

CEUREG FORUM XIII

PESTICIDE SALES AND USAGE STATISTICS IN POLAND

Grażyna Berent-Kowalska

– Central Statistical Office, Warsaw

Stanisław Stobiecki

– Institute of Plant Protection

National Research Institute

Sońnicowice Branch

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PURPOSES OF COLLECTING AND GATHERING DATA ON PESTICIDE SALES AND USAGE

- Fundamental in developing national strategies for sustainable pesticide use**
- Information base for estimating pesticide usage risk and programs to reduce this risk**
- To calculate the national pesticide risk indicators**
- To inform the public about the amount of chemicals used in agriculture**
- To conduct inspections of pesticide use**

INSTITUTIONS INVOLVED IN PESTICIDE SALES AND USAGE SURVEY

- ❑ **Central Statistical Office (Główny Urząd Statystyczny - GUS)**
- ❑ **Ministry of Agriculture and Rural Development
(Ministerstwo Rolnictwa i Rozwoju Wsi)**
- ❑ **National Plant Protection and Seed Inspection Service (Państwowa Inspekcja Ochrony Roślin i Nasiennictwa)**
- ❑ **Institute of Plant Protection – National Research Institute
(Instytut Ochrony Roślin – Państwowy Instytut Badawczy)**



LEGAL BASES FOR SURVEYS

- ❑ **Regulation (EC) No. 233/2009 of 11 March 2009 regarding European statistics;**
- ❑ **Decision No. 1578/2007/EC of 11 December 2007 regarding Community Statistical programme for 2008-2012;**
- ❑ **Decision No. 1600/2002/EC of 22 July 2002 establishing the Sixth Community Environment Action Programme.**

CHANGES IN DATA COLLECTION SYSTEMS

SALES STATISTICS

- ❑ 2002–2004 – incomplete data set
- ❑ since 2005 – complete set (all pesticides) and all entities involved in pesticide sales

USAGE STATISTICS

- ❑ since 2002 – new system based on OECD guidelines (direct visits at farms)
- ❑ 2002–2005 – first phase of monitoring (sample selection using the quota method) (21 commercially important crops)
- ❑ since 2007 – introduction of the random sampling method (sample selection done at GUS)
- ❑ since 2007 – on-line system of imputing data from individual surveys to the central database

SALES STATISTICS

SUBJECTIVE SCOPE

- ❑ Pesticide producers and importers (around 200 entities)

OBJECTIVE SCOPE

- ❑ All pesticides approved for sale and distribution in Poland (the years 2005-2006 – 974 products, 2007 – 771, 2008 – 813, 2009 - 852)
sales are surveyed in kg/l within 1-year period

USAGE STATISTICS

SUBJECTIVE SCOPE

- farms

OBJECTIVE SCOPE

- Crop type and area
- Treated area
- Usage of different active substances per chemical class and category

PESTICIDE SALES IN 2007–2008

(according to EUROSTAT classification)

Group name	Eurostat Code	2007		2008	
		Amount of product [kg]	Converted to a.s. [kg]	Amount of product [kg]	Converted to a.s. [kg]
Fungicides and bactericides	F0	10 941 877	5 201 468	13 153 718	6 060 289
Herbicides, anti-lodging agents and moss-killers	H0	31 620 775	10 920 961	31 765 613	10 941 738
Insecticides and acaricides	I0	2 842 724	981 533	3 233 481	1 077 579
Molluscicides	M0	194 652	7 938	219 329	8 853
Growth regulators	PGR0	1 955 458	1 056 304	2 517 628	1 366 718
Other pesticides	ZR0	1 700 837	553 612	2 456 895	1 158 644
TOTAL	-	49 256 324	18 721 816	53 346 666	20 613 821

PESTICIDE USAGE SURVEY METHODS

- ❑ **Central Statistical Office selects a sample from annually determined crops, depending on the crop size area (optimal stratified sampling method)**
- ❑ **Farms surveyed during direct visits by inspectors from the National Plant Protection and Seed Inspection Service**
- ❑ **On-line system feeds the collected data into the database at the Institute of Plant Protection**
- ❑ **Computation and data analysis**
- ❑ **Internal quality control of data**
- ❑ **Constant advancing of the system**



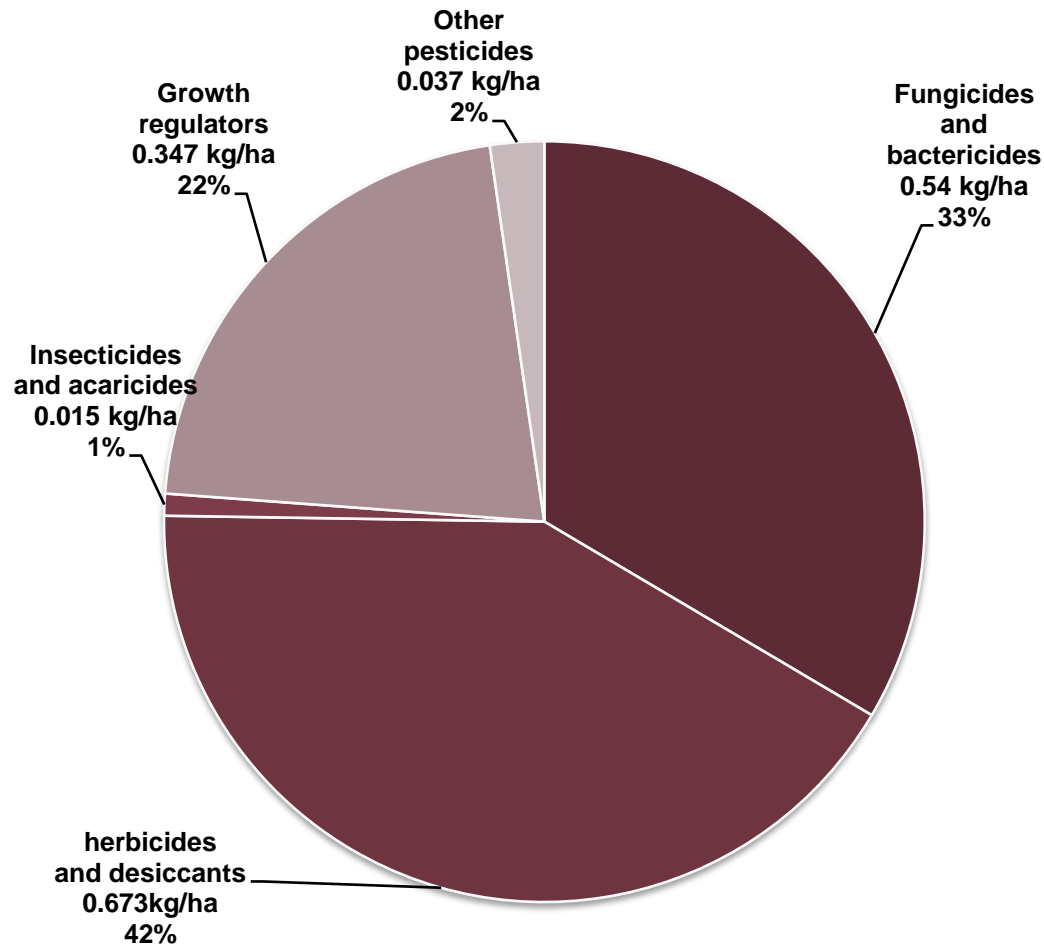
PESTICIDE USAGE SURVEY RESULTS FOR 2007

Crop type	Average usage of active substance [kg/ha]
Sugar beet	2,72
Apple trees	11,63
Plum trees	3,47
Winter wheat	1,61
Spring wheat	0,95
Rye	0,35

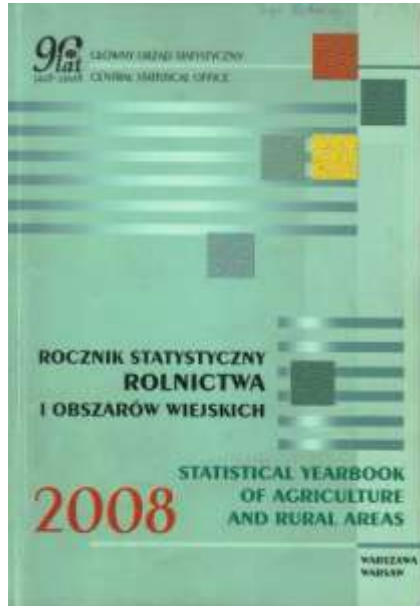
PESTICIDE USAGE SURVEY RESULTS FOR 2008

Crop type	Average usage of active substance [kg/ha]
Ground cucumbers	5,33
Ground tomatoes	9,63
Winter oilseed rape	2,15
strawberries	2,84
potatoes	1,88

AVERAGE USAGE OF ACTIVE SUBSTANCE IN WINTER WHEAT PER PESTICIDE GROUP IN 2007



AVAILABILITY OF PESTICIDE SALES AND USAGE SURVEY RESULTS



www.minrol.gov.pl



Central Statistical Office of Poland



Institute of Plant Protection
National Research Institute Sońnicowice Branch

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AVAILABILITY OF PESTICIDE SALES AND USAGE SURVEY RESULTS – FUTURE PLANS

- ❑ Subject-specific analytical publication on pesticides in 2005-2009
- ❑ www.stat.gov.pl
- ❑ Articles in popular science magazines

COST OF PESTICIDE SALES AND USAGE SURVEY IN 2008

FUNDING PROVIDED BY NATIONAL BUDGET

- National budget (GUS, Ministry of Agriculture and Rural Development)
- National budget (Multi-year programme of IOR-PIB)
- Provincial budgets (Provincial Offices of Plant Protection and Seed Inspection Service)

COST OF SALES SURVEY **PLN 125 000 (EUR 30 000)**

COST OF USAGE SURVEY: **PLN 750 000 (EUR 175 000)**

TOTAL COST OF SALES AND USAGE SURVEYS: **PLN 875 000 (EUR 205 000)**

NBP exchange rate of 06.10.2009: **1 EUR = 4.2106 PLN**



FUTURE CHANGES IN SYSTEMS FOR COLLECTING DATA ON PESTICIDE SALES AND USAGE

- ❑ Advancing the on-line system of collecting and transferring data
- ❑ Automatisation of data computation, aggregation and analysis
- ❑ Bringing the systems to compliance with quality requirements established in the new regulations
- ❑ Ensuring a continuous source of funding
- ❑ Improving accessibility to the results
- ❑ Using the results to develop strategies and National Action Plans (NAP)

CONCLUSIONS

- ❑ Proper practical application of the requirements mandated by the new Regulation by the European Parliament and the Council regarding pesticide statistics for all member countries
- ❑ Necessary financial support by the European Commission
- ❑ Necessary consistent quality control of data on pesticides
- ❑ Public accessibility of data at the level of chemical class
- ❑ A need to establish a European pesticide database.