



PPDB – Pesticide Properties Database

Dissemination, uptake and impact

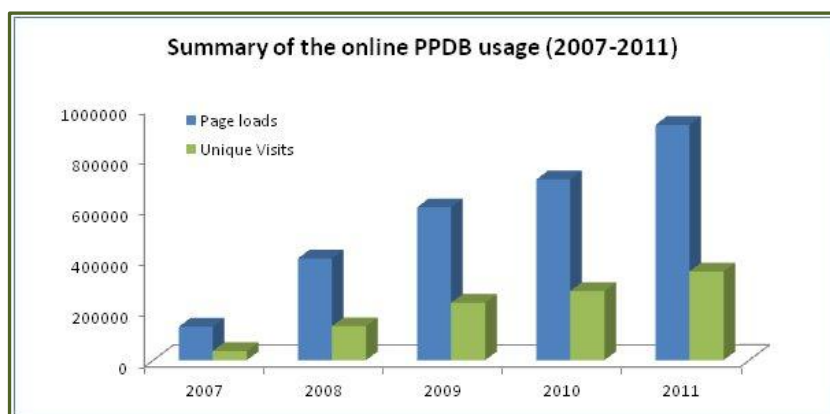
The PPDB is a comprehensive relational database of over 1800 pesticides and their metabolites. Whilst it will be of interest to a wide range of individuals, it has principally been developed to support risk assessments.

Dissemination

The database is available in two ways: either online via the [University of Hertfordshire](#) or the [IUPAC](#) free access internet portals, or via licensed use of the MS Access version of the database.

Uptake

Internet traffic on the two PPDB websites is monitored and recorded via a website tracking system. This system logs, on a daily basis, the number of users, total page downloads and returning visitors as well as a range of user information such as their identity from their IP address, search terms and access frequency. A total visitor counter is also visible to all users on the database [home page](#). The chart above illustrates growth in use since the databases' launch in early 2007. The web database, which is available in several languages, is used globally. The image shown below is a snapshot of visitors, generated for a moment in time by the tracker system. That shown is for 13.00 GMT on 05/03/2012.



The MS Access version of the database is or has been used by a number of organisations to support their own research and development activities including various national pesticide



authorities (e.g. US & Danish Environmental Protection Agencies, US Geological Survey) and pesticide manufacturers/ suppliers (e.g. Syngenta, DOW). It, or sub-sets of data derived from it, also supports various risk assessment tools such as FOOTPRINT, MACRO, [Asterix online](#) produced by ICPS, Italy and the ArtWET tool produced by the University of Koblenz-Landau in Germany. The database has also been

used to support national pesticide risk assessment programmes^{1,2,3}.

Impact



Historically, pesticide risk parameters have always been difficult to collate: data has been scattered across organisations and publications, much has been commercially protected and data has often been unreliable. Where databases did exist they had significant data gaps and limited to the more common substances. None of the available resources included data on pesticide metabolites or adjuvants even though these substances can often be very significant for risk assessments.

These issues led to researchers developing their own databases for each project. This was time consuming and added costs to each research project. Data paucity and access, a significant problem in developing countries, also led to concerns regarding data quality and so the quality of the risk assessment.

In recent years data has become more accessible, partly due to regulation and public concern. However, until the launch of the PPDB, there was no one single reference source covering all pesticides used globally. Since its launch in 2007, the PPDB has plugged an information gap, saved researchers considerable time, saved funding bodies money and provided much needed information on data quality. The harmonised dataset also allows for more consistency in pesticide risk assessments.

The impact of this resource can be verified via the considerable number of research papers that have cited the database (see separate leaflet) and by the endorsement provided by the IUPAC. The PPDB webpage on the AERU website also provides access to various letters of endorsement from organisations and individuals.

References

¹Yuzhou Luo and Xin Deng (2012) Methodology for Evaluating Pesticides for Surface Water Protection, I: Initial Screening, Department of Pesticide Regulation, Environmental Monitoring Branch, California, <http://www.cdpr.ca.gov/docs/emon/surfwttr/review/report1.pdf>.

²Yuzhou Luo (2011) Review and Evaluation of Pesticide Modelling Approaches in Rice Paddies, Report 263, Department of Pesticide Regulation, Environmental Monitoring Branch, California, USA, http://www.cdpr.ca.gov/docs/emon/pubs/ehapreps/report_263.pdf.

³Rai Kookana and Ray Correll (2008) The Tasmanian River Catchment Water Quality Index: pesticide Impact ranking Index (PIRI) risk indicator for minimising off-site migration of pesticides. CSIRO Land and Water Science Report 30/08.