



Spremljanje onesnaženosti kmetijskih proizvodov z ostanki FFS v Sloveniji v obdobju 1987-2000

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Leta 1987 je Kmetijski inštitut Slovenije, po pooblastilu Ministrstva za kmetijstvo, gozdarstvo in prehrano, vpeljal stalen in sistematičen nadzor ostankov pesticidov v kmetijskih proizvodih.

Z namenom ugotavljanja vsebnosti ostankov pesticidov v čim večjem številu kmetijskih proizvodov v intenzivni pridelavi je bil v skladu z obstoječimi tehničnimi in finančnimi možnostmi sprejet ponavljajoči se triletni načrt dela in sicer:

1. leto: krompir, grozdje; 2. leto: koruza, sadje; 3. leto: vrtnine.

Z uveljavitvijo *Uredbe o monitoringu pesticidov v živilih in kmetijskih proizvodih* (Ur.l. RS, št. 13/99) v letu 1999 pa poteka delo v okviru nacionalnega monitoringa pesticidov, ki predstavlja usklajeno, redno in sistematično preverjanje vsebnosti ostankov pesticidov v živilih in kmetijskih proizvodih. Njegov namen je ugotavljanje skladnosti s predpisanimi najvišjimi dovoljenimi količinami ostankov (MRL), identifikacija kontaminiranih živil in kmetijskih proizvodov, ugotavljanje izvora oziroma vzroka kontaminacije, ugotavljanje skladnosti pridelave z dobro kmetijsko prakso ter izdelava ocene zdravstvene ogroženosti potrošnikov.

Program nacionalnega monitoringa je rezultat sodelovanja Ministrstva za zdravje in Ministrstva za kmetijstvo, gozdarstvo in prehrano.

Izbor kmetijskih proizvodov za dvoletni monitoring je oblikovan na podlagi dveh kriterijev:

- a) značilna prehrana Slovencev - redno, vsako leto spremljamo ostanke FFS v solati, jabolkih, krompirju in mleku;
- b) priporočila EU (Commission recommendation 99/333/EC) in WHO - variabilni del preučevanih kmetijskih proizvodov.

V obdobju 1987-2000 smo analizirali skupno 1693 vzorcev kmetijskih proizvodov (grozdje, jabolka, koruza, krompir, vrtnine), ki so bili skupno analizirani na 49 različnih aktivnih snovi.

Rezultati štirinajstletnih (1987 – 2000) preučevanj vsebnosti ostankov pesticidov v rastlinskih proizvodih v Republiki Sloveniji kažejo, da več kot 48,3 % analiziranih vzorcev ni vsebovalo določljivih ostankov, kar pomeni, da je bila njihova količina, tudi če so v njih bili, tako majhna, da jih z veljavnimi analitskimi metodami ni bilo mogoče dokazati (meja detekcije). 48,9 % analiziranih vzorcev je ostanke sicer vsebovalo, vendar je bila njihova količina nižja od predpisanih MRL. Le 2,8 % vzorcev je vsebovalo prekomerno količino ostankov FFS.

Onesnaženost kmetijskih proizvodov z ostanki FFS v Sloveniji ni zaskrbljujoča. Ugotovljene vrednosti Slovenijo uvrščajo med dežele s sorazmerno nizkimi preseženimi MRL-ji ostankov FFS v kmetijskih proizvodih.

ABSTRACT

Monitoring of pollution of agricultural products with residues of PPP in Slovenia in the period 1987-2000

In 1987, a continuous and systematic control was introduced by the Agricultural Institute of Slovenia upon the authorisation of the Ministry of Agriculture, Forestry and Food, of the pesticide residues in agricultural products.

Aiming at establishing the content of pesticide residues in the biggest number of agricultural products as possible subjected to intensive production, a three-year recurrent working plan was adopted in compliance with the existing technical and financial possibilities, as follows: 1st year: potatoes, grapes; 2nd year: maize, fruit; 3rd year: vegetables.

With the effective date of the Decree on Monitoring of Pesticides in the Foodstuffs and in Agricultural Products (Official Gazette of the Republic of Slovenia, no. 13/99) in year 1999, work within the framework of the national monitoring of pesticides, representing a coordinated, regular and systematic control of the content of pesticides in foodstuffs and in agricultural products, is carried out. The aim of the work is to establish compliance with the highest prescribed permitted quantities of residues (MRL), to identify the contaminated foodstuffs and agricultural products, to find out the origin or cause of contamination, to establish compliance of production with good agricultural practice and to make the assessment of health endangerment of consumers.

The National Monitoring Program is a result of cooperation of the Ministry of Health and the Ministry of Agriculture, Forestry and Food.

Agricultural products to be included in the two-year monitoring are selected on the basis of the two criteria: a) typical nutrition of Slovenes – regular, each-year monitoring of pesticide residues in green salad, apples, potatoes and milk;

b) recommendation of EU (Commission recommendation 99/333/EC) and of WHO-variable part of the studied agricultural products.

During the period 1987-2000 we analysed in total 1693 samples of agricultural products (grapes, apples, maize, potatoes, vegetable⁹, for in total 49 different active substances.

As found by the 14-year (1987-2000) analysing of the content of pesticide residues in plant products in the Republic of Slovenia, more than 48,3 % of the analysed samples showed to be free from any determinable residues, meaning that the content thereof, although present, was so low that was not possible to be proved with the valid analytical methods (limit of detection). Although 48,9 % of the analysed samples contained the residues, the quantity thereof was lower than the prescribed MRL. Only 2,8 % of samples were found to contain excessive quantities of the pesticide residues.

Pollution of agricultural products with pesticide residues in Slovenia is not to be of any concern. According to the established values, Slovenia is classified among the countries with rather low exceeded MRLs of pesticide residues in agricultural products.