegetables in the countries.

The numbers of analytical methods that are performed in the samples vary from 1 (multi-residue method) to a maximum of 40 analytical methods (multi residue methods and individual single residue methods).

The numbers of pesticides that are analysed vary from 40 in one country to 275 in another country.

The number of samples that exceeded the MRL in 1997 varies from 1% to 10% (with a mean of 4,8%). Part of the differences can be explained by the approach of the countries or official agencies that administrate the results (see below) but also by the different number of compounds that are analysed in the countries.

##### ***Recommendations:***

- ***Interpretation of the results of the monitoring concerning residue pesticides has to be done with due reservation. Monitoring is also used for enforcement and samples are taken based on certain criteria, which means that the number of infringements does not reflect the situation of present interest.***  
***In judging the results of the monitoring plans by the European Commission, it is advisable to divide the results of the analysis into three sample-types: monitoring-samples, enforcement-samples and EU-monitoring-samples.***
- ***The number of different pesticides to be analysed, as a consequence of the number of used analytical methods, needs more co-ordination. This may only be achieved by a reliable blend of qualifications, expertise and experience applied in a well equipped,***

*accredited and quality assured environment. The laboratories, performing analysis for pesticides of residues, must be identified centres of experience (1).*

- *It is important in residue analysis to sample the right product at the right time and analyse the right compound. This means that in setting up annual sampling plans, a good knowledge of agricultural practices is necessary.*

## **4.2 Enforcement**

### **4.2.1 Warnings**

Most of the countries do send warnings as the analytical result is in a certain range. One country sends for a infringement of the company or grower a warning if the analytical result is between the maximum residue limit (MRL) en two times the MRL. No measure is taken when the results is in the range of the MRL + the analytical uncertainty. This can be made clear with the following example (chlormequat in pears, for which the MRL is 3 mg/kg).

Analytical result:

- between 0 – 3,6 mg/kg: no measure is taken (the range between 3 and 3,6 represents the uncertainty of the method);
- between 3,6 – 6 mg/kg: a warning;
- > 6,0 mg/kg: official report resulting in a penalty.

One country sends a warning in the event of residues exceeding the MRL in the range of the analytical uncertainty (a fine is imposed if the MRL is exceeded significantly). Another country sends a warning if the MRL is exceeded only slightly.

#### ***Recommendations:***

- *In taking measures, the enforcement bodies must take into account the measurement uncertainty of the analytical method.*
- *Considerations of public health must normally play a minor role in taking measures by enforcement bodies: the policy of taking measures must be clearly described and may be transparent for interested bodies. A different decision tree for measures is recommended for compounds which are known to have an acute reference dose.*

### **4.2.2 Holding consignments, recall and seizing**

More than half of the countries that responded make use of the possibility to hold a consignment until the analytical results are known. This happens in the cases where there is a strong suspicion for a violation (for example after a notification through the Rapid Alert System). Two countries hold a lot of a company/grower after an exceeding MRL on a previous samples, until results are available.

All enforcement bodies have the power to order a recall of a product. For fruits and vegetables, however, this happens very rarely. Usually, the product is consumed at the time the analytical result is available. Also, in some cases the traceability is a problem.

All enforcement bodies have the power to seize consignments. This happens rarely for the same reasons as mentioned above.

In the USA, in cases of suspicion (use of a pesticide) consignments are seized in a close co-operation between inspector and laboratory (the laboratory using a 'fast line', presenting results some hours after sampling). An example may be the exceeding of the MRL of dithiocarbamates in lettuce.

***Recommendations:***

- ***In case of incidents or serious suspicion, a next lot of a commodity, may be hold until the analytical result for a certain pesticide is available.***
- ***To strengthen the enforcement, it is recommended to make more use of a close co-operation between inspector and laboratory, in order that analytical results are known in a short time to seize consignments. This can be done in situations of strong suspicion.***

#### **4.2.3 Height of penalties and additional procedures concerning enforcement**

The height of penalties varies in practice from 25 – 5000 Euro's. Most of the countries, however, offer the possibility in their legislations, to punish by a much higher amount of money (up to 25000 Euro's). As the height may depend on items as living standards in countries and is of course the responsibility of the independent judge, the Working Party does not formulate recommendations on this item.

There are several additional procedures concerning the enforcement:

- Countries have the possibility for consignments from third countries to be detained for a certain period at the point of entry.
- Based in HACCP-principles, self-controlling measures may be taken by growers but also by auctions and importers.
- Use of the Rapid Alert System to inform other enforcementbodies in EU-countries (XXIV/98/2056).
- In cases of strong suspicion, an official preharvest control can be performed.

#### **4.2.4 Miscellaneous**

In the case a product does not fulfil the pesticide-legislation of the country, which has analysed the product, but is in line with legislation of the country of origin (i.g. another member-state), most enforcement bodies apply the national legislation (which means measures are taken). Some other countries review the health hazard aspect to consider if the product may be imported.

About half of the countries considerate Codex Alimentarius MRLs for imported consignments from third countries.

It happens that a pesticide residue is found that is not regulated in the legislation of the country's laboratory that analysed the product. Some countries have not the legal possibility to take measures. Some other countries take action, based on the result of a risk evaluation. Most countries are acting on a general MRL of 0,01 mg/kg.

Some countries have problems with enforcement in the case a pesticide residue is detected in a certain product that is only allowed to be present in other products. As an example: a compound is allowed to be used on tomatoes (and a MRL is established for tomatoes), but is found on lettuce (in a lower level than is allowed for tomatoes). Most of the countries apply a zero-tolerance (0,01 mg/kg) in these cases. Other countries consider this as no infringement as long as the residue found does not exceed the MRL of the other product. One country considers this situation as an infringement to the registration legislation and legal actions are taken.

All countries sample products from third countries. Almost all countries sample from consignments after release by customs authorities (usually on the market, wholesale, stock of retailer chains). However, it might be efficient to sample products, in close co-operation with customs, before the consignment is released. The recommendations of the FLEP Working Party 'Import Controls' can be taken into consideration.

In about the half of the responding countries, it is mandatory to take two (or more) samples. One for the enforcement laboratory, the other for defence purposes). Practises are very different in the countries.

#### ***Recommendations:***

- ***When a product does not fulfil the pesticide-legislation, but is in line with legislation of the country of origin, the national legislation has to be applied. An exception can be made on special requirements of exporting member countries. This problem diminishes as the number of harmonised MRLs is growing.***
- ***Consider MRLs, established by Codex Alimentarius in international trade, when there is no specific national or EU-legislation.***
- ***When a pesticide residue, that is not regulated in the legislation of the analysing country, is found in a product, a general MRL of 0,01 mg/kg (or the lower limit of detection) should be in force.***
- ***In the case a pesticide-residue is detected in a certain product that is only allowed to be present in other products, enforcement measures have to be taken, based on zero-tolerance level, based on a reasonable achievable limit of quantification.***
- ***Sampling of consignments from third countries before release of the customs, may be another useful tool in the enforcement of pesticide residue legislation. This can be done based on the Directive 339/93 (2).***
- ***Concerning second samples of the same lot, the possibility has to be given to companies to let the sample be analysed by a private laboratory.***

#### **5. References**

1. 'The International Position of the Laboratory in Food Control' – FLEP bulletin – July 1998
2. 'System for an Imported Foods Inspection Program' – FLEP bulletin – September 1993