

YEAR 2004 REPORT ON THE AUSTRIAN MONITORING OF PESTICIDE RESIDUES IN PLANT PRODUCTS (FRUITS, VEGETABLES AND CEREALS)
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COUNTRY: AUSTRIA**1. SUMMARY OF RESULTS**

In 2004 a total of 1760 samples of fresh fruits and vegetables were analysed under the co-ordinated program, the national pesticide monitoring program and as routine samples. Beside that other products like cereals (24 samples), processed products (73 samples) and baby food (55 samples) were analyzed.

43,7 % of all samples of fruits and vegetables were from Austria, 28,9 % from the European market and 27,4 % from third countries. For cereals this rates were 75 %, 25 % and 0 % respectively. The rates for processed food were 71,2 %, 28,8 % and 0 %. Baby food was predominantly from the European market (100 %).

In 64,3 % of the samples of fruits and vegetables no pesticide-residues could be detected. 30,5 % of the samples had residues under the harmonized and/or national Maximum Residue Limits (MRL). In sum 94,8 % of these samples were in compliance with the regulations. In all analysed samples the percentages were 65,8 %, 29,1 % and 5,1 % respectively.

5,2 % of the samples of fruits and vegetables contained one or more pesticide(s) above the MRL.

In 363 samples (19 %) more than one pesticide was analysed. Up to 9 pesticides were found in some samples. The samples with more than 8 pesticides were in all cases grapes or peppers (3 samples).

In the samples were analysed up to 217 different pesticides. Totally 273 different pesticides were sought, of which 90 (33 %) were found. The most frequently found residues in fruits and vegetables were in the co-ordinated and national programme and routine samples: Maneb-group, Procymidone, Cyprodinil, Fludioxinil, Chlorpyrifos, Imidacloprid, Iprodione, Endosulfane, Azoxystrobin and Benomyl-group.

2. ORGANISATION OF MONITORING PROGRAMMES AND SAMPLING

The national pesticide monitoring is done according to a nation-wide sampling plan designed by the Institute of Applied Statistics and System Analysis (Joanneum Research, Graz) in co-operation with the Federal Minister of Health and Women. The plan was based on data concerning dietary consumption, production and import of fruits and vegetables and results of former measurements. Furthermore the results of earlier monitoring-programs, the analytical possibilities and the budgetary situation were taken into account, too. The co-ordinated programme of the European Commission was of course also done. Samples of leek haven't been analysed under this programm due to a misunderstanding

The samples were taken by trained officials from the local Food Inspection Service („Lebensmittelaufsicht“).

3. QUALITY ASSURANCE

The analysis of the co-ordinated programme, the national monitoring programme and routine samples also were made by two laboratories for food control (Austrian Agency for Health and Food Safety, Institute for Food Control, Vienna and Institute for Food Control, Innsbruck). One additional laboratories for food control of the Austrian Agency for Health and Food Safety (Austrian Agency for Health and Food Safety, Institute for Food Control, Linz) made the analyses of some samples of the national monitoring programme. One Laboratory in Vienna (Regional Institute for Food Control in Vienna) analysed routine samples.

The analytical methods were adopted from published methods of the Dutch federal laboratories („Analytical Methods for Pesticide Residues in Foodstuffs“, 6th Ed., General Inspectorate for Health Protection, Ministry of Public Health, Welfare and Sport, The Netherlands) and validated in the laboratories. The fruits and vegetables were analysed up to a maximum of 217 pesticides. The methods used were a GC multimethod with ECD-, NPD- and FPD-detection, a HPLC-method and a spectrophotometric method for the sum of dithiocarbamates. GC/MS-methods are primarily applied for confirmation purposes of the other GC methods.

All laboratories involved in the co-ordinated programme and the national monitoring programme including the routine samples got the accreditation in the year 1998.

In 2004 three of the laboratories participated at proficiency tests, eg. the European Proficiency Test 6.

4. OTHER INFORMATION

Due to the fact, that there were some commodities for the national programme isolated, of which higher risk for residues was identified in the last years, these specific data are representative for the Austrian market, but the monitoring has to be seen partially as „targeted monitoring“. It was the aim, to reflect to the results of the last years and to choose special commodities of interest for further examination. This type of monitoring is foreseen for the next years.

Furthermore the routine sampling includes special samples, of which European alerts were given, too and thus the number of exceedance is higher than by doing statistical based sampling over all commodities and time of the year.

Additionally there were studies on the homogeneity of residues exercised on 9 pesticides: apples: 2 x Chlorpyrifos (homogeneity factor 2,48; 1,4), Diphenylamine (1,5); lettuce: Deltamethrin (1,16), Folpet (1,6), Metalaxyl (1), Dimethoat (1,84), Difenoconazole (2,3); head cabbage: Difenoconazole (1,9).