



Pesticides residues in Grapes & Wines

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Purpose of the meeting

- ◆ INFORMATION
- ◆ AWARENESS



Definitions

Pesticide

Plant Protection Product

Active substances and preparations intended to:

- Protect plants or plant products against harmful organisms or prevent the action of such organisms
- Influence the life processes of plants other than as a nutrient
- Preserve plant products
- Destroy undesired plants
- Destroy parts of plants, check or prevent undesired growth of plants

Biocide

Active substances and preparations intended to:

- destroy, deter, render harmless, prevent the action of, or exert a controlling effect on any harmful organism by chemical or biological means.



Definitions

- ◆ *Pesticide residues* means residues, including active substances, metabolites and/or breakdown or reaction products of active substances currently or formerly used in plant protection products.
- ◆ *Maximum residue levels (MRL)* means the upper legal level of a concentration for a pesticide residue in or on food or feed set in accordance with Regulation (EC) No 396/2005, based on good agricultural practice and the lowest consumer exposure necessary to protect vulnerable consumers



Maltese legislation relative to Pesticides

◆ *Pesticides Control Act*

Act XI of 2001, as amended by Legal Notice 426 of 2007 and Act XXIX of 2007

◆ *L.N. 358 of 2009 - Plant Protection Products Regulation 2009*

Regulations concerning the authorisation, placing on the market, use and control of plant protection products in commercial form and the placing on the market and control of active substances.



Maltese legislation relative to Pesticides

- ◆ *L.N. 14 of 2009* — Maximum Residue Levels of pesticides in produce of plant and animal origin (implementation of EC Regulations) Regulations
- ◆ *L.N. 479 of 2004* — European Community methods of sampling for official control of pesticide residues in and on products of plant and animal origin regulations.



Risks caused by misuse of pesticides

Risks

Risks for the farmer

- Headaches, Tears & blurred vision, Skin irritations, Dizziness and fits

Effects on the central nervous system, Cancer



Risks for the environment

- Negative effects on the water table, soil, air



Risks for the consumers

- Problems on the central nervous system, Reproductive and fertility problems, Cancer





Sources of pesticide residues in grapes

- ◆ Use of Unauthorised plant protection products
- ◆ Plant protection product not applied according to manufacturer's directions
- ◆ Quantity applied is not according to the recommended quantity
- ◆ Time interval between application and harvest is not respected



Sources of pesticide residues in grapes

- ◆ Wrong Plant protection products used on the wrong type of crop
- ◆ Combination of different pesticides which could produce hazardous bi-products
- ◆ Pesticide residues present in irrigation water
- ◆ Pesticides carried by the wind from a neighboring vineyard



Results of EU studies

◆ Pesticide Action Network (P.A.N) – April 2008

Tested 40 wines (34 conventional & 6 organic wines) from across the world for pesticide residues

Results:

- All 34 conventional wines together contained 148 pesticide residues.
- All 34 bottles contained from 1 to 10 pesticides, bringing the average per bottle to more than 4.



Results of EU studies

- A total of 24 different chemical residues were identified.
- 5 of the pesticides were registered as either carcinogenic, reprotoxic, mutagenic or endocrine disrupting.
- 5 out of the 6 organic wines showed detectable pesticide residues



Results of EU studies

◆ Pesticide Action Network (P.A.N) – November 2008

Tested table grapes from 18 major food retailers (around 124 samples of grapes)

Results:

- 90% of grapes contained pesticides
- On average 7 pesticides were detected per sample



Results of EU studies

- 38 of the samples analysed (around 1/3 of the samples) were classified “Not Recommended” for consumers owing to critical levels of pesticide contamination
- 6 grape samples were found with pesticide above EU maximum legal limits
- 2 samples contained banned pesticides
- 64 different pesticides were identified in the samples



Results of studies carried by MSA on pesticides in grapes

◆ Multi-national annual monitoring plan – 2009 – Table Grapes

Analysis of 16 samples of grapes (11 local, 5 imported [4 samples from EU MS, 1 sample from non-EU county])

Results:

- 13 different pesticides were identified in the samples
- 60% (10 samples) of the grapes contained pesticides
- 12% (2 samples) of the grapes found with pesticide level above EU Maximum legal limits (MRL)
- 6% (1 sample) contained banned pesticide residue



Cooperation between MSA & Wine producers

- ◆ Information to the farmers
- ◆ Reciprocal information sharing between MSA and wine producers



Thanks for your attention