CRL Data Pool

An Information Exchange Platform for the Official Laboratory Network of the European Community

Zipper H, Roux D, Scherbaum E, Anastassiades M

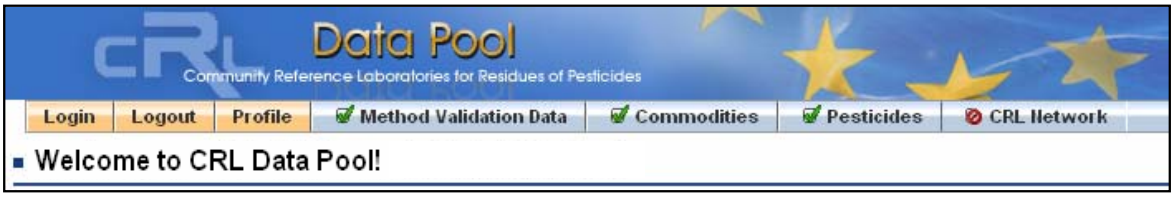
Chemisches und Veterinäruntersuchungsamt Stuttgart, EU-CRL for Pesticide Residues using Single Residue Methods, Schaflandstr. 3/2, 70736 Fellbach

Introduction

Efficient access to information about the properties of pesticides and commodities is important for pesticide residue analysts when it comes to important decision-making. Several sources of pesticide-related information already exist in literature as well as in the internet. However their practical usefulness for residue analysts is limited. A main problem is that the information provided is dispersed among countless sources. This makes the information extremely difficult to systematically retrieve and does not support the compilation of a global overview, which is valuable in strategy design. There is obviously the need to systematically collect data that is useful for pesticide residue analysts.

In 2007 the EU Community Reference Laboratories for Pesticides Residues (CRLs) introduced the so-called **CRL Data Pool internet-platform** with the aim to provide pesticide residue analysts with a **convenient and efficient access to information needed for proper decision-making in pesticide residue analysis** as well as to **strengthen the network** between CRLs, the National Reference Laboratories (NRLs) and the official control laboratories (OFLs):

www.crl-pesticides-datapool.eu



Currently, the CRL Data Pool consists of two databases allowing systematic collection and online retrieval of pesticide-related data:

Method Validation Data

This database provides data that was generated within the aim of method validation experiments from various laboratories using different methods of analysis. Synoptic data processing and information on experimental details allow to conveniently draw differentiated conclusions about the applicability and performance of methods for certain pesticide residue analysis tasks:

Pesticides

A collection of Pesticide Data Sheets that have been developed to enable an easy access to information about the physicochemical and toxicological properties of pesticides as well as basic information about their regulations in the EU and in the Codex Alimentarius is available in the Pesticides database:

Three additional databases are in preparation and will be installed in near future:

Analytical Methods Database (in preparation)

This database will allow the accumulation of information about sample preparation methodologies which are described in literature. For each analytical method, a data sheet will give a short overview about the principle extraction procedure, the compatibility with GC and LC, the analyzed sample types and the average recoveries for the analyzed compounds. A summarizing list will help to compare the recoveries for a pesticide analyzed with different methods.

CRL Network (in preparation)

The Network Database was designed to gather information of all laboratories and analysts within the network. This includes contact information of laboratories, functions within the network (CRL, NRL, OFL), instrumentation available, etc. The laboratories will have the opportunity to maintain their data on-line. Customized search options will enable to quickly filter specific laboratories having common profiles (e.g. NRLs). The access is restricted to members of the network.

Commodity Database (in preparation)

Pesticide residue analysts have to deal with a vast number of different commodities. With each commodity having a different influence on analysis, it is difficult for analysts to maintain an overview of the situation. Having the relevant information in a single database should help to get a differentiated and detailed knowledge of the properties of the commodities and understand their behavior during analysis. Consequently, the Commodity Database could help in making the right decisions in method development, method validation and routine analysis.