Pesticide Properties Database (PPDB)

Introduction

Demand for pesticide data has grown considerably in recent decades, due to the introduction of more stringent regulatory controls, and the use of data-hungry modelling, risk assessment, and decision support systems. However, identifying relevant, fit for purpose data can be difficult and time-consuming. The PPDB (Pesticide Properties Database) addresses these problems by providing a 'one-stop shop' for the researchers and regulators, and is fast becoming the international leader in data collation and dissemination.

Approach

Previous databases tend to have been developed with specific goals in mind (e.g. a particular model), and have therefore tended to cover either a small number of substances in considerable detail, or a restricted number of properties for a wide range of chemicals. As a result they are often of limited wider use. The PPDB in contrast, adopts a 'broad' and 'deep' approach, ensuring the cross-model applicability of a consistent data set.

- Broad: To date over 1500 substances have been incorporated, including pesticides, biopesticides, metabolites, and other product constituents.
- Deep: The PPDB includes physicochemical (environmental fate), ecotoxicological and human health data, as well as information on approval status, EC Directive 91/414 status, chemical structure, classification, resistance properties, and branding/formulation information.

Functionality

The data sources within the PPDB are referenced, and AERU have utilised a unique scoring system to express data confidence. Each item is given a score between 1 for low confidence (e.g. un-referenced figures) and 5 for high confidence (e.g. from EU product registration documentation). This ensures that users are fully aware of any limitations in the data, and can use it accordingly.

The PPDB & FOOTPRINT

For the FOOTPRINT project, the team have developed two main PPDB resources:

- A FOOTPRINT branded, public access website, that utilises a simple tabular data display format, and is fully supported by data interpretations and user support. This is clearly indexed, cross-linked and searchable.
- A bespoke MS Access 2000 database suitable for embedding in the three FOOT tools. This contains the core data on basic chemical properties, environmental fate, ecotoxicology, and human toxicity classification, that allow these tools to operate.

Availability

The on-line PPDB is available in English, French, Spanish, Italian, Polish (and soon Slovenian), at **www.herts.ac.uk/aeru/footprint**.

An MS Access copy of the PPDB is available to purchase. Those interested in this service should contact Dr. Andy Green at AERU (**a.green@herts.ac.uk**) to discuss their needs and obtain a quote.

The funding of FOOTPRINT by the European Commission through its 6th Framework Programme for Research and Development (Contract SSPI-CT-2005-022704) is gratefully acknowledged

www.eu-footprint.org