



Centre for Sustainable Alternatives (CEPTA), Slovakia

Pesticide Residues in Products of Plant Origin

Report for the Czech Republic 2004

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Seminar: Pesticide Residues in Food –Regulation, Monitoring, Policy

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The monitoring system

- responsible authority:

Czech Agriculture and Food Inspection Authority (CAFIA)

www.szpi.gov.cz/eng/default.asp

- responsible person:

Ing. Martin Klanica

director of the Control, Laboratories and Certification Department

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The monitoring system

Sampling is based on the principles of the risk assessment:

- excise patterns of the commodity
- risk rate of the commodity
- risk rate of the pesticide
- volume of the production
- new foodstuffs on the market



The monitoring system

Control criteria:

- knowledge from previous controls
- data analysis in the information system
- topical findings of the inspectors
- findings of other authorities (hygienists, veterinary screenings, police etc.)
- incentives of consumers
- incentives of media and advertisements
- findings of abroad control authorities
- EC recommendations
- information of the rapid warning system (RASFF)



The origin and number of samples

	domestic products	% domestic products	other EU MS products	% other EU MS products	products imported from TC	% products imported from TC	total
Fresh products of plant origin, incl. fruit, vegetables	138	22,55	357	58,33	117	19,12	612
Cereals	17	60,71	7	25	4	14,29	28
Processed products (except baby food)	22	62,86	11	31,84	2	5,71	35
Baby food	27	56,25	21	43,75	0	0,00	48
total	204	28,22	396	54,77	123	17,01	723

EU MS – European Union Member States
TC – Third Countries

Number of analysed pesticides: 119

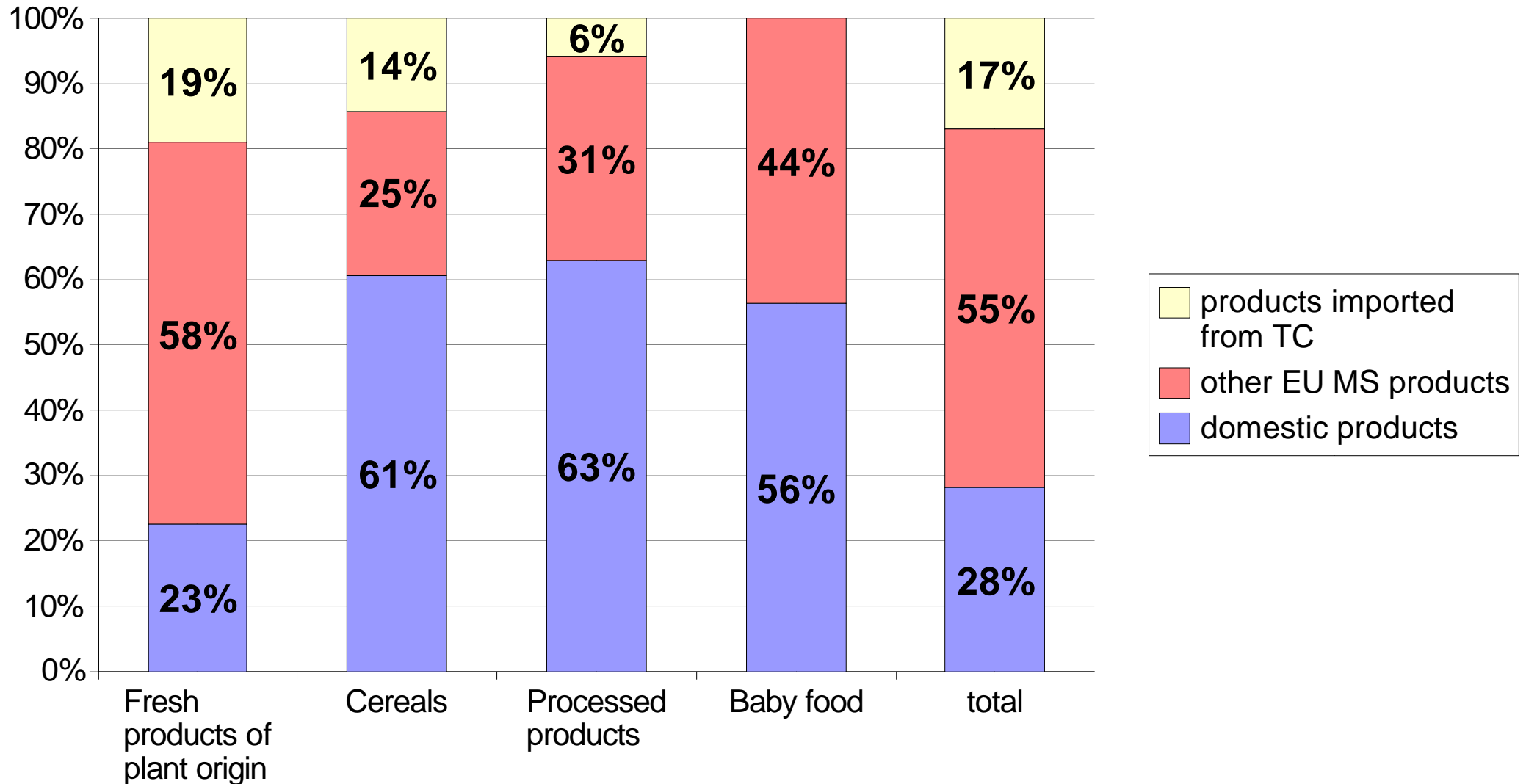
- National monitoring: **593 samples**
- EU coordinated monitoring: **130 samples**

total

723 samples



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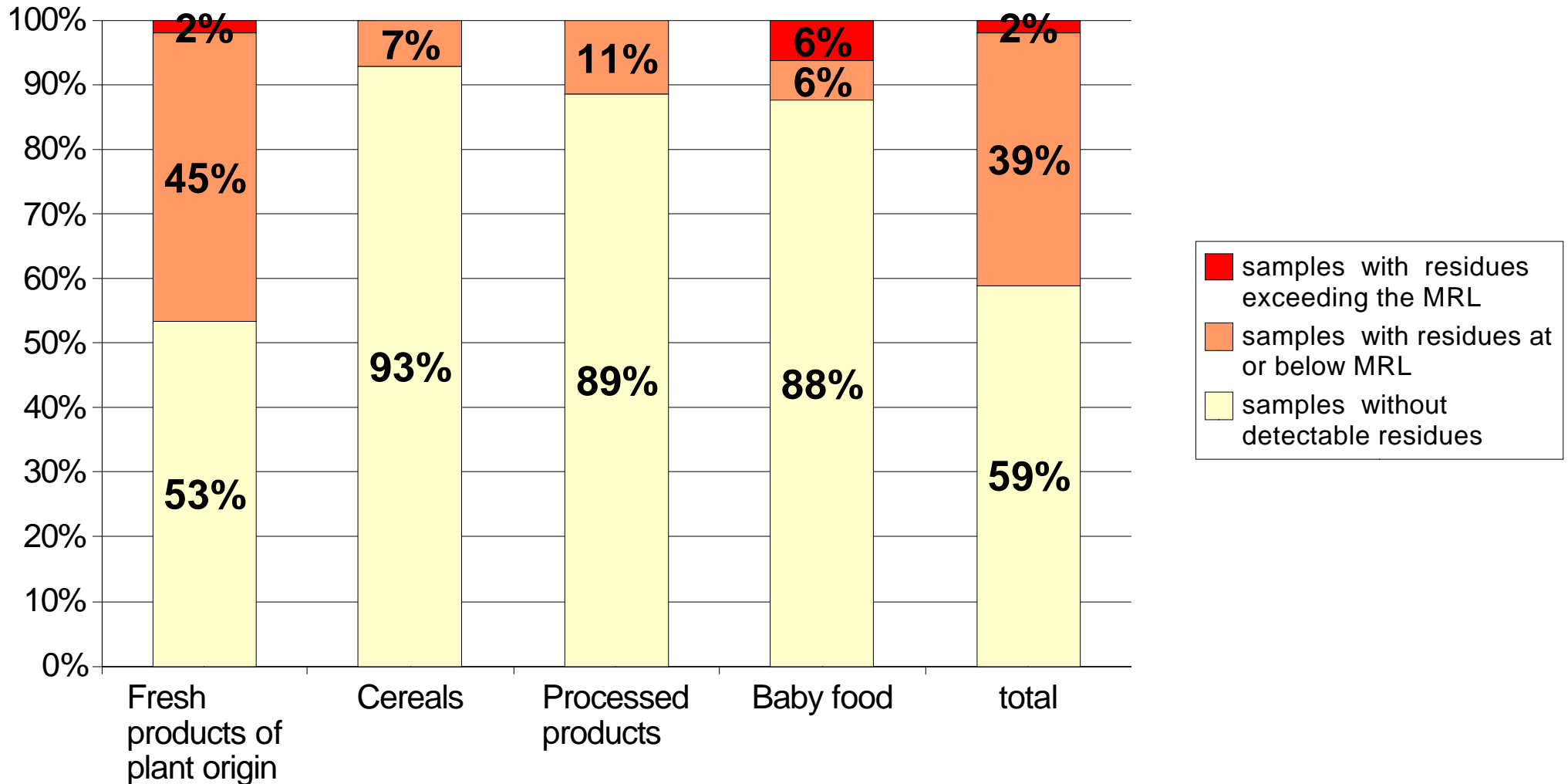
Results

	samples without detectable residues	%	samples with residues at or below MRL	%	samples with residues exceeding the MRL	%	samples with residues exceeding EC-MRLs	%
Fresh products of plant origin, incl. fruit, vegetables	327	53.43	273	44.61	12	1,96	9	1.47
Cereals	26	92.86	2	7.14	0	0.00	0	0.00
Processed products (except baby food)	31	88.57	4	11.43	0	0.00	0	0.00
Baby food	42	87.50	3	6.25	3	6.25	3	6.25
total	426	58,92	282	39,00	15	2,07	12	1,66



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Most often found pesticides

Pesticides found in more than 3 % of analysed samples

pesticide	% of samples
O-fenylfenol	66,20
Bromide	33,30
Maneb group	17,80
Imazalil	12,45
Carbendazim	11,00
Thiabendazole	10,80
Ethephon	5,50
DDT (sum)	4,93
Procymidon	4,14
Chlormequat	3,85
Chlorpyrifos	3,59
Endosulfan (sum of isomers)	3,19



Critical commodities

- Strawberries
- Parsley
- Bean
- Cucumbers
- Oranges (and citruses in general)
- Pepper
- Leek
- Lettuce
- Carrot



Critical commodity - pesticide combinations

- Strawberries / Cyromazine - Spain
- Parsley / DDT – the Czech Republic
- Bean / Endosulfan (sum of isomers) – Spain + Chlorpyrifos - Egypt
- Cucumbers / Endosulfan (sum of isomers) - Spain
- Oranges / Chlorpyrifos + Procymidon - Spain
- Pepper / Pirimiphos-methyl - Spain
- Leek / Tebuconazole - France
- Lettuce / Tolyfluanid – Belgium
- Carrot / Linuron – Netherlands + Dieldrin – the Czech Republic
- Rice / Permethrin - the Czech Republic



Multiply residues

Multiply residues = samples with more than 2 pesticides found

number of pesticide residues found	number of samples	% of total samples
2	117	16,18
3	68	9,41
4	42	5,81
5	22	3,04
6	8	1,11
7	7	0,97
8	1	0,14
total number of samples with multiple residues (≥ 2):	265	36,65



Thank you for your attention

