

プレチラクロール

公表文献調査結果報告書

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シンジェンタジャパン株式会社

本報告書に関する補足

第1段階の適合性評価において Not-relevant（適合性なし）と判断されていた文献のうち、日本の評価では Relevant（適合性あり）と判断できるものについては、新たに文献の全文に基づく適合性評価を実施した（Excel (Appendix 4)に記載）。

オリジナルの報告書では、Relevant（適合性あり）と判断されていた文献に対して適合性の区分分けを行わず、直接 Klimisch 基準による分類を行っていたため、申請者が新たに適合性の区分分けを行い、追記したものを Excel(Appendix 3)で提出する。また、毒性分野で Relevant（適合性あり）と判断した文献については、FSC フォーマットも Excel に含めた。

本報告書中で Relevant（適合性あり）と判断された文献について、オープンアクセスではない場合には、申請者が新たに著作権処理を行い提出する。

PRETILACHLOR

APPROVAL OF AN ACTIVE SUBSTANCE UNDER REGULATION (EC) No 1107/2009

DOCUMENT M-CA, Section 9

LITERATURE DATA

Version history¹

Date	Data points containing amendments or additions and brief description	Document identifier and version number
June 2018	Original submission to RMS Italy	CGA26423 Doc MCA9 – v1 06-2018

¹ It is suggested that applicants adopt a similar approach to showing revisions and version history as outlined in SANCO/10180/2013 Chapter 4 How to revise an Assessment Report

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CA 9 LITERATURE DATA

CA 9.1 Literature review report on pretilachlor

This document is a Literature Review Report for the active substance, pretilachlor (CGA 26423).

In accordance with Article 7, Paragraph 1(m) of Commission Implementing Regulation (EU) No 844/2012, this review presents the summaries and results of scientific literature as referred to in Article 8 (5) of Regulation (EC) No 1107/2009.

Article 8 (5) of Regulation (EC) No 1107/2009 requires that the summary dossier submitted to support the approval of an active substance shall include scientific and peer-reviewed open literature, as determined by the Authority, on the active substance and its relevant metabolites dealing with the side-effects on health, the environment and non-target species and published within the last 10 years before the date of submission of the dossier.

CA 9.2 Author(s) of the review

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United Kingdom

CA 9.3 Summary: A brief summary indicating the purpose of the report, the methodology employed and the results obtained

This report summarises the search for published information on pretilachlor and the following metabolites:

	Search terms	
Common name	Pretilachlor	
Code name	CGA 26423	CGA26423
Chemical name	2-Chloro-N-(2,6-diethylphenyl)-N-(2-propoxyethyl)acetamide	2-Chloro-N-(2,6-diethyl-phenyl)-N-(2-propoxy-ethyl)acetamide
CAS Number	51218-49-6	
Product names	RIFIT	SOFIT
Metabolites	CGA 80154	CGA80154
	N-(2,6-diethylphenyl)-N-(2-propoxyethyl)acetamide	N-(2,6-diethyl-phenyl)-N-(2-propoxy-ethyl)acetamide
	CGA 86903	CGA86903
	N-(2,6-diethylphenyl)-2-methylsulfinyl-N-(2-propoxyethyl)acetamide	N-(2,6-diethyl-phenyl)-2-methyl-sulfinyl-N-(2-propoxy-ethyl)acetamide
	CGA 80156	CGA80156
	N-(2,6-diethylphenyl)-2-hydroxy-N-(2-propoxyethyl)acetamide	N-(2,6-diethyl-phenyl)-2-hydroxy-N-(2-propoxy-ethyl)acetamide
	CGA 100251	CGA100251
	N-(2,6-diethylphenyl)-2-methylsulfanyl-N-(2-propoxyethyl)acetamide	N-(2,6-diethyl-phenyl)-2-methyl-sulfanyl-N-(2-propoxy-ethyl)acetamide
Additional metabolites searched for in January 2018	NOA 439896	NOA439896
	[(2,6-diethyl-phenyl)-sulfoacetyl-amino]-acetic acid disodium salt	
	CGA 94686	CGA94686
	N-carboxymethyl-N-(2,6-diethyl-phenyl)-oxalamic acid	
	CGA 94687	CGA94687
	[(2,6-diethyl-phenyl)-hydroxyacetyl-amino]-acetic acid	
	CGA 80155	CGA80155
	N-(2,6-diethyl-phenyl)-N-(2-propoxy-ethyl)-oxalamic acid	

The search strategy was based on a single-concept search (in both STN and Dialog databases). For details regarding the search strategy and the results obtained, refer to Section 5 of this report.

An overview of the results of the selection process is reported in Section 6 of this Literature Review Report and in Appendices 3 and 4.

The selection process resulted in two categories of publication:

- Relevant studies and studies of unclear relevance after detailed assessment of full-text documents for relevance;
- Studies considered to be non-relevant after initial review.

The relevance criteria applied are reported in Section 4 of this Literature Review Report.

The reliability assessment for relevant studies was carried out according to Klimisch *et al.* (1997)²

This review of the published literature for pretilachlor and its metabolites did not reveal any studies considered to significantly affect the regulatory assessment of human health, animal health or the environment.

CA 9.4 Protocol

CA 9.4.1 Statement of the objective of the review

This review was conducted in order to identify scientific peer-reviewed open literature on the active substance pretilachlor and its relevant metabolites, which may affect the assessment of human health, animal health and/or the environment and published within the last ten years before the date of submission of the dossier.

CA 9.4.2 Criteria for relevance with which decisions to select studies in the dossier were made

Studies relevant to the dossier are those that inform one or more data requirement(s), including hazard identification, hazard characterisation and exposure assessment, for the active substance under assessment, its relevant metabolites, or plant protection products.

A detailed assessment of the procedures to determine relevancy can be found in Appendix 5. The main data categories of relevance as given in Regulation (EC) No 1107/2009 for which scientific peer-reviewed open literature are searched include:

1. Data requirements on chemical active substances (Commission Regulation (EU) No 283/2013):
 - a. Toxicological and metabolism studies on the active substance (KCA Section 5)
 - b. Residues in or on treated products, food and feed (KCA Section 6)
 - c. Fate and behaviour in the environment (KCA Section 7)
 - d. Ecotoxicological studies on the active substance (KCA Section 8)
 - e. Other data requirements for which information may have a direct or indirect effect on overall risk assessment (KCA Sections 1, 2, 3 and 4) (only data requirements under these points having a direct impact on the risk assessment need to be considered)

² Klimisch, H-J., Andreae, M. & Tillmann, U. (1997) A Systematic Approach for Evaluating the Quality of Experimental Toxicological and Ecotoxicological Data. *Regulatory Toxicology and Pharmacology* **25** pp 1-5

2. Data requirements on plant protection products based on chemical preparations (Commission Regulation (EU) No. 284/2013):

- a. Toxicological studies on the plant protection product (KCP Section 7)
- b. Residues in or on treated products, food and feed (KCP Section 8)
- c. Fate and behaviour in the environment (KCP Section 9)
- d. Ecotoxicological studies on the plant protection product (KCP Section 10)
- e. Other data requirements for which information may have a direct or indirect effect on the overall risk assessment (KCP Sections 1, 2, 3, 4, and 5) (only data requirements under these points having a direct impact on the risk assessment need to be considered)

Assessment of studies for relevance was carried out by reference to their titles and if necessary abstracts. Those studies that were considered to meet the relevance criteria, following review of their abstracts were obtained. The full-text of these documents was assessed further to determine whether the information contained in the study could impact on the endpoints and risk assessment parameters related to the active substance. Reviews of the relevance and reliability of the articles brought up in the literature search were carried out by experts in the relevant technical disciplines.

CA 9.4.3 Summary of reliability codes and categories

The reliability assessment for any relevant studies was carried out according to Klimisch *et al.* (1997). Within Klimisch *et al.* (1997) the following codes and categories of reliability are assigned:

Code	Category
1	Reliable without restriction
2	Reliable with restriction
3	Not reliable
4	Not assignable

1 Reliable without restriction

This includes studies or data from the literature or reports which were carried out or generated according to generally valid and/or internationally accepted testing guidelines (preferably performed to GLP) or in which the test parameters documented are based on a specific (national) testing guideline (preferably performed according to GLP) or in which all parameters described are closely related/comparable to a guideline method.

2 Reliable with restrictions

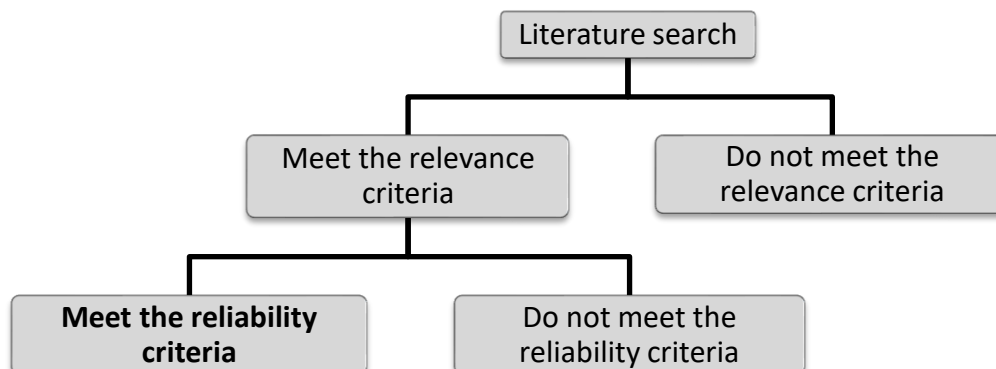
This includes studies or data from the literature, reports (mostly not performed according to GLP), in which the test parameters documented do not totally comply with the specific testing guideline, but are sufficient to accept the data or in which investigations are described which cannot be subsumed under a testing guideline, but which are nevertheless well documented and scientifically acceptable.

3 Not reliable

This includes studies or data from the literature/reports in which there are interferences between the measuring system and the test substance or in which organisms/test systems were used which are not relevant in relation to the exposure (e.g., unphysiologic pathways of application) or which were carried out or generated according to a method which is not acceptable, the documentation of which is not sufficient for an assessment and which is not convincing for an expert judgement.

4 Not assignable

This includes studies or data from the literature, which do not give sufficient experimental details and which are only listed in short abstracts or secondary literature (books, reviews, etc.).



CA 9.5 Search methods

CA 9.5.1 Overview of search terms used

Please refer to Section 3 for search terms and Table 5.1 for a summary of the search strategy.

CA 9.5.2 Search Limitation

For searches carried out using the STN and Proquest Dialog platforms, the time period was limited to studies published from January 2007 to January 2018. Patents and conference papers were excluded as these were not expected to contain information that was both relevant and reliable.

CA 9.5.3 Databases used

The databases searched together with the frequency that they are updated is given in Appendix 1.

The justification for using these databases is outlined in Appendix 2.

Table 5.1: Reporting/Overview of the search process for scientific peer-reviewed open literature in bibliographic databases

	STN databases	Proquest Dialog databases
Justification for choice of the database:	Appendix 2	Appendix 2
Date of the search:	i) Initial search: 9 February 2016 ii) Top- up search: 10 January 2018	i) Initial search: 9 February 2016 ii) Top up search: 10 January 2018
Date span of the search:	i) Initial search: 1 January 2007 to 9 February 2016 ii) Top-up search: 1 February 2016 to 10 January 2018	i) Initial search: 1 January 2007 to 9 February 2016 ii) Top-up search: 1 February 2016 to 10 January 2018
Date of the latest database update included in the search:	Refer to Appendix 1	Refer to Appendix 1
Search strategies	i) Initial search: RN: 51218-49-6 AND Publication Year: 2007-current NOT Document Type: conference NOT Document Type: patent	i) Initial search: (Pretilachlor OR "CGA 26423" OR "2-Chloro-N-2 6-diethylphenyl -N- 2-propoxyethyl acetamide" OR RN(51218-49-6) OR RIFIT OR "CGA 80154" OR "N- 2 6-diethylphenyl -N-2-propoxyethyl acetamide" OR "CGA 86903" OR "N- 2 6-diethylphenyl -2-methylsulfinyl-N- 2-propoxyethyl acetamide" OR "CGA 80156" OR "N- 2,6-diethylphenyl -2-hydroxy-N- 2-propoxyethyl acetamide" OR "CGA 100251" OR "N-2 6-diethylphenyl -2-methylsulfonyl-N- 2-propoxyethyl acetamide" OR "CGA26423" OR "2-Chloro-N-2 6-diethyl-phenyl -N- 2-propoxy-ethyl acetamide" OR SOFIT OR "CGA80154" OR "N-2 6-diethyl-phenyl -N-2-propoxy-ethyl acetamide" OR "CGA86903" OR "N- 2 6-diethyl-phenyl -2-methyl-sulfinyl-N- 2-propoxy-ethyl acetamide" OR "CGA80156" OR "N- 2 6-diethyl-phenyl -2-hydroxy-N- 2-propoxy-ethyl acetamide" OR "CGA100251" OR "N-2 6-diethyl-phenyl -2-methyl-sulfonyl-N- 2-propoxy-ethyl acetamide") AND pd(>20071001) AND stype.exact("Scholarly Journals" OR "Reports" OR "Books" OR "Government & Official Publications") AND at.exact("Article" OR "Book Chapter" OR "Government & Official Document" OR "Case Study" OR "Technical Report" OR "Report")

	STN databases	Proquest Dialog databases
	<p>ii) Top-up search:</p> <p>RN: 51218-49-6</p> <p>AND Publication Year: 2016-current</p> <p>NOT Document Type: conference</p> <p>NOT Document Type: patent</p>	<p>ii) Top-up search:</p> <p>(Pretilachlor OR "CGA 26423" OR "2-Chloro-N-2 6-diethylphenyl -N- 2-propoxyethyl acetamide" OR RN(51218-49-6) OR RIFIT OR "CGA 80154" OR "N- 2 6-diethylphenyl -N-2-propoxyethyl acetamide" OR "CGA 86903" OR "N- 2 6-diethylphenyl -2-methylsulfinyl-N- 2-propoxyethyl acetamide" OR "CGA 80156" OR "N- 2,6-diethylphenyl -2-hydroxy-N- 2-propoxyethyl acetamide" OR "CGA 100251" OR "N-2 6-diethylphenyl -2-methylsulfinyl-N- 2-propoxyethyl acetamide" OR "CGA26423" OR "2-Chloro-N-2 6-diethyl-phenyl -N- 2-propoxy-ethyl acetamide" OR SOFIT OR "CGA80154" OR "N-2 6-diethyl-phenyl -N-2-propoxy-ethyl acetamide" OR "CGA86903" OR "N- 2 6-diethyl-phenyl -2-methyl-sulfinyl-N- 2-propoxy-ethyl acetamide" OR "CGA80156" OR "N- 2 6-diethyl-phenyl -2-hydroxy-N- 2-propoxy-ethyl acetamide" OR "CGA100251" OR "N-2 6-diethyl-phenyl -2-methyl-sulfinyl-N- 2-propoxy-ethyl acetamide")</p> <p>AND (pd(>20160201))</p> <p>AND stype.exact("Scholarly Journals" OR "Reports" OR "Books" OR "Government & Official Publications")</p> <p>AND at.exact("Article" OR "Book Chapter" OR "Government & Official Document" OR "Case Study" OR "Technical Report" OR "Report")</p> <p>For additional metabolites:</p> <p>("NOA439896" OR "NOA 439896" OR "[(2,6-diethyl-phenyl)-sulfoacetyl-amino]-acetic acid disodium salt" OR "CGA94686" OR "CGA 94686" OR "N-carboxymethyl-N-(2,6-diethyl-phenyl)-oxalamic acid" OR "CGA94687" OR "CGA 94687" OR "[(2,6-diethyl-phenyl)-hydroxyacetyl-amino]-acetic acid" OR "CGA80155" OR "CGA 80155" OR "N-(2,6-diethyl-phenyl)-N-(2-propoxy-ethyl)-oxalamic acid")</p> <p>AND pd(>20071001)</p> <p>AND stype.exact("Scholarly Journals" OR "Reports" OR "Books" OR "Government & Official Publications")</p> <p>AND at.exact("Article" OR "Book Chapter" OR "Government & Official Document" OR "Case Study" OR "Technical Report" OR "Report")</p>

	STN databases	Proquest Dialog databases
Number of summary records retrieved after removing duplicates	i) Initial search: 410 ii) Top-up search: 68	i) Initial search: 115 ii) Top-up search: 42
Total number of summary records retrieved after removing duplicates	635	

CA 9.6 Results

Table 9.6-1: Results of study selection process

Summary of the review	n	Justification
Total number of summary records retrieved after removing duplicates from all database searches	635	Table 5.1
Number of summary records excluded after rapid assessment for relevance (by title/abstract)	610	Appendix 4
Number of summary records of potential/unclear relevance assessed in further detail (by abstract/full-text)	25	Appendix 3
Number of studies excluded from further consideration after detailed assessment for relevance (by abstract/full-text)	16	
Number of studies not excluded for relevance after detailed assessment (i.e. relevant studies and studies of unclear relevance)	9	
Number of relevant and reliable studies (Klimisch criteria 1-2) identified by the literature search and appraisal process	5	

Articles of potential relevance to the regulatory data package for the active substance were investigated in further detail by examining the abstract and/or the full article text. Where articles were considered to meet the criteria for relevance, an assessment of the reliability of the study was carried out based on the approach described in Klimisch *et al.*, (1997). Appendix 3 presents the articles identified as potentially relevant and/or relevant and reliable, including details of the appraisal for relevance and reliability. This process identified a total of nine relevant studies, five of which were of suitable reliability to support designation of Klimisch criteria 1 or 2. These five studies, considered relevant and reliable relate to the following EC data points:

- CA 5.8.3: Endocrine disrupting properties
- CA 7.5: Monitoring data
- CA 8.2.6.1: Effects on growth of green algae
- CA 8.2.6.2: Effects of growth of an additional algal species

CA 9.7 Conclusion

A review of the published literature for pretilachlor revealed five articles of relevance to the regulatory data package, one of the articles is relevant to the toxicology part of the data package, two are relevant to the environmental fate and behaviour part of the data package and two are relevant to the ecotoxicology part of the data package. Although these are unlikely to make substantive changes to the risk assessment, these articles may be deemed useful to consider as part of the regulatory process for pretilachlor.

Appendix 1: Databases searched

STN-DATABASES:	FREQUENCY OF UPDATES
ANABSTR (Analytical abstracts)	Updated weekly
BIOSIS (BIOSIS PREVIEWS®)	Updated weekly
BIOTECHNO (Elsevier Biotechno base)	Not updated: Closed in 2003
CABA (CA Abstracts)	Updated weekly
CAplus (Chemical abstracts plus)	Updated daily
CAplus (Toxicology focus)	Updated daily
CAplus (Analytical chemistry focus)	Updated daily
Chemical Abstracts REGISTRY	Updated daily
CROPU (Crop Protection)	Not updated: Closed in 2003
EMBASE (Excerpta Medica)	Updated daily
ESBIOBASE (Elsevier Current Research in Biology and BioScience)	Updated weekly
KOSMET (Cosmetic & Perfume Science & Technology)	Updated monthly
<i>MEDLINE</i>	Updated daily
NAPRALERT (Natural Products Alert)	Occasional updates
PASCAL (INIST's French National Research Council File)	Updated weekly
RTECS (Registry of Toxic Effects of Chemical Substances)	Updated quarterly
SCISEARCH (Science Citation Index)	Updated weekly
TOXCENTER (Toxicology Center produced by American Chemical Society CAS)	Updated weekly

PROQUEST DIALOG DATABASES:	UPDATES
AGRICOLA	All PROQUEST databases are current and updated regularly
AGRIS	
Aqualine	
Aquatic Science & Fisheries Abstracts (ASFA)	
Chemical Engineering and Biotechnology Abstracts	
Ecology Abstracts	
Embase® Alert	
Environment Abstracts	
Environmental Engineering Abstracts	
FLUIDEX	
FSTA®	
FOODLINE®: Science	
GEOBASE ^(TM)	
MEDLINE®	
Meteorology & Geostrophysical Abstracts.	
Plant Science	
Pollution Abstracts	
ToxFile	
Toxicology Abstracts	
TOXLINE	
Water Resources Abstracts	

Appendix 2: Justification for choice of databases used

STN DATABASES

Provider	Database	Justification
STN*	ANABSTR	The Analytical Abstracts database covers worldwide literature on analytical chemistry. The ANABSTR file contains bibliographic records with abstracts (since 1984) for documents reported in printed Analytical Abstracts. Sources for ANABSTR include journals, books, conference proceedings, reports, and standards. Bibliographic information, indexing terms, abstracts, chemical names, and CAS Registry Numbers are all searchable.
STN*	BIOSIS	BIOSIS Previews® is the largest and most comprehensive life science database in the world. Amongst other subject coverage includes Agriculture, Biochemistry, Biophysics, Botany, Environmental Biology, Physiology, Toxicology. Sources include periodicals, journals, conference proceedings, reviews, reports, patents and short communications. Nearly 6,000 life science journals, 1,500 international meetings as well as review articles, books, and monographs are reviewed for inclusion. Bibliographic information, indexing terms, abstracts, and CAS Registry Numbers are all searchable.
STN*	BIOTECHNO	Elsevier BIOTECHNOBASE provides comprehensive international coverage of scientific, technological, and professional biotechnology literature - from fundamental research to industrial applications. The database includes both modern biotechnology (genetic engineering, bioreactors, industrial processes, etc.) and traditional biotechnology (breeding, fermentation, etc.). Special emphasis is placed on drug development, medicine and health care, microbial biotechnology, agriculture, food industry, environmental science, forensic science and textiles. BIOTECHNO draws on a core list of 280 journals relevant to biotechnology, plus a selection of other relevant journals from related disciplines.
STN*	CAB Abstracts	The CAB Abstracts database covers worldwide literature from all areas of agriculture and related sciences including biotechnology, forestry, and veterinary medicine. Sources for CABA include journals, books, reports, published theses, conference proceedings, and patents. Bibliographic information, indexing terms, abstracts and CAS Registry Numbers are searchable.
STN*	CAPLUS	The Chemical Abstracts (CA) database covers all areas of Biochemistry, Chemistry and Chemical engineering, and related sciences. Sources include over 8,000 journals, patents from 38 national patent offices and two international patent organizations, technical reports, books, conference proceedings, and dissertations. Electronic only journals and Web preprints are also covered. Bibliographic terms, indexing terms, roles, CAS Registry Numbers, International Patent Classification and abstracts are searchable.

Provider	Database	Justification
STN*	Chemical Abstracts REGISTRY	<p>The Chemical Abstracts REGISTRY covers all types of inorganic and organic substances, including alloys, coordination compounds, minerals, mixtures, polymers, salts, high throughput screening (HTS) compounds as well as nucleic acid and protein sequences.</p> <p>Substances included in REGISTRY meet the following criteria:</p> <ul style="list-style-type: none"> - Identified by CAS as coming from a reputable source, including but not limited to patents, journals, chemical catalogues and selected substance collections on the web. - Described in largely unambiguous terms. - Characterised by physical methods or described in a patent document example or claim. - Consistent with the laws of atomic covalent organisation. <p>Experimental and predicted property data and tags and spectra data.</p>
STN*	CROPU	<p>The Derwent Crop Protection File covers all aspects of pesticides, including their use in crop protection and pest control. Information on plant and insect growth regulators, attractants, repellents and biological control is also included. The database draws on 1,100 scientific journals, conference proceedings, and patents beginning in 1996. Records contain bibliographic information, titles, abstracts, in-depth indexing, and Enzyme Commission Numbers.</p>
STN*	EMBASE	<p>The Excerpta Medica database covers worldwide literature in the biomedical and pharmaceutical fields, including biological science, biochemistry, human medicine, forensic science, paediatrics, pharmacy, pharmacology and drug therapy, pharmacoeconomics, psychiatry, public health, biomedical engineering and instrumentation and environmental science. Sources for EMBASE include more than 4,000 journals from approximately 70 countries, monographs, conference proceedings, dissertations and reports.</p>
STN*	ESBIOBASE	<p>Elsevier BIOBASE is a bibliographic current awareness database providing comprehensive coverage of the entire spectrum of biological research worldwide. Coverage includes the following areas: applied microbiology, biotechnology, cancer research, cell & developmental biology, clinical chemistry, ecological & environmental sciences, endocrinology, genetics, immunology, infectious diseases, metabolism, molecular biology, neuroscience, plant and crop science, protein biochemistry and toxicology. Records are selected from over 1,700 international scientific journals, books and conference proceedings.</p>

Provider	Database	Justification
STN*	KOSMET	Cosmetic & Perfume Science & Technology (KOSMET) is a bibliographic database containing citations to the worldwide literature on cosmetics and perfumes, with an emphasis on scientific and technical research and studies. Citations, mostly with abstracts, include bibliographic data, indexing information and CAS Registry Numbers. For literature of non-English origin the original title is given additionally. Coverage includes product development, knowledge of healthy skin and its adnexa (hair, nails, teeth, glands), trading of perfumes and cosmetics, research and development of raw materials, active ingredients, formulations, manufacture, analysis, safety, <i>in vitro</i> toxicology, physiochemical properties, biological properties, stability, packaging and clinical studies. Sources include periodicals, technical publications, conference proceedings and all reports from IFSCC congresses and meetings.
STN*	MEDLINE	MEDLINE contains information on every area of medicine. The MEDLINE database corresponds to Index Medicus, Index to Dental Literature and International Nursing Index; OLDMEDLINE, with data from NLM's from the Cumulated Index Medicus (1960-1965) and Current List of Medical Literature (1958-1959); and, since August 2001, IN-PROCESS records, the latest documents before they have been completely indexed for inclusion on MEDLINE. Sources include journals and chapters in books or symposia. Bibliographic information, indexing terms, abstracts, chemical names and CAS Registry Numbers are all searchable.
STN*	NAPRALERT	Natural Products Alert contains information on the biological, biochemical and economic aspects of natural drugs and their constituents. NAPRALERT covers pharmacology, biological activity, taxonomic distribution, ethics in medicine and the chemistry of plant, microbial, or animal (including marine) extracts. Records in NAPRALERT relate to organisms and natural products. Nearly 50% of the database contains records obtained by systematic indexing of literature since 1975. Sources include journals, books, patents, conference proceedings, government reports and newsletters. Bibliographic information, substances information, taxonomic and chemical names and CAS Registry Numbers are searchable.
STN*	PASCAL	The PASCAL database provides access to scientific and technical literature including physics and chemistry, life sciences (biology, medicine, and psychology), applied sciences and technology, earth sciences, and information sciences. Approximately 5,000 journal titles are indexed in PASCAL. French and European literature is particularly well represented in PASCAL. About 500,000 new records are added each year.

Provider	Database	Justification
STN*	RTECS	Registry of Toxic Effects of Chemical Substances contains factual toxicity data for commercially important substances from research and government reports. Coverage includes irritation data, federal standards and regulations, mutagenicity, tumorigenic effects, acute toxicity and multiple dose toxicity data, carcinogenicity reviews, NIOSH-recommended human exposure limits, reproductive effects, and information on activities by NIOSH, US EPA (Environmental Protection Agency), NTP (National Toxicology Program) and OSHA (Occupational Safety and Health Administration). Sources include journal articles, government reports and unpublished EPA test submissions (TSCATS). Molecular formulas, RTECS Numbers, CAS Registry Numbers, chemical names and toxic values are searchable.
STN*	SCISEARCH	Science Citation Index, one of the largest multidisciplinary scientific databases, is an international index to the literature covering virtually every subject area within the broad fields of science, technology and biomedicine. Records include references from over 5,600 scientific, technical and medical journals are contained in the database.
STN*	TOXCENTER	Toxicology Center covers the pharmacological, biochemical, physiological, and toxicological effects of drugs and other chemicals. TOXCENTER is composed of the following subfiles: BIOSIS (1969 to date), CApius (1907 to date), IPA (1970 to date), and MEDLINE (1953 to date). Sources include abstracts, books and book chapters, bulletins, conference proceedings, journal articles, letters, meetings, monographs, notes, papers, patents, presentations, research and project summaries, reviews, technical reports, theses, translations, unpublished material, web reprints. Records contain bibliographic data, abstracts, indexing terms, chemical names and CAS Registry Numbers.

* http://www.stn-international.de/database_list.html?&no_cache=1&cHash=

DIALOG DATABASES

Dialog is the premier online retrieval service with the most comprehensive content collection and most powerful search language available. Dialog is the worldwide leader in providing online-based information in science. The database holds data from more than 800 million unique records of key information, accessible via the Internet. Content areas include, but are not limited to, biomedical research, biotechnology, chemicals, environment, food and agriculture, medicine and science and technology.

Provider	Database	Justification
Dialog	AGRICOLA (AGRICultural OnLine Access)	AGRICOLA (AGRICultural OnLine Access) is an extensive international bibliographic database consisting of records for literature citations of journal articles, monographs, theses, patents, translations, microforms, audiovisuals, software and technical reports. Available since 1970, AGRICOLA serves as a document locator and bibliographic access and control system for the U.S. National Agricultural Library (NAL) collection, but since 1984 the database has also included some records produced by cooperating institutions for documents not held by NAL. For additional coverage of non-U.S. agricultural materials, see AGRIS INTERNATIONAL, File 203.
Dialog	AGRIS International	AGRIS International is the international information system for agricultural sciences and technology. The AGRIS International database has served since 1974 as a comprehensive inventory of worldwide agricultural literature which reflects research results, food production, and rural development to help users identify problems involved in all aspects of world food supply. Emphasis in AGRIS International is non-U.S. This file corresponds in part to the printed publication, Agrindex, published monthly by the Food and Agriculture Organization (FAO) of the United Nations. AGRIS is a cooperative, decentralised system in which over 100 national and multinational centers take part. It collects and makes available current information on the agricultural literature of the world appearing in journals, books, reports, and conference papers. Each country which participates in AGRIS does so by submitting information about documents published within its own territories. All contributing sources are of non-U.S. origin. FAO acts as a coordinating agency within this global information system, facilitating the exchange of agricultural information to its member countries.
Dialog	Aqualine	Aqualine contains abstracts and bibliographic citations from approximately 300 journals as well as from conference proceedings, scientific reports, books and theses. Major subjects of coverage include water resources and supplies management, water legislation, water quality, potable water distribution, wastewater collection, water treatment technologies, wastewater and sewage treatment, and ecological and environmental effects of water pollution. Previously published by the well-known and respected WRc in England, Aqualine is now produced in joint cooperation with WRc and CSA.

Provider	Database	Justification
Dialog	ASFA (Aquatic Sciences and Fisheries Abstracts)	ASFA (Aquatic Sciences and Fisheries Abstracts) series is the premier international reference in the field of aquatic resources. Since 1966 input to ASFA has been provided by a growing international network of information centers monitoring more than 5,000 serial publications, books, reports, conference proceedings, translations and limited distribution literature. ASFA is a component of the Aquatic Sciences and Fisheries Information System (ASFIS), formed by four United Nations agency sponsors of ASFA and a network of international and national partners.
Dialog	CEABA® - Chemical Engineering and Biotechnology Abstracts (CEABA)	CEABA® - Chemical Engineering and Biotechnology Abstracts (CEABA) database contains references with abstracts, keywords and bibliographic details of international scientific and application-oriented literature on chemical engineering and biotechnology. It covers journals, conference proceedings, books, dissertations and grey literature. Abstracts are in German and/or English. The CEABA database was published by DECHEMA e.v. from 1963 to May 2011. From June 2011 it has been produced by WTI-Frankfurt.
Dialog	CSA Life Sciences Abstracts	CSA Life Sciences Abstracts contains abstracts and bibliographic citations from recent worldwide research literature in major areas of biology, medicine, biochemistry, biotechnology, genetics, immunology, ecology, microbiology and some aspects of agriculture and veterinary science. CSA Life Sciences Abstracts is produced by CSA (Cambridge Scientific Abstracts) and corresponds to print series of more than 20 abstracting journals since 1966.
Dialog	Ecology Abstracts	Ecologists will find in this journal the essence of current ecology research across a wide range of disciplines, reflecting recent advances in light of growing evidence regarding global environmental change and destruction. Ecology Abstracts focuses on how organisms of all kinds - microbes, plants, and animals - interact with their environments and with other organisms. Included are relevant papers on evolutionary biology, economics, and systems analysis as they relate to ecosystems or the environment. With coverage ranging from habitats to food chains, from erosion to land reclamation, the journal provides an important cross-section of current findings in target research areas. Detailed information on resource and ecosystems management and modeling contributes to the journal's practical value, as does material on the impact of climate, water resources, soil, and man or growing environmental problems such as depletion, erosion, and pollution all topics which are covered in depth. Comprehensive, yet carefully focused coverage makes this an essential resource for scientists concerned with preserving the environment.

Provider	Database	Justification
Dialog	Embase® Alert	<p>Embase® Alert™ provides access to the latest eight weeks of biomedical and drug research literature, prior to entry into Embase® itself. Records in the database are indexed and appropriate records are later added to Embase.</p> <p>The emphasis of Embase Alert is on the pharmacological effects of drugs and chemicals. Additional areas of coverage are human medicine, health affairs, drug and alcohol dependence, psychiatry, forensic science, pollution control, biotechnology, medical devices and alternative medicine.</p> <p>Beginning in August 2012, <i>Article in Press (AIP)</i> records were added to the database. These are the very first version of an Embase record before it is published. As such, it may be lacking basic bibliographic data like volume and issue, and publication date. As these go through the editorial process additional information is added and they become standard Embase Alert records.</p> <p>Also beginning in 2012, all records in Embase Alert are machine-indexed using Emtree thesaurus terms, however, they will not have subheadings/links or drug concepts.</p> <p>Information for Embase Alert is taken from about 5,000 journals in approximately 70 countries.</p>
Dialog	Environment Abstracts	<p>Environment Abstracts (formerly Environment Abstracts published by LexisNexis) encompasses all aspects of the impact of people and technology on the environment and the effectiveness of remedial policies and technologies. As of 1994, the database also provides expanded coverage of energy-related issues. Environment Abstracts provides access to more than 950 journals published in the U.S. and abroad. The database also covers conference papers and proceedings, special reports from international agencies, non-governmental organizations, universities, associations and private corporations. Other materials selectively indexed include significant monographs, government studies and newsletters. Environment Abstracts customers will also receive access to Sustainability Science Abstracts and EIS: Digests of Environmental Impact Statements. Environment Abstracts also includes a special collection of over 4,000 full text government reports.</p>
Dialog	Environmental Engineering Abstracts	<p>Environmental Engineering Abstracts database covers the world literature from 1966 to the present pertaining to the technical and engineering aspects of air and water quality, environmental safety and energy production. More than 7,000 primary journals are thoroughly indexed and abstracted. More than 2,500 additional sources, including monographs and conference proceedings, are monitored for relevant articles. Published by CSA (Cambridge Scientific Abstracts).</p>

Provider	Database	Justification
Dialog	FLUIDEX	FLUIDEX is a bibliographic database providing a comprehensive source of information on all aspects of fluids engineering, behavior and applications. It is an ideal awareness tool for past and current developments in the process and civil engineering worlds. Coverage includes the latest in theoretical fluid dynamics research, innovative separation techniques, wind loading on offshore platforms, and the application and operation of hydraulic and pneumatic technologies. By bringing together both trade and scientific literature, FLUIDEX provides a unique source of information for scientists and engineering professionals alike. Each FLUIDEX record contains the full bibliographical citation, indexing terms and codes; 98% of all records include abstracts. The database provides current coverage of over 400 international journals, including both peer-reviewed titles and trade publications, and provides archival coverage of several hundred additional journal titles and books.
Dialog	Foodline®: SCIENCE	Foodline®: SCIENCE is a vital resource for keeping up-to-date with published information on food science and technology worldwide. All aspects of the food and drink industry are covered, including ingredients and process technology, microbiology, packaging, food chemistry, biotechnology, food safety and nutrition. A key strength of the database is its currency, key journals being abstracted and available online within two weeks of delivery. More than 250 current periodicals are scanned extensively for FoodlineScience. In total, more than 1,800 records are added to FoodlineScience each month, including scientific journals, trade journals, books, book chapters, standards, technical reports and PCT, European, UK, US and Japanese patents. Produced by the Leatherhead Food Research since 1972.
Dialog	FSTA®	FSTA® is produced by IFIS (UK) - core food information, an independent, not-for-profit organisation whose primary objective is to provide quality information products and services designed to meet the needs of all those working in the food sector. FSTA® is the largest and most respected collection of food science, food technology and food related human nutrition abstracts, providing content since 1969. It is compiled by a team of specialist scientists dedicated to producing a database of consistent high quality and timeliness. Continual development of coverage allows FSTA® to maintain its position as the market-leading food science database. There are more than 109,000 patent records including more than 11,000 Japanese patents. FSTA® covers journal articles (approximately 80%), patents, theses, standards, legislation, books, reviews and conference proceedings.

Provider	Database	Justification
Dialog	GEOBASE	GEOBASE is a unique bibliographic database covering worldwide research literature since 1980 in physical and human geography, earth and environmental sciences, ecology, and related disciplines. In addition to providing comprehensive coverage of the core scientific and technical periodicals, Geobase has a unique coverage of non-English language and less readily available publications. Over 2,000 journals are fully covered with an additional 3,000 having partial coverage. Over 2,000 books, monographs, conference proceedings, and reports are also included.
Dialog	MEDLINE (Medical Literature, Analysis, and Retrieval System Online)	MEDLINE is produced by the U.S. National Library of Medicine (NLM) and is the U.S. National Library of Medicine's premier bibliographic database that contains more than 15 million references to journal articles in life sciences with a concentration on biomedicine. The broad coverage of the database includes basic biomedical research and the clinical sciences since 1950 including nursing, dentistry, veterinary medicine, pharmacy, allied health and pre-clinical sciences. MEDLINE also covers life sciences that are vital to biomedical practitioners, researchers and educators, including some aspects of biology, environmental science, marine biology, plant and animal science as well as biophysics and chemistry. Increased coverage of life sciences began in 2000. MEDLINE is indexed using NLM's controlled vocabulary, MeSH® (Medical Subject headings). Approximately 400,000 records are added per year, of which more than 76% are in English.
Dialog	Meteorological and Geoastrophysical Abstracts	Meteorological and Geoastrophysical Abstracts provides current citations in English for the most important meteorological and geoastrophysical research published in worldwide literature sources since 1966 to the present. Over 200 sources, including technical journals, monographs, proceedings, reviews and annual publications are scanned for relevant literature. Subject coverage includes meteorology (weather and climate), astrophysics, physical oceanography, hydrosphere and hydrology, environmental sciences, and glaciology. Content from American Meteorological Society, published by CSA.
Dialog	Plant Science	<i>Plant Science</i> is a bibliographic database containing citations and abstracts of scientific literature on plant science, focussing on all plant scientific aspects, especially on pathology, symbiosis, biochemistry, genetics, biotechnology, techniques and environmental biology. It covers over 250 research journals with more than 23,000 titles. Informative abstracts have been added when available. Major areas of coverage include: Physiology, pathology, environmental biology & pollution, breeding, agronomy & horticulture, biotechnology, diversity, genetics, taxonomy, crop protection, water & nutrients, plants & medicine, algae, lichens, mosses & ferns, forestry, pest control.

Provider	Database	Justification
Dialog	Pollution Abstracts	A leading resource for references to environmentally related literature on pollution, its sources, and its control. This database combines information on scientific research and government policies in a single resource and provides fast access to the environmental information necessary to resolve day-to-day problems, ensure ongoing compliance and handle emergency situations more effectively. Subject coverage: air pollution, marine pollution, freshwater pollution, sewage and wastewater treatment, waste management, land pollution, toxicology and health, noise, radiation and environmental action. This database is a subset of the Environmental Sciences & Pollution Management database.
Dialog	ToxFile	<p>ToxFile® covers the toxicological, pharmacological, biochemical and physiological effects of drugs, pesticides and other chemicals. Typical areas of coverage include adverse drug reactions, chemically induced diseases, carcinogenesis, mutagenesis, teratogenesis, environmental pollution, waste disposal, radiation, and food contamination.</p> <p>ToxFile is created by copying the journal citations on toxicology from MEDLINE® and loading them into this database. ToxFile can be searched in the same way as MEDLINE: subjects are easily accessed by means of the NLM's Medical Subject Headings (MeSH®). ProQuest Dialog™ offers a thesaurus so searchers can take full advantage of this indexed vocabulary and easily find the right terms to locate broad groups of subjects as well as very precise topics.</p>
Dialog	Toxicology Abstracts	<p>Specifically focused to meet the needs of toxicologists, <i>Toxicology Abstracts</i> (a ProQuest "Environmental Sciences & Pollution Management" subfile) covers issues from social poisons and substance abuse to natural toxins, from legislation and recommended standards to environmental issues. Surveying the literature for toxicology studies of industrial and agricultural chemicals, household products, pharmaceuticals, and myriad other substances, each issue publishes information concerning the in vivo effects of toxic substances.</p> <p>Major areas of coverage include: Pharmaceuticals, Food, Additives, and Contaminants, Agro- chemicals, Cosmetics, Toiletries, and Household Products, Industrial Chemicals, Metals, Toxins and Other Natural Substances, Social Poisons and Drug Abuse, Polycyclic Hydrocarbons, Nitrosamines and Related Compounds, Radiation and Radioactive Materials, Methodology, Legislation and Recommended Standards.</p>

Provider	Database	Justification
Dialog	TOXLINE	<p><i>TOXLINE</i> covers information in all areas of toxicology, including chemicals and pharmaceuticals, pesticides, environmental pollutants, and mutagens and teratogens. This database, produced by the U.S. National Library of Medicine, provides bibliographic citations and abstracts from the core journal literature in toxicology. This version of <i>TOXLINE</i> does not contain information from Chemical Abstracts Service, BIOSIS, or International Pharmaceutical Abstracts.</p> <p>Major areas of coverage include: air pollution, antidotes, biological and adverse effects of drugs, carcinogenesis via chemicals, chemically-induced diseases, environmental chemicals and pollutants, food additives, genotoxicity, hazardous materials, health and safety, human and animal toxicity, industrial and household chemicals, mutagenicity – pesticides and herbicides, radioactive materials, risk information.</p>
Dialog	Water Resources Abstracts	<p>Technical and scientific literature on water-related topics covering the characteristics, conservation, control, pollution, treatment, use and management of water resources.</p> <p>This database, which concentrates on water supply and water treatment, complements the Aquatic Sciences & Fisheries Abstracts database, ASFA, where there is greater coverage of the marine environment and biological material. Free access to Water Resources Netsites, linking to research and development programs, data sets, lists of experts and researchers, conference and meetings information, and other resources on the Internet. Subjects include: groundwater, lakes, estuaries, erosion and sedimentation, water supply and conservation, desalination, water yield improvement, water quantity management and control, watershed protection, water quality management, water resources planning, water law, engineering works and hydraulics.</p>

Appendix 3: Report of all potentially relevant studies and studies of unclear relevance after detailed assessments for relevance

No.	Author	Year	Title	Reference	Meet relevance criteria	Meet Reliability Criteria	Basis for relevance/ reliability decision (title, abstract or full article)	Comments	EU data point
					Y or N	Score			
1.	Ait-Aïssa, S., Laskowski, S., Laville, N., Porcher, J.M., Brion, F.	2010	Anti-androgenic activities of environmental pesticides in the MDA-kb2 reporter cell line	Toxicology In Vitro 24(7): 1979- 1985	Y	2	Full article	An <i>in vitro</i> study indicating no relevant activity at likely physiological concentrations of parent.	CA 5.8.3
2.	Al-Hussaini, T., Abdelaleem, A., Elnashar, I., Shabaan, O., Mostafa, R., El-Baz, M., El-Deek, S., Farghaly, T.	2018	The effect of follicular fluid pesticides and polychlorinated biphenyls concentrations on intracytoplasmic sperm injection (ICSI) embryological and clinical outcome	European journal of obstetrics, gynaecology, and reproductive biology 220: 39-43	N	N/A	Full article	Study on pesticide levels in follicular fluid from 94 women in which pretilachlor was associated with lower oocyte retrieval, fertilization and embryo cleavage rates. Not considered reliable; no control group and unclear whether other pesticides, such as PCBs (known to cause reproductive issues), were also present in the samples where pretilachlor was identified. Results briefly presented and the level of detail is unsatisfactory (e.g. no representative chromatographs). Statistics were performed with Microsoft Excel. In conclusion, it is not clear if the observed fertility effects were solely caused by pretilachlor exposure.	N/A

No.	Author	Year	Title	Reference	Meet relevance criteria	Meet Reliability Criteria	Basis for relevance/ reliability decision (title, abstract or full article)	Comments	EU data point
					Y or N	Score			
3.	Armita, N., Othman, R., Dzolkhifli, O., Ebrahimi, M.	2016	Effects of Selected Herbicides on Growth and Nitrogen Fixing Activity of <i>Stenotrophomonas maltophilia</i> (Sb16)	Polish Journal of Microbiology 65 (3): 377-382	N	N/A	Full article	Study on the effects on the bacteria <i>Stenotrophomonas maltophilia</i> does not meet EU data requirements. <i>S. maltophilia</i> is a bacteria found in/on plants. The EU data point on nitrogen transformation (data point 8.5) refers to soil microbial activity only.	N/A
4.	Comoretto, L., Arfib, B., Chiron, S.	2007	Pesticides in the Rhône river delta (France): Basic data for a field-based exposure assessment	Science of the Total Environment 38: 124-132	Y	2	Full article	A 6-month EU relevant monitoring program to study the seasonal variation in pesticide concentrations and spatial contamination profile. Well described site and sampling methodology. Well-designed and good analytical analysis. LOD: 4 ng/L, determined by analysis of spiked water samples by ESI-LC/MSMS.	CA 7.5
5.	Comoretto, L., Arfib, B., Talva, R., Chauvelon, P., Pichaud, M., Chiron, S., Höhener, P.	2008	Runoff of pesticides from rice fields in the Ile de Camargue (Rhône river delta, France): field study and modeling	Environmental Pollution 151: 486-493	Y	2	Full article	The water balance of this EU relevant study area and concentrations of the pesticides and some of the degradation products in the irrigation, field, drainage, and outlet water were measured. Comparison with a simplified PADDY model was performed but is not relevant for the proposed use. Good description of the measuring water balance method (inflow and outflow rates). Analytical method described in Comoretto (2007) and considered appropriate. Deficiency in sampling methodology description.	CA 7.5

No.	Author	Year	Title	Reference	Meet relevance criteria	Meet Reliability Criteria	Basis for relevance/ reliability decision (title, abstract or full article)	Comments	EU data point
					Y or N	Score			
6.	Das, S., Ghosh, A., Adhya, T.K.	2011	Nitrous oxide and methane emission from a flooded rice field as influenced by separate and combined application of herbicides bensulfuron methyl and pretilachlor	Chemosphere 84(1): 54-62	N	N/A	Full article	Does not address an EU data requirement and area not relevant for the EU.	N/A
7.	Dharumarajan, S., Sankar, R., Arun, S.	2011	Persistence and dissipation of pretilachlor in soil, plant and water of coastal rice ecosystem	Indian Journal of Weed Science (India) 43: 199-202	N	N/A	Full article	Study of the persistence and dissipation of pretilachlor in soil, straw and floodwater alone or in combination with green leaf manure and gypsum. Well described study but area not relevant for the EU. Minimum sampling details. Adequate recovery and suitable analytical method.	N/A
8.	Jiang, J., Chen, Y., Yu, R., Zhao, X., Wang, Q., Cai, L.	2016	Pretilachlor has the potential to induce endocrine disruption, oxidative stress, apoptosis and immunotoxicity during zebrafish embryo development	Environmental toxicology and pharmacology 42: 125-134	N	N/A	Full article	Non-standard test method – fish embryos exposed in well plates for 96 hours.	N/A
9.	Jung, S.C., Kim, H.G., Kuk, Y.I., Ahn, H.G., Senseman, S.A., Lee, D.J.	2015	Bioavailability of the nano- unit 14C-agrochemicals under various water potential	Journal of nanoscience and nanotechnology 15(8): 6206- 6209	N	N/A	Full article	Does not address an EU data requirement.	N/A

No.	Author	Year	Title	Reference	Meet relevance criteria	Meet Reliability Criteria	Basis for relevance/ reliability decision (title, abstract or full article)	Comments	EU data point
					Y or N	Score			
10.	Kawakami, T., Eun, H., Ishizaka, M., Endo, S., Tamura, K., Higashi, T.	2007	Adsorption and desorption characteristics of several herbicides on sediment.	Journal of Environmental Science and Health. Part. B, Pesticides, Food Contaminants, and Agricultural Wastes 42(1): 1-8	N	N/A	Full article	Generally, a well performed study with well described sampling and analytical methods. However, it is considered not relevant because the study was performed with sediment samples from Japan and not with relevant agricultural soils from the EU. Moreover, only one of the sediments meets OECD 106 criteria, the absorption of the test substances on the surface of the test vessels was not informed, and to inhibit biotransformation, NaN_3 was used (stability of the test was not informed). The recovery was adequate. Overall the study is considered not relevant.	N/A
11.	Kumar, A., Nayak, A., Shukla, A., Panda, B., Raja, R., Shahid, M., Tripathi, R., Mohanty, S., Rath, P.	2012	Microbial biomass and carbon mineralization in agricultural soils as affected by pesticide addition	Bulletin of environmental contamination and toxicology 88(4): 538-542	N	N/A	Full article	Field site in India not relevant to EU.	N/A

No.	Author	Year	Title	Reference	Meet relevance criteria	Meet Reliability Criteria	Basis for relevance/ reliability decision (title, abstract or full article)	Comments	EU data point
					Y or N	Score			
12.	Liu, Y., Jian, L., Pan, B., Lin, Y.	2017	Teratogenic effects of embryonic exposure to pretilachlor on the larvae of zebrafish	Journal of Agro- Environment Science 36 (3): 481-486	N	N/A	Abstract / on- line translation of full article	Limited detail given in this paper on a non-standard Chinese language study. However, concentrations used in the study (0.50 to 1.50 mg pretilachlor/L) correspond with the fish acute (LC ₅₀ 1.3 to 1.6 mg/L) and juvenile growth (NOEC = 0.58 mg/L) test data available from the standard Guideline/GLP studies conducted with pretilachlor. As such, the results of this study would have no impact on the risk assessment for pretilachlor, which is driven by the toxicity to algae and aquatic plants.	N/A
13.	Maryam, P., Mehdi, M., Morteza, S., Masood, F., Abbasali, Z., Firouz, A.	2013	Determination of the acute toxicity of pretilachlor on liver and gill issues as well as glucose and cortisol levels in fingerling grass carps (<i>Ctenopharyngodon idella</i>)	Journal of Fisheries and Aquatic Science 8(6): 721	Y	3	Full article	Test material not well defined, exposure profile not clear and no chemical analysis was conducted.	CA 8.2.1
14.	Nagai, T., Ishihara, S., Yokoyama, A., Iwafune, T.	2011	Effects of four rice paddy herbicides on algal cell viability and the relationship with population recovery	Environmental Toxicology and Chemistry / SETAC 30(8): 1898- 1905	Y	2	Full article	Modification of OECD 201, but no chemical analysis conducted.	CA 8.2.6.1
15.	Nagai, T., Taya, K., Yoda, I.	2016	Comparative toxicity of 20 herbicides to 5 periphytic algae and the relationship with mode of action	Environmental Toxicology and Chemistry 35(2): 368-375	Y	1-2	Full article	Mentions OECD 201 and chemical analysis conducted.	CA 8.2.6.1

No.	Author	Year	Title	Reference	Meet relevance criteria	Meet Reliability Criteria	Basis for relevance/ reliability decision (title, abstract or full article)	Comments	EU data point
					Y or N	Score			
16.	Prasad, S., Kumar, S.	2011	Differential responses of growth, antioxidant enzymes and oxidative stress in two species of Azolla (<i>Azolla microphylla</i> and <i>Azolla pinnata</i>) exposed to pretilachlor and enhanced UV-B radiation	Journal of Chemical and Pharmaceutical Research 3(4): 974-985	N	N/A	Full article	The study was conducted in plastic trays, placed in the field in India; as such, the test conditions are not relevant for a European assessment. In addition, the two species of Azolla tested do not occur in Europe.	N/A
17.	Prasad, S., Kumar, S., Parihar, P., Singh, A., Singh, R.	2015	Evaluating the combined effects of pretilachlor and UV-B on two Azolla species	Pesticide and Biochemistry Physiology (In press)	N	N/A	Full article	The study was conducted in plastic trays, placed in the field in India; as such, the test conditions are not relevant for a European assessment. In addition, the two species of Azolla tested do not occur in Europe.	N/A
18.	RajaRajeswari, R., Sathiyarayanan, S., Ramesh, A., Ayyappan, A.	2013	Evaluation of bioavailability of residues of pretilachlor in soil and water under paddy cropping condition and their influence on <i>Lemna gibba</i>	Journal of Agriculture and Environment 14: 102-110	N	N/A	Full article	Field aspect of study conducted in India, thus not relevant to EU. Limited details given for bioassay in lab and no guideline mentioned.	N/A

No.	Author	Year	Title	Reference	Meet relevance criteria	Meet Reliability Criteria	Basis for relevance/ reliability decision (title, abstract or full article)	Comments	EU data point
					Y or N	Score			
19.	Sadeghi, A., Hedayati, A.	2014	Investigation of acute toxicity Diazinon, Deltamethrin, Butachlor and Pretilachlor on Zebra Cichlid (<i>Cryptoheros nigrofasciatus</i>)	Iranian Journal of Toxicology 8(25): 1086- 1092	N	N/A	Full article	Test material not well defined (50% formulation), method generally similar to OECD guideline but limited detail reported, no chemical analysis, non-EU species.	N/A
20.	Sadeghi, A., Imanpoor, M.	2013	Effect of pretilachlor on the mortality of fish gambusia	World Journal of Zoology 8(3): 328	Y	3	Full article	Test material not well defined (50% formulation), method generally similar to OECD guideline but limited detail reported, no chemical analysis, non-EU species.	CA 8.2.1
21.	Saha, S., Dutta, D., Karmakar, R., Ray, D.	2012	Structure-toxicity relationship of chloroacetanilide herbicides: relative impact on soil microorganisms	Environmental Toxicology and Pharmacology 34(2): 307-14	N	N/A	Full article	Experimental test soil collected in India not relevant to EU. Plus non- standard test method.	N/A
22.	Sanyal, S., Dasgupta, R., Kaviraj, A., Chakravorty, P.	2015	Comparative toxicity studies of four pesticides on the epigeic earthworm <i>Perionyx excavatus</i> in two different soil media	Pollution Research 34(1): 47-51	N	N/A	Full article	Acute toxicity to earthworms is not an EU data requirement. Field collect specimens of <i>Perionyx excavatus</i> (in India) not relevant.	N/A
23.	Satyavani, G., Chandrasehar, G., Varma, K.K., Goparaju, A., Ayyappan, S., Reddy, P., Murthy, P.	2012	Toxicity assessment of expired pesticides to green algae <i>Pseudokirchneriella subcapitata</i>	ISRN Toxicology 2012: 247072	N	N/A	Full article	Follows OECD 201, but no chemical analysis conducted. Study tested on unknown formulation.	N/A
24.	Singh, D., Khattar, J., Kaur, G., Gupta, M., Singh, Y., Gulati, A.	2015	Effect of pretilachlor on nitrogen uptake and assimilation by the cyanobacterium <i>Desmonostoc muscorum</i> PUPCCC 405.10	Acta Physiologiae Plantarum 37(9): 177	N	N/A	Full article	Does not meet an EU data requirement.	N/A

No.	Author	Year	Title	Reference	Meet relevance criteria	Meet Reliability Criteria	Basis for relevance/ reliability decision (title, abstract or full article)	Comments	EU data point
					Y or N	Score			
25.	Singh, D., Khattar, J., Kaur, G., Singh, Y.	2016	Toxicological effect of pretilachlor on some physiological processes of cyanobacterium <i>Synechocystis</i> sp. strain PUPCCC 64	J. App. Biol. Biotech. 4 (1): 12-19	Y	3	Full article	Non-standard study on the photosynthesis, respiration and nitrogen assimilation of a unicellular cyanobacterium (previously referred to as “blue-green algae”). Methods used do not follow standard guidelines and no analytical verification of the test concentrations was performed	CA 8.2.6.2

Appendix 4: All other studies considered to be non-relevant after initial review; ordered by author(s)

No.	Author	Year	Title	Reference	Meet relevance criteria	Meet Reliability Criteria		Comments
					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
1.	Abe, R., Yuasa, T., Fukuchi, T., Nonaka, Y., Morioka, H., Yamamoto, Y., Nozaki, Y., Kabayama, K.	2011	Investigation of pesticide residues in vegetables and fruits produced in Miyazaki Prefecture, Apr. 2007-Dec. 2011	Miyazaki Prefecture Health and Environment Institute Annual Report (23), 82-87, 2011	N	N/A	N/A	Determination of pesticide residues in foostuffs.
2.	Adachi, A., Komura, T., Andoh, A., Okano, T.	2007	Effects of spherosomes on degradation of pretilachlor and esprocarb in soil	Japan Journal of Health Science 53(5): 600-603	N	N/A	N/A	Academic paper to show effects of plant spherosomes on the rate of degradation of pretilachlor in soil.
3.	Adachi, A., Okita, Y., Adachi, J.	2010	Efficiency of rice bran for removal of pretilachlor and esprocarb in artificial gastric fluid	Journal of Health Science 56(1): 88-91	N	N/A	N/A	Academic paper on the use of rice bran as an adsorbent in removal of pretilachlor from artificial gastric juice.
4.	Agasimani, C., Channappagoudar, B., Raikar, D.	2008	Effect of herbicides on weeds in transplanted rice	Journal of Crop and Weed	N	N/A	N/A	Agronomy study.
5.	Ahmed, G., Bhuiyan, M.	2010	Performance of weed management practices for different establishment methods of rice (<i>Oryza sativa</i> L.) in dry season	Pakistan Journal of Weed Science Research 16(4): 393-402	N	N/A	N/A	Agronomy study.
6.	Akbar, N., Ehsanullah, Jabran, K.	2011	Weed management improves yield and quality of direct seeded rice.	Australian Journal of Crop Science 5(6): 688-694	N	N/A	N/A	Agronomy study.
7.	Alder, L., Steinborn, A., Bergelt, S.	2011	Suitability of an orbitrap mass spectrometer for the screening of pesticide residues in extracts of fruits and vegetables	Journal of AOAC International 94(6): 1661-1673	N	N/A	N/A	Report on the suitability of analytical equipment for determining pesticide residues in extracts of fruits and vegetables.
8.	Ali, M., Hossain, H., Ahamed, S.	2010	Growth and yield of hybrid and inbred boro rice affected by different methods of weed control	Pakistan Journal of Weed Science Research 16(2): 169-180	N	N/A	N/A	Agronomy study.

No.	Author	Year	Title	Reference	Meet relevance criteria	Meet Reliability Criteria		Comments
					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
9.	Alighardashi, A., Sajjad, J., Nazem, M., Hosein, A.	2017	Risk assessment of pesticides in paddy fields and the Safidrud River in Gilan, Iran	Paddy and Water Environment 15 (2): 371-380	N	N/A	N/A	Development of a model to predict pesticide concentrations in the Safidrud River, Iran.
10.	Alla, M., Mamdouh, M., Badawi, A., Hassan, N., El-Bastawisy, Z., Badran, E.	2008	Herbicide tolerance in maize is related to increased levels of glutathione and glutathione-associated enzymes	Acta Physiologiae Plantarum 30(3): 371-379	N	N/A	N/A	Herbicide resistance study.
11.	Aminpanah, H.,	2014	Effects of crop density and reduced rates of pretilachlor on weed control and grain yield in rice	Romian Agricultural Research 31(31)	N	N/A	N/A	Efficacy study on pretilachlor.
12.	Aminpanah, H., Sharifi, P., Mohaddesi, A., Abbasian, A., Javadi, M.	2013	Effect of pretilachlor rate on grain yield and weed biomass in two rice cultivars	International Journal of Biosciences 3(8): 150-158	N	N/A	N/A	Efficacy study on pretilachlor.
13.	Aminpanah, H., Sharifi, P., Mohaddesi, A., Abbasian, A., Javadi, M.	2014	Rice grain yield and weed growth as affected by plant density and pretilachlor rate	The Philippine Agricultural Scientist 97(3): 266-272	N	N/A	N/A	Efficacy study on pretilachlor.
14.	Amakawa, E., Yamada, Y., Aoyagi, Y., Hirata, K., Takano, I.	2009	Survey of pesticide residues in agricultural products cultivated in the Tama region, Tokyo	Annual Report Tokyo Metropolitan Institute of Public Health 60: 165-170	N	N/A	N/A	Survey of pesticide residues in agricultural products cultivated in the region of Tokyo.
15.	Anonymous	2009	Study of analytical method for pesticide residues in vegetables and fruits by GC/MS/MS	Hiroshima-shi Eisei Kenkyusho Nenpo 28: 54-61	N	N/A	N/A	Analytical method for detection of pesticide residues in fruit and vegetables. Japanese language paper.
16.	Anonymous	2016	CAS registry number: 51218-49-6 (pretilachlor)	Registry of Toxic Effects of Chemical Substances (RTECS) The National Institute for Occupational Safety and Health (NIOSH)	N	N/A	N/A	All citations recorded within RTECS are outside the timeframe of this literature review.

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					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
17.	Anwar, M., Juraimi, A., Mohamed, M., Uddin, M., Samedani, B., Puteh, A., Man, A.	2013	Integration of agronomic practices with herbicides for sustainable weed management in aerobic rice	The Scientific World Journal 2013: 916408	N	N/A	N/A	Agronomy study.
18.	Anwar, M., Juraimi, A., Puteh, A., Man, A., Rahman, M.	2012	Efficacy, phytotoxicity and economics of different herbicides in aerobic rice	Acta Agriculturae Scandinavica 62(7): 604-615	N	N/A	N/A	Agronomy study.
19.	Arakawa, M., Sano, H., Baba, Y., Ushitani, M., Kato, I.	2012	Multiresidue analysis of pesticides in tea by supercritical fluid extraction (SFE) and GC-MS	Journal of the Food Hygienic Society of Japan 53(3): 139-145	N	N/A	N/A	Analytical method for detection of pesticides in tea.
20.	Araujo, L., Troconis, M., Cubillán, D., Mercado, J., Villa, N., Prieto, A.	2013	Single drop microextraction and gas chromatography-mass spectrometry for the determination of diflufenican, mepanipyrim, fipronil, and pretilachlor in water samples	Environmental Monitoring and Assessment 185(12): 10225-10233	N	N/A	N/A	Analytical method for detection of pesticides in water.
21.	Aravinna, P. Priyantha, N., Pitawala, A., Yatigammana, S.	2017	Use pattern of pesticides and their predicted mobility into shallow groundwater and surface water bodies of paddy lands in Mahaweli river basin in Sri Lanka	J. Environ. Sci. Health B 52(1): 37-47	N	N/A	N/A	Mobility potential of pesticides on surface water and groundwater using pesticide risk indicators. Climatic conditions not relevant to EU.
22.	Arora, S., Mukherjee, I., Kumar, A., Garg, D.	2014	Comparative assessment of pesticide residues in grain, soil, and water from IPM and non-IPM trials of basmati rice	Environmental Monitoring and Assessment 186(1): 361-366	N	N/A	N/A	Determination of pesticide residues in grain, soil and water.
23.	Arora, S., Mukherjee, I., Kumar, A., Tanwar, R.	2014	Pesticide residue analysis of soil, water, and grain of IPM basmati rice	Environmental Monitoring and Assessment 186(12): 8765-8772	N	N/A	N/A	Determination of pesticide residue levels in soil, water and rice grain.
24.	Arya, S., Ameen, M.	2016	Efficacy of new generation herbicides for weed management in semi dry rice	Journal of Tropical Agriculture 54 (1)	N	N/A	N/A	Efficacy study.

No.	Author	Year	Title	Reference	Meet relevance criteria	Meet Reliability Criteria		Comments
					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
25.	Ashrafi, S., Alizadeh, H., Yaghoubi, B., Abtali, Y., Mesgaran, M.	2010	The effect of Azolla herbicides on yield and yield component of rice	Proceedings of 3rd Iranian Weed Science Congress, Volume 2: Key papers, weed management and herbicides, Babolsar, Iran 2: 574-577	N	N/A	N/A	Agronomy study.
26.	Aslani, F. Juraimi, A., Ahmad-Hamdani, M, Hahemi F., Alam, A	2016	Control of weeds in glasshouse and rice field conditions by phytotoxic effects of <i>Tinospora crispa</i> (L.) Hook. f. & Thomson leaves	Chilean J. Agric. Res. 76 (4)	N	N/A	N/A	Efficacy study.
27.	Aulakh, C., Mehra, S.	2007	Effect of submergence periods and herbicides on the control of red sprangletop (<i>Leptochloa chinensis</i> (L.) nees) in transplanted rice	Plant Protection Quarterly 22(4): 132-135	N	N/A	N/A	Agronomy study.
28.	Aulakh, C., Mehra, S.	2009	Effect of herbicides and submergence period on red sprangletop [<i>Leptochloa chinensis</i> (L.) nees] in transplanted rice	Journal of Research 46(1-2): 1-5	N	N/A	N/A	Agronomy study.
29.	Awan, T., Sta Cruz, P., Chauhan, B.	2016	Effect of pre-emergence herbicides and timing of soil saturation on the control of six major rice weeds and their phytotoxic effects on rice seedlings	Crop Protection 83: 37-47	N	N/A	N/A	Efficacy study.
30.	Babar, S., Velayutham, A.	2012	Weed management practices on weed characters, plant growth and yield of rice under system of rice intensification.	Madras Agricultural Journal 99(1/3): 46-50	N	N/A	N/A	Agronomy study.
31.	Bahar, F., Rashid, Z.	2013	Effect of different doses of herbicides on yield attributes and grain yield of dry seeded rice (<i>Oryza sativa</i> L.).	Journal of Cereals and Oilseeds 4(9): 109-111	N	N/A	N/A	Agronomy study.

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					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
32.	Bai, S., Li, Z., Zang, X., Wang, C., Wang, Z.	2013	Graphene-based Magnetic Solid Phase Extraction-Dispersive Liquid Liquid Microextraction Combined with Gas Chromatographic Method for Determination of Five Acetanilide Herbicides in Water and Green Tea Samples	Chinese Journal of Analytical Chemistry 41(8): 1177-1182	N	N/A	N/A	Analytical method for detection of acetanilide herbicides in water and tea.
33.	Banerjee, H., Pramanik, S., Goswami, K., Samanta, M.	2008	Efficacy of herbicides against weeds in transplanted summer rice (<i>Oryza sativa</i> L.)	Environment and Ecology 26(3): 1087-1089	N	N/A	N/A	Efficacy study.
34.	Banerjee, K., Utture, S., Dasgupta, S., Kandaswamy, C., Pradhan, S., Kulkarni, S., Adsule, P.	2012	Multiresidue determination of 375 organic contaminants including pesticides, polychlorinated biphenyls and polyaromatic hydrocarbons in fruits and vegetables by gas chromatography-triple quadrupole mass spectrometry with introduction of semi-quantification approach	Journal of Chromatography A 1270: 283-295	N	N/A	N/A	Analytical method for detection of pesticide residues in foodstuffs.
35.	Banerjee, P., Maiti, D., Bandyopadhyay, P.	2008	Production potential and economics of hybrid rice during Boro season under new alluvial zones of West Bengal.	Journal of Crop and Weed 4(1): 28-30	N	N/A	N/A	Agronomy study.
36.	Bari, M.	2010	Effects of herbicides on weed suppression and rice yield in transplanted wetland rice	Pakistan Journal of Weed Science Research (Pakistan) 16(4): 349-361	N	N/A	N/A	Agronomy study.
37.	Barman, S., Das, A.	2015	Residual effect of pre-emergence herbicides on microbial activities in relation to mineralization of C, N and P in the Gangetic alluvial soil of West Bengal, India	Environmental Monitoring and Assessment 187(7): 465	N	N/A	N/A	Study on residual effects of herbicides on soil microbial activities; soil type not relevant to EU.
38.	Begum, M.	2010	Efficacy of herbicides on the control weeds and productivity of direct seeded rice under minimal water conditions	Plant Protection Quarterly 25(1): 25-29	N	N/A	N/A	Agronomy study.

No.	Author	Year	Title	Reference	Meet relevance criteria	Meet Reliability Criteria		Comments
					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
39.	Begum, M., Juraimi, A., Syed Omar, S., Rajan, A., Azmi, M.	2008	Effect of herbicides for the control of <i>Fimbristylis miliacea</i> (L.) Vahl. in rice	Journal of Agronomy 7(3): 251-257	N	N/A	N/A	Agronomy study.
40.	Belansky, E. Cutfirth, N., Kern, B., Scarbro, S.	2016	Disseminating Evidence-Based Physical Education Practices in Rural Schools: The San Luis Valley Physical Education Academy	Journal of Physical Activity & Health 13 (9): 1002-9	N	N/A	N/A	Physical education report.
41.	Bharali, M., Pathak, K., Sharma, A.		NPK levels and weed management practices for rice (<i>Oryza sativa</i> L.) under SRI method of cultivation	International Journal of Tropical Agriculture 34 (6): 1649-1652	N	N/A	N/A	Agronomy study.
42.	Bhat, M., Hussain, A., Ganai, M., Jehangir, A., Teli, N.	2017	Bioefficacy of pyrazosulfuron and bensulfuron methyl in combination with pretilachlor against weeds in transplanted rice (<i>Oryza sativa</i> L.) under temperate conditions of Kashmir	Journal of Crop and Weed 13(1) : 178-182	N	N/A	N/A	Efficacy study.
43.	Bhuiyan, M., Rashid, M., Roy, D., Karmakar, B., Hossain, M., Khan, M.	2015	Sound weed management options for sustainable crop production	Pakistan Journal of Weed Science Research 21(1): 59-70	N	N/A	N/A	Agronomy study.
44.	Bhowmick, S., Das, R., Das, A.	2014	Effect of thiobencarb and pretilachlor on microorganisms in relation to mineralization of C and N in the Gangetic alluvial soil of West Bengal	Environmental monitoring and assessment 186(10): 6849-6856	N	N/A	N/A	Study on effects of pretilachlor on soil microorganisms; soil type not relevant to EU.
45.	Bo, T., Zhan, S., Hu, P., Wang, Y., Zhang, Z., Li, P.	2008	GC-MS application in 80 kinds of pesticide residue in grain	Zhonghua Yufang Yixue 42(5): 356-358	N	N/A	N/A	Analytical method for detection of pesticide residues in grain. Chinese language paper.
46.	Bokhan, A., Fedorova, M.	2010	Initial material for garden radish breeding in the conditions of Belarus	Scientific-practical Journal 28-30	N	N/A	N/A	Agronomy study.
47.	Boulange, J., Kondo, K., Phong, T., Watanabe, H.	2012	Analysis of parameter uncertainty and sensitivity in PCPF-1 modeling for predicting concentrations of rice herbicides	Journal of Pesticide Science 37(4): 323-332	N	N/A	N/A	Predictive modelling.

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					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
48.	Bhullar, G.S., Singh, T., Brar, L.S.	2007	Effect of continuous and rotational use of herbicides on weed flora of rice (<i>Oryza sativa</i> L.) under long-term rice-wheat cropping system.	European Weed Research Society, 14th EWRS Symposium, Hamar, Norway 17-21	N	N/A	N/A	Agronomy study.
49.	Bueno, C. S., and Lafarge, T.	2017	Maturity groups and growing seasons as key sources of variation to consider within breeding programs for high yielding rice in the tropics	Euphytica 213 (3): 1-18	N	N/A	N/A	Agronomy study.
50.	Byer, J.D., Alaei, M., Jobst, K., Pacepavicius, G., Binkley, J.	2015	Leveraging Cl-H mass defect plots for the identification of halogenated organic contaminants	Poster presented at Dioxin 2014	N	N/A	N/A	Poster presentation on analytical identification of halogenated organic contaminants.
51.	Cai, C., Cheng, H., Wang, Y.	2014	Determination of pretilachlor in soil and rice using matrix solid-phase dispersion extraction by capillary electrophoresis with field amplified sample injection and electrochemiluminescence detection	Analytical Methods 6(8): 2767-2773	N	N/A	N/A	Analytical method for detection of pretilachlor in soil and rice.
52.	Caishan, J., Zhongwei, W., Meiyuan, P., Qing, W.	2007	Pretreatment of wastewater from clomazone and pretilachlor production by Fe-C microelectrolysis-Fenton reagent oxidation process	Environmental Protection of Chemical Industry 2007-04	N	N/A	N/A	Report on wastewater treatment.
53.	Campagna, G., Geminiani, E.	2015	Weed control in rice and management of herbicide resistance in weeds	Informatore Agrario 71(2): 60-62	N	N/A	N/A	Agronomy study. Italian language paper.
54.	Chang, G., Chen, H., Lin, F.	2016	Analysis of banned veterinary drugs and herbicide residues in shellfish by liquid chromatography-tandem mass spectrometry (LC/MS/MS) and gas chromatography-tandem mass spectrometry (GC/MS/MS)	Mar. Pollut. Bull 113(1-2): 579-584	N	N/A	N/A	Analysis of chloramphenicol, malachite green, leucomalachite green, and nitrofurans metabolites in shellfish.

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55.	Chang, Q., Zhou, X., Gao, S., Wang, Z.	2013	Determination of acetanilide herbicides in water samples by liquid phase microextraction based on solidification of floating organic droplet coupled with gas chromatography	Chinese Journal of Analytical Chemistry 40(4): 523-528	N	N/A	N/A	Analytical method for detection of acetanilide herbicides in water.
56.	Channappagoudar, B., Mane, S., Naganagoudar, Y., Channappagoudar, S., Rathod, S.	2013	Crop weed competition and chemical control of weeds in turmeric	Environment and Ecology 31(2): 532-536	N	N/A	N/A	Agronomy study.
57.	Channappagoudar, B., Babu, V., Naganagoudar, Y., Channappagoudar, S., Rathod, S.	2013	Crop weed competition and chemical control of weeds in Brinjal (<i>Solanum melongena</i> L.)	Environment and Ecology 31(2): 537-542	N	N/A	N/A	Agronomy study.
58.	Channappagoudar, B., Babu, V., Naganagoudar, Y., Rathod, S.	2013	Influence of herbicides on morpho-physiological growth parameters in turmeric (<i>Curcuma longa</i> L.)	The Bioscan 8(3): 1019-1023	N	N/A	N/A	Agronomy study.
59.	Channappagoudar, B., Mane, S., Naganagoudar, Y., Rathod, S.	2013	Influence of herbicides on morpho-physiological growth parameters in brinjal (<i>Solanum melongena</i> L.)	The Bioscan 8(3): 1049-1052	N	N/A	N/A	Agronomy study.
60.	Chau, N., Sebesvari, Z., Amelung, W., Renaud, F.	2015	Pesticide pollution of multiple drinking water sources in the Mekong Delta, Vietnam: evidence from two provinces	Environmental Science and Pollution Research International 22(12): 9042-9058	N	N/A	N/A	Pesticide pollution of drinking water in Vietnam. Use of product unlikely to be consistent with intended use patterns in EU.
61.	Chauhan, B.	2013	Rice husk biochar influences seedling emergence of junglerice (<i>Echinochloa colona</i>) and herbicide efficacy	American Journal of Plant Sciences 4(7): 1345-1350	N	N/A	N/A	Agronomy study.
62.	Chauhan, B., Abeysekara, A., Kulatunga, S., Wickrama, U.	2013	Performance of different herbicides in a dry-seeded rice system in Sri Lanka	Weed Technology 27(3): 459-462	N	N/A	N/A	Agronomy study.

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63.	Chauhan, B., Abugho, S.	2013	Weed Management in Mechanized-Sown, Zero-Till Dry-Seeded Rice	Weed Technology 27(1): 28-33	N	N/A	N/A	Agronomy study.
64.	Chauhan, B., Awan, T., Evengelista, G., Abugho, S.	2015	Effect of crop establishment methods and weed control treatments on weed management, and rice yield	Field Crops Research 172: 72-84	N	N/A	N/A	Agronomy study.
65.	Chauhan, B., Ngoc, S., Duong, D., Ngoc, P.	2014	Effect of pretilachlor on weedy rice and other weeds in wet-seeded rice cultivation in South Vietnam	Agronomy & Crop Ecology 17(4): 315-320	N	N/A	N/A	Efficacy study.
66.	Chawla, S., Patel, H., Vaghela, K., Pathan, F., Gor, N., Patel, A., Shah, P.	2016	Development and validation of multiresidue analytical method in cotton and groundnut oil for 87 pesticides using low temperature and dispersive cleanup on gas chromatography and liquid chromatography-tandem mass spectrometry	Analytical and Bioanalytical Chemistry 408(3): 983-997	N	N/A	N/A	Analytical method for detection of pesticides in foodstuffs.
67.	Chen, B., Jin, B., Jiang, R., Xie, L., Lin, Y., Feng, W., Ouyang, G.	2014	Screening and quantification of 304 pesticides and related organic pollutants in surface water using dispersive liquid-liquid microextraction coupled with gas chromatography-mass spectrometry	Analytical Methods 6: 1743-1752	N	N/A	N/A	Analytical detection of pesticides in surface water.
68.	Chen, H., Han, Y., Zhong, M., Jin, W., Wang, X., Ni, J.	2010	The GC-ECD method for detecting acetanilide herbicide residues in soil samples	Chemical Reagents 12: 15	N	N/A	N/A	Analytical method for detection of acetanilide herbicide residues in soil.
69.	Chen, H., Gao, G., Chai, Y., Ma, G., Hao, Z., Wang, C., Liu, X., Lu, C.	2017	Multiresidue Method for the Rapid Determination of Pesticide Residues in Tea Using Ultra Performance Liquid Chromatography Orbitrap High Resolution Mass Spectrometry and In-Syringe Dispersive Solid Phase Extraction	ACS Omega 2 (9): 5917-5927	N	N/A	N/A	Determination of pesticide residues in tea.

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					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
70.	Chen, J., Xu, J., Xie, J.J., Yuan, Z.Y., Liu, C.	2013	Determination of 287 pesticide residues in vegetable by gas chromatography-tandem mass spectrometry with multiple reaction monitoring and product ion scan	Chinese Journal of Analysis Laboratory 2013-06	N	N/A	N/A	Analytical method for detection of pesticide residues in foodstuffs.
71.	Chen, Q., Yao, Li., Wang, C., Deng, S., Chu, C., He, J.	2013	Isolation and characterization of acetochlor-degrading strain <i>Sphingomonas</i> sp. DC-6 and preliminary studies on its metabolic pathway	Journal of Agricultural Science and Technology (Beijing) 15(5): 67-74	N	N/A	N/A	Microbiology study.
72.	Chen, W.	2015	Penoxsulam-resistant barnyardgrass (<i>Echinochloa crus-galli</i>) in rice fields in China	Weed Biology and Management 16 (1): 16-23	N	N/A	N/A	Resistance study.
73.	Chen, Y., Shen, X., Fang, Y.	2013	Fenclorim effects on rice germination and yield	Canadian Journal of Plant Science 93(2): 237-241	N	N/A	N/A	Agronomy study.
74.	Chen, Z., Zhang, H., liu, B., Yang, G., Aboul-Enein, H.Y., Wang, W., Ding, R., Du, H., Li, H.	2007	Determination of Herbicide Residues in Garlic by GC-MS	Chromatographia 66(11): 887-891	N	N/A	N/A	Analytical method for detection of herbicide residues in garlic.
75.	Chiba, T., Senda, Y., Yasunaga, M., Nishioka, C.	2006	Survey of Pesticide Residues in Agricultural Products in Kagawa	Kagawa Prefecture Environmental Health Research Center Office Report 5	N	N/A	N/A	Survey of pesticide residues in agricultural products in Kagawa, Japan.
76.	Chinnusamy, C., Janaki, P., Muthukrishnan, P., Jeyaraman, S.	2012	Long term herbicidal weed management integrated with nitrogen nutrient in transplanted rice-rice cropping system of Tamil Nadu, India	Pakistan Journal of Weed Science Research 18: 95-103	N	N/A	N/A	Agronomy study.
77.	Cho, H., Kong, K.	2007	Study on the biochemical characterization of herbicide detoxification enzyme, glutathione S-transferase	Biofactors 30(4): 281-287	N	N/A	N/A	Study on the biochemical characterisation of glutathione S-transferase enzymes.

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78.	Cho, J., Lee, J., Lim, C.U., Ahn, J.	2016	Quantification of pesticides in food crops using QuEChERS approaches and GC-MS/MS	Food Addit. Contam. Part A Chem. Anal. Control Expo. Risk Assess. 33 (12):1803-1816	N	N/A	N/A	Determination of pesticides in food crops.
79.	Chowdhury, M., Choudhury, S., Koushik, B., Rambilash M., Brahmachari, K., Mallick, R.	2013	Effect of different nutrient levels and weed management practices in hybrid rice (<i>Oryza sativa</i> L.) under red lateritic zone of West Bengal	Journal of Interacademia 17(1): 97-103	N	N/A	N/A	Agronomy study.
80.	Chu, X., Fang, H., Wang, X., Gao, C., Pang, G., Yu, Y.	2008	Pesticide wastewater treatment by a membrane bioreactor	Chinese Journal of Pesticide Science 10(4): 469-476	N	N/A	N/A	Report on wastewater treatment.
81.	Chuah, T., Siti Nurul, I., Ramisah, M., Dilipkumar, M.	2013	Effects of oil palm rachis residue mulch in combination with pretilachlor on control of goosegrass (<i>Eleusine indica</i>)	The role of weed science in supporting food security by 2020. Proceedings of the 24th Asian-Pacific Weed Science Society Conference, Bandung, Indonesia 2013: 482-486	N	N/A	N/A	Efficacy study on pretilachlor.
82.	Chuanpei, C., Baiwang, C., Xinwany, X.	2013	Control efficacy of 6 herbicides to rice seedling throwing weeds and its comparison of crop safety	Pesticide Science and Administration 7: 56-59	N	N/A	N/A	Agronomy study.
83.	Cui, D., Wang, W.	2013	Control effect of Pretilachlor against <i>Sclerochloa kengiana</i> in closed wheat field	Anhui Nongye Kexue 41(19): 8180-8181	N	N/A	N/A	Agronomy study. Chinese language paper.
84.	Creusot, N., Kinani, S., Balaguer, P., Tapie, N., LeMenach, K., Maillot-Maréchal, E., Porcher, J., Budzinski, H., Aït-Aïssa, S.	2010	Evaluation of an hPXR reporter gene assay for the detection of aquatic emerging pollutants: screening of chemicals and application to water samples	Analytical and Bioanalytical Chemistry 396(2): 569-583	N	N/A	N/A	Analytical method for detection of chemical pollutants in water.

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85.	Dagnino, S., Bellet, V., Grimaldi, M., Riu, A., Aït-Aïssa, S., Cavaillès, V., Fenet, H., Balaguer, P.	2014	Affinity purification using recombinant PXR as a tool to characterize environmental ligands	Environmental Toxicology 29(2): 207-215	N	N/A	N/A	Characterisation of environmental ligands.
86.	Dai, S., Zhang, Q., Huang, J., Ma, K., Qian, X.	2013	Analysis method of pyrazosulfuron-ethyl · pretilachlor WP by HPLC	World Pesticides 3: 56-58	N	N/A	N/A	Analytical method.
87.	Daniel, P., Poonguzhalan, R., Bhasker, P., Tiwari, D.	2015	Performance of herbicides on productivity and profitability of aerobic rice	Environment and Ecology 33(2A): 952-955	N	N/A	N/A	Agronomy study.
88.	Das, A., Barman, S., Das, R.	2015	Effect of pre-emergence herbicides on microbial biomass and biochemical processes in a typic fluvaquent soil amended with farm yard manure	Bulletin of Environmental Contamination and Toxicology 95(3): 395-400	N	N/A	N/A	Study on effects of herbicides on farmyard manure; high application rate not relevant to GAP.
89.	Das, A., Das, R., Bhowmick, S.	2015	Non-symbiotic N ₂ -fixation and phosphate-solubility in Gangetic alluvial soil as influenced by pre-emergence herbicide residues	Chemosphere 135: 202-207	N	N/A	N/A	Laboratory study using soil type not relevant to EU.
90.	Dasgupta, S., Meisner, C., Wheeler, D., Xuyen, K., Lam, N.	2007	Pesticide poisoning of farm workers-implications of blood test results from Vietnam	International Journal of Hygiene and Environmental Health 210(2): 121-132	N	N/A	N/A	Self-reporting by farmers; weak associations with actual poisonings. Pretilachlor was not specifically highlighted as a cause for concern in the abstract.
91.	Dashtbozorgia, Z., Golmohammadia, H., Konozb, E.	2013	Support vector regression based QSPR for the prediction of retention time of pesticide residues in gas chromatography-mass spectroscopy	Microchemical Journal 106: 51-60	N	N/A	N/A	Agronomy study.
92.	Dawson, A., Eddleston, M., Senarathna, L., Mohamed, F., Gawarammana, I., Bowe, S., Manuweera, G., Buckley, N.	2010	Acute human lethal toxicity of Agricultural pesticides: a prospective cohort study	PloS Medicine 7(10): e1000357	N	N/A	N/A	Survey of pesticide poisonings to develop pesticide toxicity rankings. No deaths were recorded for pretilachlor.

No.	Author	Year	Title	Reference	Meet relevance criteria	Meet Reliability Criteria		Comments
					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
93.	De, J., Ramaiah, N.	2007	Characterization of marine bacteria highly resistant to mercury exhibiting multiple resistances to toxic chemicals	Ecological Indicators 7(3): 511-520	N	N/A	N/A	Study on bacteria with a high tolerance to mercury.
94.	Deepa, S., Jayakumar, R.	2008	Compatibility of pretilachlor with insecticides and fungicides in rice ecosystem	Madras Agricultural Journal 95(1-6): 42-45	N	N/A	N/A	Agronomy study.
95.	Deepa, S., Jayakumar, R.	2008	Studies on uptake of N, P and K as influenced by different rates (doses) of pretilachlor in transplanted rice.	Madras Agricultural Journal 95(7-12): 333-338	N	N/A	N/A	Agronomy study.
96.	Deka, J., Barua, I., Borah, N., Deka, N.	2013	Weed flora and their management in aquatic environments of Assam, India	The role of weed science in supporting food security by 2020. Proceedings of the 24th Asian-Pacific Weed Science Society Conference, Bandung, Indonesia 2013: 227-234	N	N/A	N/A	Agronomy study.
97.	Deng, X.	2013	Effect of 40% bensulfuron-methyl + pretilachlor WP on weeds in rice transplanting field	North Rice 43(3): 65-66, 75	N	N/A	N/A	Agronomy study. Chinese language paper.
98.	Devi, K., Abraham, C., Krishnan, S.	2013	Changes in chemical and biological characteristics of soil under long term application of herbicides in rice-rice system	The role of weed science in supporting food security by 2020. Proceedings of the 24th Asian-Pacific Weed Science Society Conference, Bandung, Indonesia 2013: 331-337	N	N/A	N/A	Agronomy study.
99.	Devi, K., Kannan, M., Abraham, C., Beena, S.	2007	Persistence of herbicides and its impact on soil micro flora in rice-rice system	Journal of Crop and Weed 3(1): 3-8	N	N/A	N/A	Study on the persistence of pretilachlor and its effects on soil microflora. Climatic conditions not relevant to EU.

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					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
100.	Devillers, J., Mombelli, E.	2010	Evaluation of the OECD QSAR Application Toolbox and Toxtree for estimating the mutagenicity of chemicals. Part 1. Aromatic amines	SAR and QSAR in Environmental Research 21(7-8): 753-769	N	N/A	N/A	Development of QSAR models.
101.	Dharumarajan, S., Sankar, R., Baskar, A., Kumar, K.	2008	Persistence of pretilachlor in coastal rice ecosystem	Pesticide Research Journal 20(2): 273-274	N	N/A	N/A	Study conducted in India. Climatic conditions not relevant to EU. The half life of pretilachlor varied from 3.9 – 10 days. Application rates tested were 1.5 kg/ha which is higher than the rate proposed for the EU.
102.	Dilipkumar, M., Adzemi, M., Chuah, T.S.	2012	Effects of soil types on phytotoxic activity of pretilachlor in combination with sunflower leaf extracts on barnyardgrass (<i>Echinochloa crus-galli</i>)	Weed Science 60(1): 126-132	N	N/A	N/A	Agronomy study.
103.	Dilipkumar, M., Chuah, T.	2013	Is combination ratio an important factor to determine synergistic activity of allelopathic crop extract and herbicide?	International Journal of Agriculture and Biology (Pakistan) 15(2): 259-265	N	N/A	N/A	Agronomy study.
104.	Dorweiler, K., Gurav, J., Walbridge, J., Ghatge, V., Savant, R.	2016	Determination of Stability from Multicomponent Pesticide Mixes	J. Agric. Food Chem. 64 (31): 6108-6142	N	N/A	N/A	Storage stability study on pesticide mixtures.
105.	Duke, S., Wedge, D., Cerdeira, A., Matallo, M.	2007	Herbicide effects on plant disease	Outlooks on Pest Management 18: 3640	N	N/A	N/A	Agronomy study.
106.	Dutta, P., Chakravorty, S.	2010	Frontline demonstration on the management of weed in rice cultivation by using Hifit (Pretilachlor)	Pestology 34(2): 34-35	N	N/A	N/A	Efficacy study on pretilachlor.
107.	Duary, B., Hossain, A., Mondal, D., Mukherjee, S.	2011	Long term effect of herbicides on weed shift and yield of rice-yellow sarson system in the lateritic soil of West Bengal, India.	23 rd Asia-Pacific Weed Science Society Conference. Volume 2: weed management in a changing world 38-48	N	N/A	N/A	Agronomy study.

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					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
108.	Dutta, D., Bandyopadhyay, P. Maiti, D.	2008	Effect of some herbicides on microbial population in the rhizosphere soils of rice	Research on Crops, 9 (3): 521-522	N	N/A	N/A	In this study comparison was made between the use of herbicides and hand weeding. Climatic conditions not relevant to EU.
109.	El-Baz, M., El-Deek, S., Nsar, A., El-Maali, N., AbdelHafez, F., Amin, A.	2015	Prenatal pesticide exposure: meconium as a biomarker and impact on fetal weight	Journal of Environmental & Analytical Toxicology 5(3): 1	N	N/A	N/A	Exposure of pregnant agricultural workers to pesticides. Difficult to differentiate the effect of pretilachlor in isolation as multiple active substances were measured.
110.	Ettienne, R., Nigg, C., Li, F., Su, Y., McGlone, K., Luick, B., Tachibana, A., Mercado, J., Novotny, R.	2016	Validation of the Actical Accelerometer in Multiethnic Preschoolers: The Children's Healthy Living (CHL) Program	Hawaii Journal of Medicine & Public Health: A Journal of Asia Pacific Medicine & Public Health 75.4: 95-100	N	N/A	N/A	Physical education report.
111.	Fabro, L., Varca, L.M.	2012	Pesticide usage by farmers in Pagsanjan-Lumban catchment of Laguna de Bay, Philippines	Agricultural Water Management 27-34	N	N/A	N/A	Survey of pesticide residues in the Philippines. An estimation of potential chemical loads moving to waterways. Climatic conditions not relevant to EU.
112.	Fairclough, S., Weaver, R., Johnson, S., Rawlinson, J.	2017	Validation of an observation tool to assess physical activity-promoting physical education lessons in high schools: SOFIT	Journal of Science and Medicine in Sport (Oct 2, 2017).	N	N/A	N/A	Physical education report.
113.	Feng, Y.	2016	Residues and decline dynamics of pretilachlor in rice and soil	Nongyao 55 (1): 42-44	N	N/A	N/A	Academic paper on residues and decline dynamics of pretilachlor in rice and soil. Chinese language paper.
114.	Ferraro, A., Milan, A., Fogliatto, S., Palo, F, Vidotto, F.	2016	Water management in rice for mitigating the risk of contamination of surface waters by herbicides	Atti, Giornate Fitopatologiche, Chianciano terme (Siena) 2: 37-46	N	N/A	N/A	Agronomy study.

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					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
115.	Flores, F., Undabeytia, T., Morillo, E., Torres Sanchez, R.	2017	Technological applications of organo-montmorillonites in the removal of pyrimethanil from water: adsorption/desorption and flocculation studies	Environmental Science and Pollution Research International 24 (16): 14463-14476	N	N/A	N/A	Use of organo-montmorillonites in adsorption and coagulation / flocculation processes for the removal of pyrimethanil from water.
116.	Fukui, N., Takatori, S., Kitagawa, Y., Okihashi, M., Kajimura, K., Obana, H.	2013	Study of multi-residue method for determining pesticide residues in processed foods manufactured from agricultural products by LC-MS/MS	Journal of the Food Hygienic Society of Japan 54(6): 426-433	N	N/A	N/A	Analytical method for detection of pesticides residues in agricultural products.
117.	Fukui, N., Takatori, S., Kitagawa, Y., Okihashi, M., Osakada, M., Nakatsuji, N., Nakayama, Y., Kakimoto, Y., Obana, H.	2012	Application of a rapid and simple multi-residue method for determination of pesticide residues in drinking water and beverages using liquid chromatography-tandem mass spectrometry	Journal of the Food Hygienic Society of Japan 53(4): 183-193	N	N/A	N/A	Analytical method for detection of pesticides in drinking water and beverages.
118.	Fan, C., Li, Y., Chang, Q., Pang, G., Kang, J., Cao, J., Zhao, Y., Li, N., Li, Z.	2015	High-throughput analytical techniques for multiresidue, multiclass determination of 653 pesticides and chemical pollutants in tea-part IV: evaluation of the ruggedness of the method, error analysis, and key control points of the method	Journal of AOAC International 98(1): 130-148	N	N/A	N/A	Analytical method for detection of pesticides and chemical pollutants in tea.
119.	Fan, H., Smuts, J., Walsh, P., Harrison, D., Schug, K.	2015	Gas chromatography-vacuum ultraviolet spectroscopy for multiclass pesticide identification	Journal of Chromatography A 1389: 120-127	N	N/A	N/A	Analytical method for identification of pesticides.
120.	Fujimoto, T., Taniguchi, M., Miyata, S.	2005	Problems of simultaneous determination of residual pesticides in vegetables and fruits	Amagasaki-shiritsu Eisei Kenkyushoho 32: 5-28	N	N/A	N/A	Method for detection of pesticide residues in fruit and vegetables. Japanese language paper.
121.	Ganai, M., Hussain, A., Bhat, M.	2014	Bio-efficacy of different herbicides in direct seeded rice (<i>Oryza sativa</i>) under temperate Kashmir valley conditions.	Indian Journal of Agronomy 59(1): 86-90	N	N/A	N/A	Agronomy study.

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122.	Gandy, M., Corral, M., Mylne, J., Stubbs, K.A.	2015	An interactive database to explore herbicide physicochemical properties	Organic and Biomolecular Chemistry 13(20): 5589-5590	N	N/A	N/A	Database for herbicide physicochemical properties.
123.	Gaurav, S., Meena, R., Meena, R.	2016	Effect of cultural and chemical weed management practices on yield, economics and nutrient uptake under zero-till direct seeded rice (<i>Oryza sativa</i> L.)	Journal of Pure and Applied Microbiology 10 (4): 3029-3034	N	N/A	N/A	Agronomy report.
124.	Ghaheri, M., Vajari, R.	2015	The concentration of toxicants in row and treated water in the Guilan Province Main Water Treatment Plant	Ab va Muhit-i Zist 67 : 14-20	N	N/A	N/A	Review of pesticides in a water treatment plant in Iran. Persian language paper.
125.	Ghosh, R. , Mallick, S., Bera, S.	2013	Efficacy of bispyribac-sodium 10% SC against weed complex under different rice ecosystem	Pestology 37(9): 47-53.	N	N/A	N/A	Agronomy study.
126.	Ghuman, R., Brar, L., Walia, U.	2008	Role of variety and plant geometry on weed management in transplanted rice (<i>Oryza sativa</i> L.)	Indian Journal of Weed Science 40(3-4): 137-141	N	N/A	N/A	Agronomy study.
127.	Goldstein, L., Sabag, P., Melykovsky, R., Hemi, S., Ron-Avraham, G., Azriel, M., Markel, A., Bisharat, N., Elias, M., Saliba, W.	2015	Could a coagulation nurse liaison improve compliance with venous thromboembolism prophylaxis in medical patients?	Journal of Nursing Care Quality 31(2): E11-E15	N	N/A	N/A	Medical surveillance study.
128.	Goon, A., Khan, Z., Oulker, D., Shinde, R., Gakiwad, S., Benerjee, K.	2018	A simultaneous screening and quantitative method for the multiresidue analysis of pesticides in spices using ultra-high performance liquid chromatography-high resolution (Orbitrap) mass spectrometry	Journal of Chromatography A 12 (1532): 105-111	N	N/A	N/A	Determination of pesticides in spices.
129.	Gopi, R.A., Satyavani, G., Shanmugasundaram, R., Murthy, P.	2014	Acute toxicity evaluation of expired pesticides on earthworms <i>Eisenia fetida</i>	International Journal of Environmental Sciences 4(6): 1121	N	N/A	N/A	Acute testing of earthworms is not a requirement of Regulation (EU) No 284/2013.

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130.	Govindan, R., Chinnusamy, C.	2014	Influence of tillage, crop establishment and weed management methods on rhizosphere micro flora on rice-rice-pulse based conservation agriculture system	Trends in Biosciences 7(15): 1932-1936	N	N/A	N/A	Agronomy study.
131.	Gu, L, Wang, X.	2016	Global market, development and trend of herbicide (I)	Xiandai Nongyao 15 (2): 8-12, 38	N	N/A	N/A	Review of global herbicide market. Chinese language document.
132.	Gu, L, Wang, X.	2016	Global market, development and trend of herbicide (II) (continued)	Xiandai Nongyao 15 (2): 1-5, 31	N	N/A	N/A	Review of global herbicide market. Chinese language document.
133.	Gunavathi, S., Rammohan, S., Poonguzhalan, R., Hattab, K., Chellamuthu, V.	2007	Effect of weed management methods on wet-seeded rice in cauvery delta zone	National Seminar on ecorestoration of soil and water resources towards efficient crop production, Kalyani, India: 113-116	N	N/A	N/A	Agronomy study.
134.	Gunawardana, W., Ariyaratne, M., Bandaranayake, P., Marambe, B.	2013	Control of <i>Echinochloa colona</i> in aerobic rice: effect of different rates of seed paddy and post-plant herbicides in the dry zone of Sri Lanka	The role of weed science in supporting food security by 2020. Proceedings of the 24th Asian-Pacific Weed Science Society Conference, Bandung, Indonesia 2013: 431-437	N	N/A	N/A	Agronomy study.
135.	Guo, Y.Z.	2010	Determination of multiple pesticides residue in garlic by gas chromatography/mass spectrometry	Anhui Nongye Kexue 38(8): 3870-3873	N	N/A	N/A	Analytical method for detection of pesticide residues in garlic. Chinese language paper.
136.	Gururaj S., Jayadeva, H., Krishnamurthy, N., Sajjam, G.	2013	Effect of different weed control measures in transplanted rice (<i>Oryza sativa</i>)	Journal of Agriculture Research and Technology 38(3): 388-392	N	N/A	N/A	Agronomy study.
137.	Hai, C., Ming, D., Tong, Y., Jie, L.Z., Xiang, C.	2008	Effects of bensulfuron-methyl mixed with pretilachlor on controlling weeds in a direct-sowing rice field and its security to rice	Weed Science (China) 48-49	N	N/A	N/A	Efficacy study on pretilachlor.

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138.	Hakim, M., Juraimi, A., Hanafi, M., Rafii, M., Ismail, M., Karim, S., Kausar, H.	2015	Integration of herbicides with manual weeding for controlling the weeds in rice under saline environment	Journal of Environmental Biology / Academy of Environmental Biology, India 36(6): 1311-1317	N	N/A	N/A	Agronomy study.
139.	Hamada, S., Owaki, S., Tsuchida, T., Matsumoto, H., Toriminami, Y., Nozawa, M., Chatani, Y.	2012	Evaluation of analytical method for pesticide residues in agricultural products by GC/MS/MS	Kyoto-fu Hoken Kankyo Kenkyusho Nenpo 57: 64-68	N	N/A	N/A	Analytical method for detection of pesticide residues in agricultural products. Japanese language paper.
140.	Hamadache, M., Benkortbi, O., Hanini, S., Amrane, A., Khauwane, L., Si Moussa, C.	2016	A Quantitative Structure Activity Relationship for acute oral toxicity of pesticides on rats: Validation, domain of application and prediction	Journal of Hazardous Materials 303: 28-40	N	N/A	N/A	Development of QSAR models.
141.	Hamilton, K., Kaczynski, A., Faire, M., Levesque, L.	2017	Examining the Relationship between Park Neighborhoods, Features, Cleanliness, and Condition with Observed Weekday Park Usage and Physical Activity: A Case Study	Journal of Environmental and Public Health (2017)	N	N/A	N/A	Report on the use of parks for physical activity.
142.	Hamsan, H., Ho, Y., Zaidon, S., Hashim, Z., Saari, N., Karami, A.	2017	Occurrence of commonly used pesticides in personal air samples and their associated health risk among paddy farmers	The Science of the Total Environment 603-604: 381-389	N	N/A	N/A	Occupational health sampling from paddy field farmers in Malaysia. Whilst numerous pesticide active substances were analysed for it was concluded that the risk of diseases associated with pesticide exposure was not significant.
143.	Han, Y.J., Zhao, C.S.	2008	Influences of pretilachlor on physiology and biochemistry of the rice	Acta Phytopythologica Sinica 35(2), 189-190	N	N/A	N/A	Investigation into the effects of pretilachlor on rice. Chinese language paper.

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					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
144.	Han, Y., Song, L., Liu, S., Li, Y., Qin, Y., Li, W., Pan, C.	2018	Simultaneous determination of 124 pesticide residues in Chinese liquor and liquor-making raw materials (sorghum and rice hull) by rapid Multi-plug Filtration Cleanup and gas chromatography-tandem mass spectrometry	Food Chemistry 214: 258-267	N	N/A	N/A	Determination of pesticide residues in Chinese liquor, sorghum and rice hull.
145.	Han, Y., Song, L., Zou, N., Chen, R., Qin, Y., Pan, C.	2016	Multi-residue determination of 171 pesticides in cowpea using modified QuEChERS method with multi-walled carbon nanotubes as reversed-dispersive solid-phase extraction materials	J. Chromatogr. B Analyt. Technol. Biomed. Life Sci. 15 (1031): 99-108	N	N/A	N/A	Determination of pesticides in cowpea.
146.	Haq, A., Das Gupta, R., Chakravorty, P.P.	2011	Effect of two herbicides on <i>Xenylla welchi</i> (Hexapoda: <i>Collembola</i>) under laboratory conditions	Bulletin of Environmental Contamination and Toxicology 86(6): 583-586	N	N/A	N/A	Laboratory study using too short an exposure duration. Not relevant to EU requirements.
147.	Harada, H., Takino, A., Yamamoto, H., Yamanaka, S.	2008	Studies on the determination of analytical condition of pesticide residue in agricultural products by GC/MS/MS	Shiga-ken Eisei Kagaku Senta Shoho 42: 78-89	N	N/A	N/A	Analytical method for detection of pesticide residues in agricultural products. Japanese language paper.
148.	Hasanuzzaman, M., Nahar, K., Karim, R.	2007	Effectiveness of different weed control methods on the performance of transplanted rice	Pakistan Journal of Weed Science Research 13(1-2): 17-25	N	N/A	N/A	Agronomy study.
149.	Hassan, A., Abdullah, S., Khardali, I., Khardali, I., Shaikhain, G., Oraiby, M.	2014	Evaluation of pesticides multiresidue contamination of khat leaves from Jazan region, Kingdom Saudi Arabia, using solid-phase extraction - gas chromatography/mass spectrometry	Toxicological & Environmental Chemistry 95(9): 1477-1483	N	N/A	N/A	Analytical method for detection of pesticide residues in khat leaves.
150.	Hay, Y., Song, L., Zou, N., Qin, Y.	2017	Rapid multipug filtration cleanup method for the determination of 124 pesticide residues in rice, wheat, and corn	J. Sep. Sci. 40 (4):878-884	N	N/A	N/A	Determination of pesticides in rice, wheat and corn.

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151.	Hayashi, T.I., Imaizumi, Y., Yokomizo, H., Tatarazako, N., Suzuki, N.	2016	Ecological risk assessment of herbicides in Japan: Integrating spatiotemporal variation in exposure and effects using a multimedia model and algal density dynamics models	Environmental Toxicology and Chemistry / SETAC 35(1): 233-240	N	N/A	N/A	Development of modelling to develop management plans for chemical exposure to pretilachlor and other herbicides.
152.	Hayat, K., Ashfaq, M., Ashfaq, U., Saleem, M.	2010	Determination of pesticide residues in blood samples of villagers involved in pesticide application at District Vehari (Punjab), Pakistan	African Journal of Environmental Science and Technology 4(10): 666-684	N	N/A	N/A	Determination of pesticide residues in blood. The abstract states that only chlorpyrifos and pyributicarb were detected.
153.	Hayward, D., Wong, J., Shi, F., Zhang, K., Lee, N., DiBenedetto, A., Hengel, M.	2013	Multiresidue Pesticide Analysis of Botanical Dietary Supplements Using Salt-out Acetonitrile Extraction, Solid-Phase Extraction Cleanup Column, and Gas Chromatography-Triple Quadrupole Mass Spectrometry	Analytical Chemistry 85(9): 4686-4693	N	N/A	N/A	Analytical method for detection of pesticides in botanical dietary supplements.
154.	Hayward, D., Wong, J., Zhang, K., Chang, J., Shi, F., Banerjee, K., Yang, P.	2011	Multiresidue pesticide analysis in ginseng and spinach by nontargeted and targeted screening procedures	Journal of AOAC International 94(6): 1741-1751	N	N/A	N/A	Analytical method for detection of pesticides in ginseng and spinach.
155.	He, Z., Chen, S., Wang, L., Peng, Y., Luo, M., Wang, W., Liu, X.	2015	Multiresidue analysis of 213 pesticides in leek and garlic using QuEChERS-based method and gas chromatography-triple quadrupole mass spectrometry	Analytical and Bioanalytical Chemistry 407(9): 2637-2643	N	N/A	N/A	Analytical method for detection of pesticides in leek and garlic.
156.	He, Z., Wang, L., Peng, Y., Luo, M., Wang, W., Liu, X.	2015	Multiresidue analysis of over 200 pesticides in cereals using a QuEChERS and gas chromatography-tandem mass spectrometry-based method	Food Chemistry 169: 372-380	N	N/A	N/A	Analytical method for detection of pesticides in cereals.
157.	He, Z., Wang, Y., Wang, L., Peng, Y., Wang, W., Liu, X.	2017	Determination of 255 pesticides in edible vegetable oils using QuEChERS method and gas chromatography tandem mass spectrometry	Journal of Agro-Environment Science 36 (3)	N	N/A	N/A	Determination of pesticides in edible vegetable oils.

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158.	Heisnam, P., Moirangthem, A., Singh, N., Singh, A., Singh, L.	2017	Study on economic feasibility of some promising weedicides on shallow land transplanted rice (<i>Oryza sativa</i> L.) under rainfed conditions	Journal of Crop and Weed 13(1): 170-174	N	N/A	N/A	Economic feasibility study
159.	Hou, H., Liu, H., Wu, P.	2011	Analytical method for pretilachlor residue in ecosystem of paddy field	Modern Agrochemicals 3: 10	N	N/A	N/A	Analytical method for detection of pretilachlor residues in paddy fields.
160.	Hou, Y., Dong, W., Wang, F., Li, J., Shen, W., Li, Y., Cui, Z.	2014	Degradation of acetochlor by a bacterial consortium of <i>Rhodococcus</i> sp.T3-1, <i>Delftia</i> sp.T3-6 and <i>Sphingobium</i> sp.MEA3-1	Letters in Applied Microbiology 59(1): 35-42	N	N/A	N/A	Bacterial degradation of acetochlor.
161.	Hou, Y., Wang, F., Dong, W., Cui, Z.	2013	Degradation characteristics of an acetochlor-degrading bacterium <i>Rhodococcus</i> sp. T3-1	China Environmental Science 33(10): 1785-1790	N	N/A	N/A	Bacterial degradation of acetochlor.
162.	Huang, Y., Xiong, H., Wan, S., Luo, X.	2014	Simultaneous determination of 23 pesticides in tea by high performance liquid chromatography-tandem mass spectrometry	Shipin Yanjiu Yu Kaifa 35(21): 81-85	N	N/A	N/A	Monitoring method for detection of pesticides in tea. Chinese language paper.
163.	Hu, H., Zhang, Y., Zhang, Y., Huang, X., Yuan, D.	2014	Preparation of a new sorbent based on boronate affinity monolith and evaluation of its extraction performance for nitrogen-containing pollutants	Journal of Chromatography A 1342: 8-15	N	N/A	N/A	Development of analytical methods for the extraction of nitrogen-containing compounds.
164.	Hu, L., Chen, C., Huang, T., Cai, Y., Chou, K.	2011	Predicting biological functions of compounds based on chemical-chemical interactions	PloS One 6(12): e29491	N	N/A	N/A	Use of modelling to predict biological functions.
165.	Hu, R., Yin, C., Wang, Y., Lu, C., Ge, T.	2008	QSPR study on GC relative retention time of organic pesticides on different chromatographic columns	Journal of Separation Science 31(13): 2434-2443	N	N/A	N/A	Use of QSPR modelling.
166.	Hu, Y.F.	2014	Determination of pretilachlor and polyoxin B in yam with capillary electrophoresis-electrochemiluminescence	Journal of Molecular Science 2014-06	N	N/A	N/A	Analytical method for detection of pretilachlor in yam.

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167.	Hu, Z., Dai, G., Huang, J., Ye, T., Fan, H., Youwen, T., Yu, Y., Liang, Y.	2010	Molecularly imprinted polymer coated on stainless steel fiber for solid-phase microextraction of chloroacetanilide herbicides in soybean and corn	Journal of Chromatography A 1217(38): 5875-5882	N	N/A	N/A	Analytical method for detection of chloroacetanilide herbicides in soybean and corn.
168.	Ibaraki, T., Iwata, S., Taneoka, Y., Mukai, H.	2010	Screening method for pesticides in water using micro extraction in packed syringe	Niigata-ken Hoken Kankyo Kagaku Kenkyusho Nenpo 25: 88-92	N	N/A	N/A	Analytical method for detection of pesticides in water. Japanese language paper.
169.	Ibaraki, T., Watanabe, N., Hatamoto, N., Nakata, M., Kasahara, M.	2012	Distribution of pesticides in paddy fields area in Niigata City	Niigata-ken Hoken Kankyo Kagaku Kenkyusho Nenpo 27, 84-89	N	N/A	N/A	Study of the distribution of pesticides in paddy fields around Niigata City, Japan. Japanese language paper.
170.	Inao, K., Hojyo, T., Annoch, H., Miyazaki, S., Saito, T., Park, H.D.	2011	Predicting the behavior of paddy pesticides in a river basin using a simulation model (PADDY-Large): application to a tributary of the Chikuma River under rice cultivation	Journal of Pesticide Science 36(3): 413-427	N	N/A	N/A	Predictive modelling.
171.	Inderjit, Kaushik, S.	2010	Effect of herbicides with different modes of action on physiological and cellular traits of <i>Anabaena fertilissima</i>	Paddy and Water Environment 8(3): 277-282	N	N/A	N/A	Study on the effects of pretilachlor on the physiology of <i>Anabaena fertilissima</i> ; effects on physiology of cyanobacteria is not relevant under EU data requirements.
172.	Infantino, A., Pereira, T., Ferrari, C., Cerejeira, M. J., Di Guardo, A.	2008	Calibration and validation of a dynamic water model in agricultural scenarios	Chemosphere 70(7): 1298-1308	N	N/A	N/A	Predictive modelling.
173.	Inoue, T., Nagatomi, Y., Kinami, T., Uyama, A., Mochizuki, N.	2010	Fate of pesticides in a distilled spirit of barley shochu during the distillation process	Bioscience, Biotechnology, and Biochemistry 74(12): 2518-2522	N	N/A	N/A	Determination of pesticide residues in distilled fermented mash.
174.	Inoue, T., Nagatomi, Y., Suga, K., Uyama, A., Mochizuki, N.	2011	Fate of Pesticides during Beer Brewing	Journal of Agricultural and Food Chemistry 59(8): 3857-3868	N	N/A	N/A	Determination of pesticide residues in the course of beer brewing.

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					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
175.	Ishaya, D., Dadari, S., Shebayan, J.	2007	Evaluation of herbicides for weed control in three varieties of upland rice (<i>Oryza sativa</i> L.) in the Nigerian Savannah.	Crop Protection 26(10): 1490-1495	N	N/A	N/A	Agronomy study.
176.	Ishaya, D., Dadari, S.A., Shebayan, J.	2007	Evaluation of herbicides for weed control in sorghum (<i>Sorghum bicolor</i>) in Nigeria	Crop Protection 26(11): 1697-1701	N	N/A	N/A	Agronomy study.
177.	Ishibashi, M., Izumi, Y., Sakai, M., Ando, T., Fukusaki, E., Bamba, T.	2015	High-throughput simultaneous analysis of pesticides by supercritical fluid chromatography coupled with high-resolution mass spectrometry	Journal of Agricultural and Food Chemistry 63(18): 4457-4463	N	N/A	N/A	Analytical method for detection of pesticides.
178.	Ishihara, S.	2008	Development of risk assessment procedure for evaluating effect of herbicides on primary productivity of river ecosystem.	Bulletin of the National Institute of Agro-Environmental Sciences 25: 1-92	N	N/A	N/A	Development of risk assessment procedures.
179.	Ishii, A., Takeda, S., Hattori, S., Mukasa, K.	2008	Ultrasensitive detection of organophosphate insecticides by carbon nanotube field-effect transistor	Colloids and Surfaces A Physicochemical and Engineering Aspects 313: 456-460	N	N/A	N/A	Analytical method for detection of organo-phosphate insecticides.
180.	Ishii, R., Nozaki, N., Osaka, I., Kikuchi, Y.	2011	Development of simultaneous determination of pesticide residues in livestock and seafood products by GC-MS using procedure of large volume injection and validation study	Japanese Journal of Food Chemistry and Safety 18(2):	N	N/A	N/A	Analytical method for detection of pesticide residues on livestock and seafood products.
181.	Ishimota, M., Tanaka, K., Yamashita, N., Tsunoda, S., Miyabara, Y.	2010	Seasonal variation and distribution of herbicides in Lake Suwa	Journal of Environmental Chemistry 20(3): 241-248	N	N/A	N/A	Seasonal use of herbicides.
182.	Islam, S., Islam, M., Rahman, H., Shahidul., H., Lee, J., Park, K	2016	Effect of herbicides on weed infestation and yield in boro rice	Research on Crops 17 (3): p415-420	N	N/A	N/A	Efficacy study.
183.	Iwafune, T., Inao, K., Horio, T., Iwasaki, N., Yokoyama, A., Nagai, T.	2010	Behavior of paddy pesticides and major metabolites in the Sakura River, Ibaraki Japan	Journal of Pesticide Science 35(2): 114-123	N	N/A	N/A	Monitoring of pesticides and their major metabolites in the Sakura River, Japan.

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184.	Iwakami, S., Watanabe, H., Miura, T., Matsumoto, H., Uchino, A.	2014	Occurrence of sulfonylurea resistance in <i>Sagittaria trifolia</i> , a basal monocot species, based on target-site and non-target-site resistance	Weed Biology and Management 14(1): 43-49	N	N/A	N/A	Agronomy study.
185.	Iwakoshi, K., Kobayashi, M., Otsuka, K., Tamura, Y., Tomizawa, S., Kinoshita, T., Kamijo, K., Sato, C., Takano, I.	2011	Survey of pesticide residues in imported crops (organophosphorus and organonitrogen pesticides) (April 2010-March 2011)	Annual Report Tokyo Metropolitan Institute of Public Health 62: 183-189	N	N/A	N/A	Pesticide residues survey.
186.	Iwakoshi, K., Kobayashi, M., Otsuka, K., Tamura, Y., Tomizawa, S., Kinoshita, T., Kamijo, K., Sato, C., Takano, I.	2012	Survey of pesticide residues in domestic vegetables and fruits (April 2011-March 2012)	Ann. Rep. Tokyo Metr. Inst. Pub. Health 63, 229-235, 2012	N	N/A	N/A	Pesticide residues survey.
187.	Iwamura, T., Jinya, D., Kadokami, K.	2008	Comparison of concentrations between commercially available pesticides standard solutions	The Japan Society for Analytical Chemistry 57(10): 825-831	N	N/A	N/A	Comparison of commercially available pesticide standards.
188.	Jabran, K, Chauhan, B.	2015	Weed management in aerobic rice systems	Crop Protection 78: 151-163	N	N/A	N/A	Agronomy study.
189.	Jacob, G., Menon, M., Abraham, C.	2014	Comparative efficacy of new herbicides in direct seeded rice	Journal of Tropical Agriculture 52(2): 174-177	N	N/A	N/A	Agronomy study.
190.	Jadhav, A., Pawar, S.	2013	Time of sowing and influence of weed control methods on yield of direct seeded rice	Journal of Agriculture Research and Technology 38(3): 466-469	N	N/A	N/A	Agronomy study.
191.	Jadhav, M., Oulkar, D., Shabeer, T., Banerjee, K.	2015	Quantitative screening of agrochemical residues in fruits and vegetables by buffered ethyl acetate extraction and LC-MS/MS analysis	Journal of Agricultural and Food Chemistry 63(18): 4449-4456	N	N/A	N/A	Screening for pesticide residues in fruit and vegetables.

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					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
192.	Jagadeesha, N., Shet, R., Gireesh, C., Sheshadri, T., Lokesh, G.	2009	Uptake of nutrients by rice and weeds of influenced by different weed management practices in drum seeded rice	International Journal of Agricultural Sciences 5(2): 490-493	N	N/A	N/A	Agronomy study.
193.	Jagadeesha, N., Sheshadri, T., Shet, R., Gireesh, C., Umeha, M.	2009	Growth and yield of drum seeded rice as influenced by different weed management practices	Environment and Ecology 27(2A): 898-901	N	N/A	N/A	Agronomy study.
194.	Janaki, P., Meena, S., Chinnusamy, C.	2012	Field dissipation of herbicides under different crops in Tamil Nadu	Madras Agricultural Journal 99(10-12): 794-798	N	N/A	N/A	Indian field study; not relevant to EU due to different soil types and climate.
195.	Jang, M., Moon, H., Kim, T., Yuk, D., Hwang, I., Kim, M., Kim, J., Chae, Y.	2011	Exposure assessment for pesticide residues in vegetables using Korea National Health and Nutrition examination survey data for Seoulites	Korean Journal of Nutrition 44(5):443-452	N	N/A	N/A	Dietary exposure assessment of pesticides in Korea.
196.	Ji, C., Liu, J., Lu, Y., Liu, H., Zhang, C.	2013	Control effect of soil-applied herbicides to weeds in paddy field of dry direct seeding	Anhui Nongye Kexue 41(27): 11007-11008	N	N/A	N/A	Agronomy study. Chinese language paper.
197.	Ji, W., Sun, R., Duan, W., Wang, X., Wang, T., Mu, Y., Guo, L.	2017	Selective solid phase extraction of chloroacetamide herbicides from environmental water samples by amphiphilic magnetic molecularly imprinted polymers	Talanta 170: 111-118	N	N/A	N/A	Extraction of chloroacetamide herbicides from environmental water samples.
198.	Jia, W., Chu, X., Ling, Y., Huang, J., Chang, J.	2014	High-throughput screening of pesticide and veterinary drug residues in baby food by liquid chromatography coupled to quadrupole Orbitrap mass spectrometry	Journal of Chromatography A 1347: 122-128	N	N/A	N/A	Screening for pesticide and veterinary drug residues in baby food.
199.	Jia, W., Chu, X., Zhang, F.	2015	Multiresidue pesticide analysis in nutraceuticals from green tea extracts by comprehensive two-dimensional gas chromatography with time-of-flight mass spectrometry	Journal of Chromatography A 1395: 160-166	N	N/A	N/A	Analytical method for detection of pesticide residues in tea.

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200.	Jia, W., Huang, J.R., Ling, Y., Feng, F., Zheng, Y.M., Chu, X.G.	2013	Determination of 290 pesticide residues in tea by high performance liquid chromatography-tandem mass spectrometry	Journal of Instrumental Analysis 1:9-22	N	N/A	N/A	Analytical method for detection of pesticide residues in tea.
201.	Jiang, Y., Li, X., Xu, J., Pan, C., Zhang, J., Niu, W.	2009	Multiresidue method for the determination of 77 pesticides in wine using QuEChERS sample preparation and gas chromatography with mass spectrometry	Food additives & contaminants. Part A, Chemistry, Analysis, Control, Exposure & Risk Assessment 26(6): 859-866	N	N/A	N/A	Analytical method for detection of pesticide residues in wine.
202.	Jin, H., Wang, Y., Lan, J., Ma, S.	2012	Determination of 192 pesticides in <i>Flos Lonicerae</i> by gas chromatography-mass spectrometry	Chinese Pharmaceutical Journal 2012-08	N	N/A	N/A	Analytical method for detection of pesticides in <i>Flos Lonicerae</i> .
203.	Jinxu, M.	2013	Oxadiazon pretilachlor 40% ME for control of annual weeds in rice field	Pesticide Science and Administration 2013-09	N	N/A	N/A	Efficacy study.
204.	Jinya, D., Iwamura, T., Kadokami, K., Kusuda, T.	2011	Development of a comprehensive analytical method for semi-volatile organic compounds in water samples by a combination of solid-phase extraction and gas chromatography-mass spectrometry database system	Journal of Environmental Chemistry 21(1): 35-48	N	N/A	N/A	Analytical method for detection of semi-volatile organic compounds in water.
205.	Jo, H., Lee, J., Kong, K.	2011	A plant-specific tau class glutathione S-transferase from <i>Oryza sativa</i> with very high activity against 1-chloro-2,4-dinitrobenzene and chloroacetanilide herbicides	Pesticide Biochemistry and Physiology 101(3): 265-269	N	N/A	N/A	Gene activity in <i>Oryza sativa</i> .
206.	Juliano, L., Casimero, M., Llewellyn, R.	2010	Multiple herbicide resistance in barnyardgrass (<i>Echinochloa crus-galli</i>) in direct-seeded rice in the Philippines	International Journal of Pest Management 56(4): 299-307	N	N/A	N/A	Agronomy study.
207.	Jung, S., Kuk, Y., Senseman, S., Ahn, H., Seong, C., Lee, D.	2015	Bioactivity of several herbicides on the nanogram level under different soil moisture conditions	Journal of Nanoscience and Nanotechnology 15(1): 676-679	N	N/A	N/A	Method to assess the bioactivity of herbicides under different soil moisture conditions.

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208.	Juraimi, A., Anwar, M., Mohamed, M., Uddin, M., Man, A.	2013	Integrated weed management in aerobic rice [Conference poster]	The role of weed science in supporting food security by 2020. Proceedings of the 24th Asian-Pacific Weed Science Society Conference, Bandung, Indonesia 2013: 564-570	N	N/A	N/A	Agronomy study.
209.	Kachroo, D., Bazaya, B.	2011	Efficacy of different herbicides on growth and yield of direct wet seeded rice sown through drum seeder	Indian Journal of Weed Science (India) 43: 67-69	N	N/A	N/A	Agronomy study.
210.	Kadiyam, C. Duary, B., Dash S.	2016	Sole and combined application of herbicides on composite weed flora of transplanted rice	Indian Journal of Weed Science 48 (3) : 254-258	N	N/A	N/A	Efficacy study.
211.	Kamijo, K., Kobayashi, M., Otsuka, K., Tamura, Y., Tomizawa, S., Sakai, N., Kageyama, Y., Takano, I., Nagayama, T.	2009	Survey of pesticide residues in imported vegetable products (1992.4-2006.3)	Journal of the Food Hygienic Society of Japan 50(3): 146-52	N	N/A	N/A	Survey of pesticide residues in imported vegetable products.
212.	Kandeshwari, M., Jayanthi, C.	2014	Effect of weed management practices integrated with two different sources of nitrogen on weed control and yield of in rice-rice cropping system	Trends in Biosciences 7(19): 2959-2963	N	N/A	N/A	Agronomy study.
213.	Kandeshwari, M., Jayanthi, C.	2014	Weed and nutrient management practices integrated with two different sources of nitrogen on growth, yield and economics of transplanted rice-rice cropping system	Trends in Biosciences 7(19): 3028-3032	N	N/A	N/A	Agronomy study.
214.	Kanno, A., Nishi, I., Kishi, T., Kawakami, T., Takahashi, Y., Onodera, S.	2010	Cholinesterase-inhibiting potentials of Amberlite XAD-2 resin extracts collected from river and drinking waters in northwest district of Chiba Prefecture, Japan	Journal of Health Science 56(6): 664-674	N	N/A	N/A	Determination of cholinesterase inhibiting potentials and pesticide levels in drinking water in Chiba Prefecture, Japan.

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215.	Kanrar, B., Mandal, S., Bhattacharyya, A.	2010	Validation and uncertainty analysis of a multiresidue method for 67 pesticides in made tea, tea infusion, and spent leaves using ethyl acetate extraction and gas chromatography/mass spectrometry.	Journal of AOAC International 93(2): 411-424	N	N/A	N/A	Analytical method for detection of pesticide residues in tea products.
216.	Kaur, P., Kaur, P.	2015	Terminal residues of pretilachlor in paddy under subtropical humid conditions of Punjab	Annals of Plant Protection Sciences 23(1): 197-199	N	N/A	N/A	Study on the terminal residues in paddy fields of pretilachlor in subtropical humid conditions. Not relevant to EU due to different climate conditions.
217.	Kaur, P., Kaur, P., Bhullar, M.	2015	Persistence behaviour of pretilachlor in puddled paddy fields under subtropical humid climate	Environmental Monitoring and Assessment 187(8): 524	N	N/A	N/A	Study on the persistence behaviour and dissipation kinetics in paddy fields of pretilachlor in subtropical humid conditions; not relevant to EU due to different climate conditions.
218.	Kaur, P., Kaur, P., Duhan, A., Bullar, M.	2017	Effect of long-term application of pretilachlor on its persistence and residues in paddy crop	Environmental Technology 38 (19): 2410-2415	N	N/A	N/A	Resistance study.
219.	Kaur, P., Kaur, P., Singh, K., Kaur, M.	2016	Adsorption and Desorption Characteristics of Pretilachlor in Three Soils of Punjab	Water, Air and Soil Pollution 227 (10): 1-10	N	N/A	N/A	Soils not relevant for the EU. Study does not appear to follow OECD 106 guideline; soils treated with H ₂ O ₂ to remove organic matter and show the effect on the adsorption of pretilachlor in the treated soils.
220.	Kaur, P., Pal, P., Virdo, A., Singh, N., Mahajan, G.	2016	Protein and starch characteristics of milled rice from different cultivars affected by transplantation date	Journal of Food Science and Technology 53 (8): 3186-3196	N	N/A	N/A	Agronomy study.
221.	Kaur, S., Kaur, K., Bullar, M.	2016	Management of mixed weed flora in transplanted rice using herbicide combinations	Agricultural Research Journal 53 (4): 483-487	N	N/A	N/A	Efficacy study.

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222.	Kaur, S., Singh, S.	2015	Bio-efficacy of different herbicides for weed control in direct-seeded rice	Indian Journal of Weed Science 47(2): 106–109	N	N/A	N/A	Efficacy study.
223.	Kavitha, M., Ganesaraja, V., Paulpandi, V., Subramanian, R.	2010	Effect of age of seedlings, weed management practices and humic acid application on system of rice intensification.	Indian Journal of Agricultural Research 44(4): 294-299	N	N/A	N/A	Agronomy study.
224.	Kavitha, M., Ganesaraja, V., Paulpandi, V., Subramanian, R.	2011	Rhizosphere enzyme activities as influenced by age of seedlings, weed management practices and humic acid application under system of rice intensification.	Indian Journal of Agricultural Research 45(2): 151	N	N/A	N/A	Agronomy study.
225.	Kawakami, T., Takezawa, A., Nishi, I., Watanabe, E., Ishizaka, M., Eun, H., Onodera, S.	2008	Monitoring of cholinesterase-inhibiting activity in water from the Tone Canal, Japan, as a biomarker of ecotoxicity	Ecotoxicology 17(4): 221-228	N	N/A	N/A	Monitoring of the cholinesterase inhibiting activity of water to evaluate its ecotoxicity.
226.	Kawasaki, E., Sudo, M., Miki, T., Shibahara, F.	2008	Application of simple model to estimation of herbicide losses from seven paddy fields located in Lake Biwa basin	Journal of Japan Society on Water Environment 31(11): 677-683	N	N/A	N/A	Predictive modelling for herbicide loss.
227.	Kawasaki, E., Okubo, T., Sudo, M.	2008	Herbicide discharge from paddy fields located around Lake Biwa basin and development of simple model for estimation of herbicide loss	Journal of Japan Society on Water Environment 31(7): 375-382	N	N/A	N/A	Predictive modelling for herbicide loss.
228.	Kenchaiiah, K., Shekara, B., Kalyanamurthy, K., Jagadeesh, B., Shivalingaiah, M., Prakesh, P.	2007	Evaluation of clomazone alone and tank mix formulation of clomazone + propanil for control of weeds in direct wet seeded rice under irrigated puddled condition.	Environment and Ecology 25: 1208-1209	N	N/A	N/A	Agronomy study.
229.	Khaliq, A., Matloob, A.	2012	Germination and growth response of rice and weeds to herbicides under aerobic conditions.	International Journal of Agriculture and Biology 14(5): 775-780	N	N/A	N/A	Agronomy study.

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230.	Khan, Z., Kamble, N, Bhongale, A., Girme, M., Chauhan, V., Banerjee.	2018	Analysis of pesticide residues in tuber crops using pressurised liquid extraction and gas chromatography-tandem mass spectrometry	Food Chemistry 214: 250-257	N	N/A	N/A	Detection of pesticide residues in tuber crops.
231.	Khare, T., Sharma, R., Singh, S.	2014	Evaluation of the performance of penoxsulam for weed management in direct-seeded and transplanted rice (<i>Oryza sativa</i>).	Indian Journal of Agricultural Sciences 84(1): 154-157	N	N/A	N/A	Agronomy study.
232.	Khare, T., Sharma, R., Sobhana, V.	2014	Control of complex weed flora in direct-seeded and transplanted rice (<i>Oryza sativa</i> L.) with early post-emergence herbicide	Research on Crops 15(3): 547	N	N/A	N/A	Agronomy study.
233.	Khwaja, I., Deva, S.	2014	Effect of new post emergence herbicides on yield and yield attributes and energy in transplanted rice (<i>Oryza sativa</i> L.)	International Journal of Forestry and Crop Improvement 5(2): 73-78	N	N/A	N/A	Agronomy study.
234.	Kim, J., Kim, S., Schaumann, G.	2014	Development of a Partial Least Squares-Based Integrated Addition Model for Predicting Mixture Toxicity	Human and Ecological Risk Assessment: An International Journal 20(1): 174-200	N	N/A	N/A	Predictive modelling.
235.	Kim, S., Oh, S., Lee, J., Nam, M.	2012	Differential sensitivity of rice cultivars to HPPD-inhibiting herbicides and their influences on rice yield.	Korean Journal of Crop Science 57(2): 160-165	N	N/A	N/A	Agronomy study.
236.	Kimura, S., Ban, S, Yoshikawa, T., Sudo, M.	2007	Preliminary report on evaluating the effects of agricultural drainage on phytoplankton growth in Lake Biwa	Japanese Journal of Limnology 68(3): 403-413	N	N/A	N/A	Effects of drainage on phytoplankton growth in Lake Biwa, Japan.
237.	Kitagawa, Y., Okihashi, M., Takatori, S., Okamoto, Y., Fukui, N., Murata, H., Sumimoto, T., Obana, H.	2009	Multiresidue method for determination of pesticide residues in processed foods by GC/MS	Journal of the Food Hygienic Society of Japan 50(5): 198-207	N	N/A	N/A	Analytical method for detection of pesticide residues in processed food.

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238.	Kitagawa, Y., Okihashi, M., Takatori, S., Okamoto, Y., Fukui, N., Murata, H., Sumimoto, T., Obana, H.	2009	Multiresidue method for determination of pesticide residues in processed foods by GC/MS/MS	Journal of the Food Hygienic Society of Japan 50(5): 243-252	N	N/A	N/A	Analytical method for detection of pesticide residues in processed food.
239.	Kobayash, M., Ohtsuka, K., Tamura, Y., Tomizawa, S., Kinoshita, T., Kamijo, K., Iwakoshi, K., Sato, C., Nagayama, T., Takano, I.	2013	Survey of pesticide residues in imported tea (1992.4-2010.3)	Journal of the Food Hygienic Society of Japan 54(3):224-31	N	N/A	N/A	Survey of pesticide residues in imported tea.
240.	Kobayash, M., Ohtsuka, K., Tamura, Y., Tomizawa, S., Sakai, N., Kamijo, K., Kageyama, Y., Takano, I., Nagayama, T.	2009	Survey of pesticide residues in imported fruit products (1994.4-2006.3)	Journal of the Food Hygienic Society of Japan 50(5): 261-269	N	N/A	N/A	Survey of pesticide residues in imported tea.
241.	Kobayashi, M., Ohtsuka, K., Tamura, Y., Tomizawa, S., Kinoshita, T., Kamijo, K., Iwakoshi, K., Sato, C., Nagayama, T., Takano, I.	2013	Survey of pesticide residues in imported tea (1997.4-2011.3)	Journal of the Food Hygienic Society of Japan 54(4): 316-325	N	N/A	N/A	Survey of pesticide residues in imported tea.
242.	Kobayashi, M., Takano, I., Tamura, Y., Tomizawa, S., Tateishi, Y., Sakai, N., Kamijo, K., Ibe, A., Nagayama, T.	2007	Survey of pesticide residues in imported tea (1999.4-2005.6)	Journal of the Food Hygienic Society of Japan 48(6): 186-193	N	N/A	N/A	Survey of pesticide residues in imported tea.

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					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
243.	Kojima, H., Sata, F., Takeuchi, S., Sueyoshi, T., Nagai, T.	2011	Comparative study of human and mouse pregnane X receptor agonistic activity in 200 pesticides using in vitro reporter gene assays	Toxicology 280(3): 77-87	N	N/A	N/A	Review of receptor agonistic activity in pesticides.
244.	Kou, L., Li, L., Kong, W., Zhang, P., Wang, M.	2007	Application of matrix solid-phase dispersion to the determination of 80 pesticides in vegetables by gas chromatography-mass spectrometry	Shipin Yu Fajiao Gongye 33(12): 133-136	N	N/A	N/A	Analytical method for detection of pesticides in vegetables. Chinese language paper.
245.	Krishnamurthy, P., Sreedevi, B., Singh, S.P.	2007	Evaluation of combination weedicides in transplanted rice	Indian Journal of Plant Protection 35(2): 331-334	N	N/A	N/A	Agronomy study.
246.	Kudo, K., Ishida, T., Hikiji, W., Usumoto, Y., Umehara, T., Nagamatsu, K., Tsuji, A., Ikeda, N.	2010	Pattern of poisoning in Japan: selection of drugs and poisons for systematic toxicological analysis	Forensic Toxicology 28(1): 25-32	N	N/A	N/A	Review of poisonings from toxic drugs and poisons in Japan.
247.	Kudo, K., Nagamatsu, K., Umehara, T., Usumoto, Y., Sameshima, N., Tsuji, A., Ikeda, N.	2012	Rapid and reliable screening method for detection of 70 pesticides in whole blood by gas chromatography-mass spectrometry using a constructed calibration-locking database	Legal Medicine 14(2): 93-100	N	N/A	N/A	Method for the screening of pesticides in blood.
248.	Kumar, B., Sharma, R., Singh, S., Shukla, L., Khare, T.	2014	Effect of post-emergence application of cyhalofop-butyl for weed management in direct-seeded rice (<i>Oryza sativa</i>)	The Indian Journal of Agricultural Sciences 84(8): 1018-1021	N	N/A	N/A	Agronomy study.
249.	Kumar, N., Kumar, R., Shakil, N., Das, T.	2016	Nanoformulations of pretilachlor herbicide: Preparation, characterization and activity	Journal of Scientific and Industrial Research 75 (11): 676-680.	N	N/A	N/A	Chemical stability and efficacy of nanoformulations of pretilachlor.
250.	Kumar, V., Hooda, V., Nandal, D., Kumar, S., Gupta, G.	2017	Influence of Weed Management Practices on Nutrient Uptake and Productivity of Basmati Rice under Different Dates of Transplanting	Environment and Ecology 35 (2A): 885-889	N	N/A	N/A	Agronomy study.

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					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
251.	Kumaran, S., Kathiresan, G., Arthanari, P., Chinnusamy, C., Kumar, V.	2013	Evaluation of new herbicide (bispyribac sodium 10% SC) on weed control in direct seeded lowland rice	Journal of Ecobiology 32(3): 177-183	N	N/A	N/A	Agronomy study.
252.	Kumari, E., Upadhyay, P., Sen, A., Raha, P., Padmavathi, J., Nagargade, M., Tyagi, V.	2016	Allelopathic effect of cocklebur extract on the fertility status of soil in transplanted rice by controlling weed	Journal of Pure and Applied Microbiology 10.1: 479-483	N	N/A	N/A	Agronomy study.
253.	Kumari. P. <i>et al</i>	2017	Effect of combined organic and inorganic fertilizers and weed management for sustained productivity of aromatic rice	Indian Journal of Ecology 44 (4): 120-123	N	N/A	N/A	Agronomy study.
254.	Kurtay, A., Ozayar, E., Gulec, H., Tezca, S., Eyup, H.	2016	Our airway management in a patient with rigid external distractor	Anestezi Dergisi 24 (4): 283-285	N	N/A	N/A	Treatment of patient with rigid external distractor.
255.	Kwon, O.	2016	Control of sulfonylurea-resistant <i>Diplachne fusca</i> (DF) and reduction of rice yield by occurrence densities of DF in reclaimed paddy fields	Research on Crops 17 (4): 641-646	N	N/A	N/A	Efficacy study.
256.	Kurmi, K.	2008	Bio-efficacy of some herbicides in transplanted rice-weed ecosystem under rainfed condition	Journal of Soils and Crops 18(1): 48-52	N	N/A	N/A	Agronomy study.
257.	Lan, T., Zheng, Z., Li, W.	2013	Simultaneous determination of residues of eight amide herbicides in fresh ginger	Chinese Journal of Pesticide Science 15(1): 113-116	N	N/A	N/A	Determination of herbicide residue levels in ginger.
258.	Latha, P., Gopal, H.	2010	Influence of herbicides on cellulolytic, proteolytic and phosphate solubilising bacteria.	International Journal of Plant Protection 3(1) : 83-88	N	N/A	N/A	Academic paper on the microbiological effects of herbicides.
259.	Latha, P., Gopal, H.	2010	Effect of herbicides on fluorescent pseudomonads and spore forming bacilli	Asian Journal of Bio Science 5(2): 211-215	N	N/A	N/A	Academic paper on the microbiological effects of herbicides.

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260.	Latha, P., Gopal, H.	2010	Effect of herbicides on soil microorganisms	Indian Journal of Weed Science 42(3-4): 217-222	N	N/A	N/A	Academic paper on the microbiological effects of herbicides.
261.	Latif, M., Singh, M.K.	2007	Effect of integrated crop management on weed density, weed dry matter production and grain yield of wet seeded rice in Kuttanad, Kerala.	Plant Archives 7: 725-727	N	N/A	N/A	Agronomy study.
262.	Lee, J., Jo, H., Kong, K.	2011	A plant-specific tau class glutathione S-transferase from <i>Oryza sativa</i> having significant detoxification activity towards chloroacetanilide herbicides	Bulletin- Korean Chemical Society 32(10)	N	N/A	N/A	Gene activity in <i>Oryza sativa</i> .
263.	Lee, J., Kim, L., Sinn, Y., Lee, J., Lee, J., Kim, E., Moon, J., Kim, J.	2017	Rapid and Simultaneous Analysis of 360 Pesticides in Brown Rice, Spinach, Orange, and Potato Using Microbore GC-MS/MS	J. Agric. Food Chem. 65 (16): 3387-3395	N	N/A	N/A	Determination of pesticides in brown rice, spinach, orange, and potato.
264.	Lei, H., Xue, G., Yu, C., Haughey, S. A., Eremin, S. A., Sun, Y.	2011	Fluorescence polarization as a tool for the detection of a widely used herbicide, butachlor, in polluted waters	Analytical Methods 3(10): 2334-2340	N	N/A	N/A	Analytical method for detection of butachlor in water.
265.	Li, D., Xu, L., Pang, S., Liu, Z., Zhao, W., Wang, C.	2017	Multiple Pesticides Detoxification Function of Maize (<i>Zea mays</i>) GST34	J. Agric. Food Chem. 65 (9): 1847-1853	N	N/A	N/A	Resistance study.
266.	Li, F., Cai, P., Lai, H., Qu, J., Miao, L., Zhou, Y., Ding, C.	2012	Study on the disintegration and vectors of 20% bensulfuronmethyl·pretilachlor water dispersible granule	Journal of Zhejiang University of Technology 40(2)	N	N/A	N/A	Formulation development of a water dispersible granule containing pretilachlor.
267.	Li, J., Cai, Q., Li, L.	2013	Application of miniaturized gel permeation chromatography (GPC) clean up system in analysis of pesticide residues	Xiandai Yiqi Yu Yiliao 19(2): 61-63	N	N/A	N/A	Analytical method for detection of pesticide residues. Chinese language paper.
268.	Li, L., Li, W., Qin, D., Jiang, S., Liu, F.	2009	Application of graphitized carbon black to the QuEChERS method for pesticide multiresidue analysis in spinach	Journal of AOAC International 92(2): 538-547	N	N/A	N/A	Analytical method for detection of pesticide residues in spinach.

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269.	Li, L., Xu, Y., Pan, C., Zhou, Z., Jianc, S., Liu, F.	2007	Simplified pesticide multiresidue analysis of soybean oil by low-temperature cleanup and dispersive solid-phase extraction coupled with gas chromatography/mass spectrometry.	Journal of AOAC International 90(5):1387-94	N	N/A	N/A	Analytical method for detection of pesticide residues in soybean oil.
270.	Li, M., Wu, F-M. Li, H., Liu, C-Z., Shi, Z., Song, J.	2014	Application research on herbicide in rice field by mechanically transplanting seedlings	Xiandai Nongyao 13(3): 51-52, 56	N	N/A	N/A	Agronomy study. Chinese language paper.
271.	Li, T.P.	2012	A positive analysis of excessively rigorous proof of the standards about maximum residue limits for pesticide in agri-food	Science and Technology of Food Industry 2012-09	N	N/A	N/A	Review of pesticide MRLs.
272.	Li, X., Li, Z. Wang, Z., Pan, C.	2010	Application of accurate mass and elemental composition determination for pesticides identification using a unit mass resolution gas chromatography/mass spectrometry	Chemical Journal of Chinese Universities - Chinese Edition 31(12): 2383-2389	N	N/A	N/A	Analytical method for pesticide identification. Chinese language paper.
273.	Li, X., Zhang, H., Chang, Q., Fan, C., Spang, G., Cao, Z., Wang, W.	2014	Identification of pesticide residues in common fruits and vegetables by gas chromatography-quadrupole time-of-flight mass spectrometry	Chinese Journal of Chromatography 32(3): 268-277	N	N/A	N/A	Analytical method for detection of pesticide residues in fruit and vegetables.
274.	Li, Y., Wang, M., Yan, H., Fu, S., Dai, H.	2013	Simultaneous determination of multiresidual phenyl acetanilide pesticides in different food commodities by solid-phase cleanup and gas chromatography-mass spectrometry	Journal of Separation Science 36(6): 1061-1069	N	N/A	N/A	Analytical method for detection of residues of phenyl acetanilide pesticides in food.
275.	Li, Y., Zheng, F., Wang, M., Pang, G.	2009	Rapid screening and confirmation of 156 pesticide residues in concentrated fruit and vegetable juices using liquid chromatography-tandem mass spectrometry	Chinese Journal of Chromatography 27(2): 127-137	N	N/A	N/A	Analytical method for detection of pesticide residues in concentrated fruit and vegetable juices.

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276.	Li, Z., Bai, S., Hou, M., Wang, C., Wang, Z.	2013	Magnetic graphene nanoparticles for the preconcentration of chloroacetanilide herbicides from water samples prior to determination by GC-ECD	Analytical Letters 46(6): 1012-1024	N	N/A	N/A	Determination of chloroacetanilide herbicides in water.
277.	Li, Z., Li, Y., Liu, X., Li, X., Zhou, L., Pan, C.	2012	Multiresidue Analysis of 58 Pesticides in Bean Products by Disposable Pipet Extraction (DPX) Cleanup and Gas Chromatography-Mass Spectrometry Determination	Journal of Agricultural and Food Chemistry 60(19): 4788-4798	N	N/A	N/A	Analytical method for detection of pesticide residues in bean products.
278.	Lian, Y., Pang, G., Shu, H., Fan, C., Liu, Y., Feng, J., Wu, Y., Chang, Q.	2010	Simultaneous determination of 346 multiresidue pesticides in grapes by PSA-MSPD and GC-MS-SIM	Journal of Agricultural and Food Chemistry 58(17): 9428-9453	N	N/A	N/A	Analytical method for detection of pesticide residues in grapes.
279.	Lim, C., Awan, T., Sta Cruz, P., Chauhan, B.	2015	Influence of environmental factors, cultural practices, and herbicide application on seed germination and emergence ecology of <i>Ischaemum rugosum</i> Salisb	PloS one 10(9): e0137256	N	N/A	N/A	Agronomy study.
280.	Lim, J., Lim, S., Kim, D.	2013	Baseline sensitivity of <i>Echinochloa crus-galli</i> to alternative herbicides selected for managing herbicide resistant <i>Echinochloa</i> species.	The 4th Tropical Weed Science Conference, Chiang Mai Thailand 95-98	N	N/A	N/A	Agronomy study.
281.	Liu, B., Zhu, F., Huang, Y., Wang, Y., Yu, F., Fan, B., Yao, J.	2010	Screening Rules for Leads of Fungicides, Herbicides, and Insecticides	Journal of Agricultural and Food Chemistry 58(5): 2673-2684	N	N/A	N/A	Screening rules to assist in development of new pesticides.
282.	Liu, H., Cai, X., Wang, Y., Chen, J.	2011	Adsorption mechanism-based screening of cyclodextrin polymers for adsorption and separation of pesticides from water	Water Research 45(11): 3499-3511	N	N/A	N/A	Adsorption based screening of pesticides in water.
283.	Liu, H., Cao, L., Lu, P., Ni, H., Li, Y., Yan, X., Hong, Q., Li, S.	2012	Biodegradation of butachlor by <i>Rhodococcus</i> sp. strain B1 and purification of its hydrolase (ChlH) responsible for N-dealkylation of chloroacetamide herbicides	Journal of Agricultural and Food Chemistry 60(50): 12238-12244	N	N/A	N/A	Biodegradation of chloracetamide herbicides at the enzyme level.

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284.	Liu, J., Tong, L., Li, D., Meng, W., Sun, W., Zhao, Y., Yu, Z.	2016	Comparison of two extraction methods for the determination of 135 pesticides in <i>Corydalis Rhizoma</i> , <i>Chuanxiong Rhizoma</i> and <i>Angelicae Sinensis Radix</i> by liquid chromatography-triple quadrupole-mass spectrometry. Application to the roots and rhizomes of Chinese herbal medicines	J. Chromatogr. B Analyt. Technol. Biomed. Life Sci. 1 (1017-018): 233-40	N	N/A	N/A	Determination of pesticides in roots and rhizomes of Chinese herbal medicines.
285.	Liu, L., Hashi, Y., Qin, Y., Zhou, H., Lin, J.	2007	Development of automated online gel permeation chromatography-gas chromatograph mass spectrometry for measuring multiresidual pesticides in agricultural products.	Journal of Chromatography. B, Analytical Technologies in the Biomedical and Life Sciences 845(1): 61-8	N	N/A	N/A	Analytical method for detection of pesticide residues in agricultural products.
286.	Liu, R., Wang, S., Cui, H., Gao, J., Zhang, J., Zhang, W.	2013	Multiresidue method for analysis of pesticides residue in beef and pork by GCMS	Food Research and Development 2013-22	N	N/A	N/A	Analytical method for detection of pesticide residues in meat.
287.	Liu, X., Li, C., Zhang, Y., Yu, J., Yuan, M., Ma, Y	2017	Simultaneous photodegradation of multi-herbicides by oxidized carbon nitride: performance and practical application	Applied Catalysis B: Environmental 219: 194-199	N	N/A	N/A	Report on the simultaneous photodegradation of multiple herbicides.
288.	Liu, X., Li, X., Liu, S., Zhao, P., Zhou, L., Pan, C.	2013	Determination of 13 representative pesticides in Chinese herbal medicine plants by dispersive solid-phase cleanup and gas chromatography-tandem mass spectrometry	Chinese Journal of Analytical Chemistry 41(4): 553-558	N	N/A	N/A	Analytical method for detection of pesticides in Chinese herbal medicine plants.
289.	Liu, Y., Hu, Y., Jiang, L., Pan, B., Qin, H., Lin, Y.	2014	The toxicity effects of five amide herbicides on embryo development of zebrafish	Agrochemicals 11: 806-808	N	N/A	N/A	Paper only available in Chinese. Pretilachlor is not specifically mentioned in the abstract.
290.	Liu, Z., Yu, P., Fang, S., Fan, J.Q., Wang, M.	2011	Development of an enzyme-linked immunosorbent assay for determination of pretilachlor in water and soil	Ecotoxicology and Environmental Safety 74(6): 1595-1599.	N	N/A	N/A	Analytical method for detection of pretilachlor in water and soil.
291.	Lu, B.	2010	Experiment summary on the weed control in paddy field	Beifang Shuidao 40(6): 39-40	N	N/A	N/A	Agronomy study. Chinese language paper.

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292.	Lu, Y. Ding, Z., Wu, D., Ge, Y., Huang, F., Zhou, J.	2014	Weeds controlling in rice field by mechanically transplanting seedlings	Xiandai Nongyao 13(5): 55-56	N	N/A	N/A	Agronomy study. Chinese language paper.
293.	Lübcke, P., Lampel, J., Arellano, S., Bobrowski, N., Dinger, F., Galle, B., Garzon, G., Hidalgo, S., Chacon Ortiz, X., Vogel, L., Warnach, S., Platt, U.	2016	Retrieval of absolute SO ₂ column amounts from scattered-light spectra: implications for the evaluation of data from automated DOAS networks	Atmospheric Measurement Techniques 9 (12): 5677-5698.	N	N/A	N/A	Retrieval of absolute SO ₂ column amounts from scattered-light spectra.
294.	Luo, J., Huang, X., Gong, D., Yang, L.	2013	Residue and decline of bensulfuron methyl·pretilachlor 2g/kg granule in paddy field	Chinese Journal of Animal Nutrition 15(6): 667-672	N	N/A	N/A	Chinese residues data, not relevant to Europe. Chinese language paper.
295.	Ma, H., Lin, C., Gao, S.	2007	Study on efficacy of five herbicides on water barnyard grass and barnyard grass	Xiandai Nongyao 6(5): 42-43, 46	N	N/A	N/A	Efficacy study. Chinese language paper.
296.	Ma, Y., Liu, B.	2011	Determination of seven acetanilide and sulfonylurea herbicide residues in environmental water	Modern Agrochemicals 2011-04	N	N/A	N/A	Analytical method for determination of herbicide residues in water.
297.	Ma, Z., Zhao, W., Li, L., Zheng, S, Lin, H., Zhang, Y., Gao, Q., Liu, S.	2013	Rapid determination of 129 pesticide residues in vegetables and fruits by gas chromatography-triple quadrupole mass spectrometry	Chinese Journal of Chromatography 31(3): 228-239	N	N/A	N/A	Analytical method for detection of pesticide residues in fruit and vegetables.
298.	Madhukumar, V., Kalyana Murthy, K., Prashanth, R., Basavaraj, K., Dinesha, M.	2013	Relative efficacy of different herbicides for weed control in aerobic rice (<i>Oryza sativa</i> L.)	International Journal of Science and Nature	N	N/A	N/A	Agronomy study.
299.	Mahajan, G., Chauhan, B., Johnson, D.	2009	Weed management in aerobic rice in northwestern Indo-Gangetic Plains	Journal of Crop Improvement 23(4): 366-382	N	N/A	N/A	Agronomy study.
300.	Maity, S., Mukherjee, P.	2009	Integrated weed management practices in dry direct-seeded summer rice (<i>Oryza sativa</i>)	The Indian Journal of Agricultural Sciences 79(12)	N	N/A	N/A	Agronomy study.

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301.	Makabe, Y., Miyamoto, F., Hashimoto, H., Nakanish, K., Hasegawa, Y.	2010	Determination of residual pesticides in processed foods manufactured from livestock foods and seafoods using ion trap GC/MS	Journal of the Food Hygienic Society of Japan 51(4): 182-195	N	N/A	N/A	Analytical method for detection of pesticide residues in livestock foods and seafoods.
302.	Malik, S., Singh, V., Singh, S., Dhyani, V., Singh, M., Tripathi, N., Kumar, A.	2011	Efficacy of penoxsulam against weed complex, crop growth and yield in transplanted rice.	Pantnagar Journal of Research 9(1): 141-144	N	N/A	N/A	Agronomy study.
303.	Mamun, A., Shultana, R., Bhuiyan, M., Mridha, A., Mazid, A.	2011	Economic weed management options in winter rice.	Pakistan Journal of Weed Science Research 17(4): 323-331	N	N/A	N/A	Agronomy study.
304.	Mamun, A., Shultana, R., Roy, B., Parvez, A., Mridha, A.	2013	Determination of yield loss and economic threshold density of <i>Scirpus maritimus</i> in winter rice	Academia Journal of Agricultural Research 1(11): 211-219	N	N/A	N/A	Agronomy study.
305.	Mamun, M., Park, J., Choi, J., Kim, H., Choi, W., Han, S., Hwang, K., Jang, N., Assayed, M., El-Dib, M., Shin, H., Abd, E., Shim, J.	2009	Development and validation of a multiresidue method for determination of 82 pesticides in water using GC	Journal of Separation Science 32(4): 559-74	N	N/A	N/A	Analytical method for detection of pesticide residues in water.
306.	Mandal, D., Rakesh, K., Singh, D., Kumar, P.	2011	Growth and yield of direct-seeded rice (<i>Oryza sativa</i>) as influenced by sowing dates and weed management methods	International Journal of Bio-resource and Stress Management 2(3): 273-276	N	N/A	N/A	Agronomy study.
307.	Manjunatha, K., Hanumanthappa, M., Nagesha, L., Kalyanamurthy, K., Kamath, K.	2012	Effect of new herbicide molecules on nutrient uptake in transplanted rice (<i>Oryza sativa</i> L.) in coastal Karnataka.	Mysore Journal of Agricultural Sciences 46(4): 928-930	N	N/A	N/A	Agronomy study.
308.	Manjunatha, K., Hanumanthappa, M., Nagesha, L., Kalyanamurthy, K., Kamath, K., Jayaprakash, S.	2013	Effect of new herbicide molecules on growth and yield of transplanted rice (<i>Oryza sativa</i> L.) in coastal Karnataka.	Mysore Journal of Agricultural Sciences 47(2): 292-295	N	N/A	N/A	Agronomy study.

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309.	Manuello, D., Campagna, C., Tabacchi, M., Heini, J, Massone, G.	2016	Pretilachlor (Rifit): characteristics and usage in resistant weed management in rice	Atti, Giornate Fitopatologiche, Chianciano Terme 1: 537-543	N	N/A	N/A	Resistance study.
310.	Masilamany, D., Chuah, T.S.	2013	Allelopathic effects of sunflower leaf extract and selected pre-emergence herbicides on barnyardgrass.	Journal of Tropical Agriculture and Food Science 41(2): 309-318	N	N/A	N/A	Agronomy study.
311.	Mathiyalagan, S., Muraliarthanari, P.	2015	Sequential application of herbicides for weed control in transplanted rice	International Journal of Farm Sciences 5(2): 27-33	N	N/A	N/A	Agronomy study.
312.	Matsumoto, H., Ohfujii, M., Tsuchida, T., Owaki, S., Toriminami, Y., Nozawa, M., Ohta, H; Chatani, Y.	2011	Survey of pesticide residues in agricultural products (Apr. 2010 - Mar. 2011)	Kyoto-fu Hoken Kankyo Kenkyusho Nenpo 56: 53-58	N	N/A	N/A	Pesticide residues survey. Japanese language paper.
313.	Matsumoto, N., Yoshikawa, M., Eda, K., Kobayashi, A., Yokoshima, M., Murakami, M., Kanekita, H.	2008	Simple preprocessing method for multi-determination of 235 pesticide residues in cooked ingredients of foods by GC/MS and LC/MS/MS	Journal of the Food Hygienic Society of Japan 49(3): 211-222	N	N/A	N/A	Analytical method for detection of pesticide residues in cooked food.
314.	McGarty, A., Penpraze, V., Melville, C.	2016	Calibration and Cross-Validation of the ActiGraph wGT3X+ Accelerometer for the Estimation of Physical Activity Intensity in Children with Intellectual Disabilities	PloS one 11.10: e0164928.	N	N/A	N/A	Physical education report.
315.	McKenzie, T., Smith, N.	2017	Studies of Physical Education in the United States Using SOFIT: A Review	Research Quarterly for Exercise and Sport 88.4: 492-502	N	N/A	N/A	Physical education report.
316.	Mehta, R., Yadav, D., Yadav, A., Punia, S., Malik, R., Mehta, A.	2010	Weed control efficiency of bispyribac-sodium in transplanted and direct seeded rice and its residues in soil, rice grains and straw	Environment and Ecology 28(1A): 275-279	N	N/A	N/A	Agronomy study.

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317.	Menon, M., Bridgit, T., Girija, T	2016	Efficacy of herbicide combinations for weed management in transplanted rice	Journal of Tropical Agriculture 54 (2)	N	N/A	N/A	Efficacy study.
318.	Mewada, P.	2016	Optimization of suitable weed management practices for aerobic rice	Indian Journal of Weed Science 48(1): 64–66	N	N/A	N/A	Agronomy study.
319.	Miao, X., Yang, Y., Liu, D., Yang, X., Xu, H.	2015	Determination of the amide herbicides in milk using dispersive liquid-liquid microextraction prior to GC-MS	Journal of South China Agricultural University 36(2): 43-48	N	N/A	N/A	Analytical method for detection of amide herbicides in milk.
320.	Min, Z., Hong, S., Yang, I., Kwon, H., Kim, T., Kim, D.	2012	Analysis of pesticide residues in brown rice using modified QuEChERS multiresidue method combined with electrospray ionization-liquid chromatography-tandem mass spectrometric detection	Journal of the Korean Society for Applied Biological Chemistry 55(6): 769-775	N	N/A	N/A	Analytical method for detection of pesticide residues in brown rice.
321.	Ming, Z., Xian, O., Mao-Kun, C., Tu, H.	2008	Determination of paraquat by resonance Rayleigh scattering method	Chinese Journal of Analytical Chemistry 36(1): 112-115	N	N/A	N/A	Analytical method for detection of paraquat in rice.
322.	Miranda, A., Roche, H., Randi, M., Menezes, M., Ribeiro, C.	2008	Bioaccumulation of chlorinated pesticides and PCBs in the tropical freshwater fish <i>Hoplias malabaricus</i> : Histopathological, physiological, and immunological findings	Environment International 34(&): 939-949	N	N/A	N/A	Tropical freshwater fish collected from a lake in Brazil not relevant to the EU.
323.	Mishima, S., Otduka, T., Hasegawa, A., Saito, K.	2012	Ecotoxicological test for risk estimation of river water	Kanagawa-ken Kankyo Kagaku Senta Kenkyu Hokoku 35: 1-7	N	N/A	N/A	Ecotoxicological testing of chemicals in river water. Japanese language paper.
324.	Mishra, J.S., Singh, V.P.	2007	Integrated weed management in zero-till direct-seeded rice (<i>Oryza sativa</i>) wheat (<i>Triticum aestivum</i>) cropping system	Indian Journal of Agronomy 52(3): 198-203	N	N/A	N/A	Agronomy study.
325.	Mishra, J.S., Singh, V.P.	2008	Integrated weed management in dry-seeded irrigated rice (<i>Oryza sativa</i>)	Indian Journal of Agronomy 53(4): 299-305	N	N/A	N/A	Agronomy study.

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326.	Mitra, B. Karim, A, Haque, M., Bari, M.	2005	Effect of weed management practices on the performance of transplanted aman rice varieties	Journal of Agronomy 4: 238-241	N	N/A	N/A	Agronomy study.
327.	Miyagawa, H., Nakagawa, K., Kadokami, K.	2011	Reproducibility of Programmed-Temperature Retention Indices under Average Linear Velocity Carrier Gas Control of GC and GC-MS	Chromatographia 73: 953-963	N	N/A	N/A	Development of qualitative and quantitative analysis by GC and GC-MS.
328.	Miyawaki, T., Tobiishi, K., Takenaka, S., Kadokami, K.	2013	Development of rapid screening method for organic pollutants in soils and sediments with microwave extraction	The Japan Society for Analytical Chemistry 62(11): 971-978	N	N/A	N/A	Analytical method for detection of organic pollutants in soil and sediments.
329.	Mo, J. Dai, L., Chen, L., Wang, Y., Huang, A., Wang, L., Ma, L.	2015	Structural effects of organobentonites on controlled release of pretilachlor	Applied Clay Science 115: 150-156	N	N/A	N/A	Development of slow release products containing pretilachlor.
330.	Mohapatra, S.	2016	Integrated weed management under modified water regimes in System of Rice Intensification	Indian Journal of Weed Science 48(1): 17-20	N	N/A	N/A	Agronomy study.
331.	Mondal, R., Kole, R., Bhattacharyya, A.	2017	Validation of multiresidue method for analysis of 31 pesticides in rice using gas chromatography-tandem mass spectrometry	J. AOAC Int. 100 (4): 1094-1101	N	N/A	N/A	Determination of pesticides in rice.
332.	Morioka, H., Yuasa, T., Nozaki, Y., Kabayama, K.	2011	Survey of pesticide residues in tea leaves	Miyazaki-ken Eisei Kankyo Kenkyusho Nenpo 23: 88-92	N	N/A	N/A	Survey of pesticide residues in tea leaves. Japanese language paper.
333.	Mouri, K., Myouga, H., Morishige, Y.	2008	Simple method for multi pesticide residue analysis of agricultural products by GC/MS	Kinki Chugoku Shikoku Nogyo Kenkyu 13: 3-8	N	N/A	N/A	Analytical method for detection of pesticide residues in agricultural products. Japanese language paper.
334.	Mu, J.W., Li, P., Li, D.P.	2007	Studies on herbicide application by stage to control barnyard grass in paddy field of cold region	North Rice 6: 40-42	N	N/A	N/A	Agronomy study.

No.	Author	Year	Title	Reference	Meet relevance criteria	Meet Reliability Criteria		Comments
					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
335.	Mubeen, K., Nadeem, M.A., Tanveer, A., Jhala, A.J.	2014	Effect of time of sowing and weed control methods in direct seeded rice	The Journal of Animal & Plant Sciences 24(2): 534-542	N	N/A	N/A	Agronomy study.
336.	Mukherjee, I., Arora, S.	2011	Impact analysis of IPM programs in Basmati rice by estimation of pesticide residues	Bulletin of Environmental Contamination and Toxicology 86(3): 307-313	N	N/A	N/A	Agronomy study.
337.	Mukherjee, P.K., Das, H., Debnath, P., Singha, A.S., Kundu, A., Haque, S.	2012	Bio-efficacy of some non traditional herbicides against weed complex of jute.	Journal of Crop and Weed 8(1): 195-197	N	N/A	N/A	Agronomy study.
338.	Nagai, T.	2014	Algal population growth model integrated with toxicokinetics for ecological risk assessment under time-varying pesticide exposure	Human and Ecological Risk Assessment 20(3): 641	N	N/A	N/A	Modelling development for assessing the effect of pesticides on population dynamics.
339.	Nagai, T.	2017	Predicting herbicide mixture effects on multiple algal species using mixture toxicity models	Environmental Toxicology and Chemistry 36 (10): 2624-2630	N	N/A	N/A	Use of mixture toxicity models to predict the effects of herbicides.
340.	Nagarajan, G., Khan, Z., Utture, S.C., Dasgupta, S., Banerjee, K.	2013	Ensuring selectivity and sensitivity by timed- and ultra-selective reaction monitoring during gas chromatography-tandem mass spectrometric determination of pesticides	Journal of Chromatography A 1318: 226-233	N	N/A	N/A	Analytical method for detection pesticides.
341.	Nahi, A., Othman, R., Omar, D.	2016	Effects of Sb16 bacterial strain and herbicides on endophytic bacterial populations and growth of aerobic rice	Plant Soil Environ. 62 (10): 453-459	N	N/A	N/A	Efficacy study.
342.	Nakayama, H., Doi, K., Tsujimura, K., Yamanouchi, K.	2011	Pesticide residues in agricultural products (2011)	Nagasaki-ken Kankyo Hoken Kenkyu Senta Shoho 57: 91-94	N	N/A	N/A	Pesticide residues survey. Japanese language paper.
343.	Nakamura, S., Yamagami, T., Ono, Y., Daishima, S.	2013	Multi-residue analysis of pesticides in agricultural products by GC/MS using synchronous SIM/Scan acquisition	The Japan Society for Analytical Chemistry 62(3): 229-242	N	N/A	N/A	Analytical method for detection of pesticides in agricultural products.

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344.	Nakashima, I., Iseri, H., Fukata, T., Hiramatsu, K., Harada, M., Phong, K.	2009	Application of a GIS-based pesticide runoff model to Chikugo River Basin	Science Bulletin of the Faculty of Agriculture, Kyushu University 64(2): 147-160	N	N/A	N/A	Exposure modelling of pesticides in the Chikugo River Basin, Japan.
345.	Ng, S., Kadir, J., Hailmi, M., Rahim, A.	2011	Efficacy of <i>Exserohilum longirostratum</i> on barnyard grass (<i>Echinochloa crus-galli</i> spp. <i>crusgalli</i>) under field conditions.	Biocontrol Science and Technology 21(4): 449-460	N	N/A	N/A	Efficacy study.
346.	Nguyen, T., Han, E., Seo, M., Kim, S., Yun, M., Lee, D., Lee, G.	2008	A multi-residue method for the determination of 203 pesticides in rice paddies using gas chromatography/mass spectrometry	Analytica Chimica Acta. 619(1): 67-74	N	N/A	N/A	Analytical method for detection of pesticide residues in rice paddies.
347.	Nguyen, T., Lee, K., Lee, M., Lee, G.	2010	A multiresidue method for the determination 234 pesticides in Korean herbs using gas chromatography mass spectrometry	Microchemical Journal 95(1): 43-49	N	N/A	N/A	Analytical method for detection of pesticide residues in Korean herbs.
348.	Ni, J., Shen, W., Yan, X., Li, S.	2011	Isolation and characterization of an acetochlor-degrading strain Y-4 and Its degrading characteristics	Journal of Agro-Environment Science 30(5): 946-951	N	N/A	N/A	Degradation characteristics of acetochlor.
349.	Ni, Y., Zheng, J., Zhang, J., Wang, B., He, J., Li, S.	2011	Isolation of Chloracetanilide Herbicides-degrading Bacterium Y3B-1 and Its Degradability to Chloracetanilide Herbicides	Chinese Journal of Applied & Environmental Biology 17(5): 711-716	N	N/A	N/A	Microbial degradation of chloracetanilide Herbicides.
350.	Nirmalnath, P., Patil, C., Deshpande, H., Agasimani, C.	2011	Influence of integrated weed management practices on soil respiration, soil enzymatic activity, nodulation and yield in groundnut (<i>Arachis hypogaea</i> L.)	International Journal of Agricultural Sciences 7(2): 291-294	N	N/A	N/A	Agronomy study.
351.	Nishina, T., Murakawa, H., Fukushima, K., Tobino, T.	2004	Pesticide residue monitoring method in agricultural products with supercritical fluid extraction and GC/MS, 2 [nov2004]	Annual Report of Kumamoto Prefectural Institute of Public Health and Environmental Science	N	N/A	N/A	Analytical method for detection of pesticide residues in agricultural products.

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352.	Noda, Y., Asada, T., Kobayashi, K.	2010	Simultaneous analysis of agricultural chemical residues in salts by GC/MS	Bunseki Kagaku 59(7): 579-587	N	N/A	N/A	Analytical method for detection of chemical residues in salts. Japanese language paper.
353.	Norhafizah, M., Gunavathy, S., Chuah, T, Norsyafiq, S., Nuradiba, N., Nur Farahatul, A.	2017	Response of <i>Eleusine indica</i> to herbicides and N fertilizer in dry seeded rice	African Journal of Agricultural Research 12 (20): 2398-2403	N	N/A	N/A	Efficacy study.
354.	Nougadère, A., Reninger, J., Volatier, J., Leblanc, J.	2011	Chronic dietary risk characterization for pesticide residues: A ranking and scoring method integrating agricultural uses and food contamination data	Food and Chemical and Toxicology 49(7): 1484-1510	N	N/A	N/A	Method for ranking food contamination data from agricultural uses.
355.	Ochiai, N., Leda, T., Sasamoto, K., Tawazawa, Y., Hashimoto, S., Fushimi, A., Tanabe, K.	2011	Stir bar sorptive extraction and comprehensive two-dimensional gas chromatography coupled to high-resolution time-of-flight mass spectrometry for ultra-trace analysis of organochlorine pesticides in river water	Journal of Chromatography A 1218(39): 6851-6860	N	N/A	N/A	Analytical method for detection of organochlorine pesticides in river water.
356.	Ochiai, N., Sasamoto, K., Kanda, H., Pfannkoch, E.	2008	Sequential stir bar sorptive extraction for uniform enrichment of trace amounts of organic pollutants in water samples	Journal of Chromatography A 1200(1): 72-79	N	N/A	N/A	Analytical method for extraction of organic pollutants in water.
357.	Oda, T., Hatsuse, Y., Yoshimura, M., Tonami, K.	2007	Simultaneous determination of pesticide residues in agricultural products by GC/MS (SIM)	Ishikawa-ken Hoken Kankyo Senta Kenkyu Hokokusho 45: 32-41	N	N/A	N/A	Analytical method for detection of pesticide residues in agricultural products. Japanese language paper.
358.	Odaka, Y; Hosaka, H.	2008	Examination of simultaneous determination of 67 pesticides on the complementary items for water quality management by gas chromatography mass spectrometry	Chiba-ken Eisei Kenkyusho Nenpo 55: 103-111.	N	N/A	N/A	Analytical method for detection of pesticides in water. Japanese language paper.
359.	Oh, C.H.	2007	Purification method for multi-residual pesticides in green tea	Natural Product Communications 2(10): 1025-1031	N	N/A	N/A	Analytical method for purification of residual pesticides in tea.

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360.	Ohara, K., Nishimura, S., Shimodozono, E., Ohkoda, S., Aiko, T., Miyata, Y.	2007	Suitability survey of analytical methods of agricultural chemicals by GC/MS (1)	Kagoshima-ken Kankyo Hoken Senta Shoho 8: 109-118	N	N/A	N/A	Analytical method for detection of pesticides in agricultural products. Japanese language paper.
361.	Okamoto, Y., Takatori, S., Kitagawa, Y., Okihashi, M., Fukui, N., Murata, H., Sumimoto, T., Tanaka, Y., Obana, H.	2009	Determination of pesticides in chinese dumplings using liquid chromatography-tandem mass spectrometry	Journal of the Food Hygienic Society of Japan 50(1): 10-5	N	N/A	N/A	Analytical method for detection of pesticides in food stuffs.
362.	Okamura, Y., Yamada, K.	2008	Evaluation of analysis of agricultural chemical residues in foods for positive list system	Shimadzu Hyoron 65(1/2): 3-13	N	N/A	N/A	Analytical method for detection of pesticides in food. Japanese language paper.
363.	Okihashi, M., Takatori, S., Kitagawa, Y., Tanaka, Y.	2007	Simultaneous analysis of 260 pesticide residues in agricultural products by gas chromatography/triple quadrupole mass spectrometry	Journal of AOAC International 90(4): 1165-1179	N	N/A	N/A	Analytical method for detection of pesticide residues in agricultural products.
364.	Okuda, T., Koshi, N., Matsumura, A., Yamamoto, R., Oyanagi, T., Matsuda, T., Hashimoto, A., Hatakeyama, O., Kobayashi, K., Nagao, Y., Yamada, T.	2014	Validation study on a multi-residue method for determination of pesticide residues in agricultural products by new automatic pretreatment equipment (FASRAC) and GC-MS/MS	Journal of the Food Hygienic Society of Japan 55(5): 216-229	N	N/A	N/A	Analytical method for detection of pesticide residues in agricultural products.
365.	Opeña, J., Chauhan, B., Baltazar, A.	2014	Seed germination ecology of <i>Echinochloa glabrescens</i> and its implication for management in rice (<i>Oryza sativa</i> L.)	PloS one 9(3): e92261	N	N/A	N/A	Agronomy study.
366.	Ostrea, E., Bielawski, D., Posecion, N., Corrión, M., Villanueva-Uy, E., Jin, Y., Janisse, J., Ager, J.	2008	A comparison of infant hair, cord blood and meconium analysis to detect fetal exposure to environmental pesticides	Environmental Research 106(2): 277-283	N	N/A	N/A	Method development to detect foetal exposure to pesticides.

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367.	Ostrea, E., Bielawski, D., Posecion, N, Corrion, M., Villanueva-Uy, E., Bernardo, R., Jin, Y., Janisse, J., Ager, J.	2009	Combined analysis of prenatal (maternal hair and blood) and neonatal (infant hair, cord blood and meconium) matrices to detect fetal exposure to environmental pesticides	Environmental Research 109(1): 116-122	N	N/A	N/A	Method development to detect foetal exposure to pesticides.
368.	Ostrea, E., Reyes, A., Villanueva-Uy, E., Pacifico, R., Benitez, B., Ramos, E., Bernardo, R., Bielawski, D., Delaney-Black, V., Chiodo, L., Janisse, J., Ager, J.	2012	Fetal exposure to propoxur and abnormal child neurodevelopment at 2 years of age	Neurotoxicology 33(4):6 69-75	N	N/A	N/A	Measurement of foetal exposure to propoxur.
369.	Otsuka, K., Kobayashi, M., Tamura, Y., Tomizawa, S., Kinoshita, T., Kamijo, K., Iwakoshi, K., Sato, C., Takano, I.	2011	Survey of pesticide residues in domestic vegetables and fruits (April 2010-March 2011)	Annual Report Tokyo Metropolitan Institute of Public Health 62: 177-182	N	N/A	N/A	Survey of pesticide residues in domestic vegetables and fruits.
370.	Owaki, S., Hamada, S., Tsuchida, T., Toriminami, Y., Matsumoto, H., Mozawa, M., Chatani, Y.	2012	Survey of pesticide residues in agricultural products (Apr. 2011-May 2012)	Kyoto-fu Hoken Kankyo Kenkyusho Nenpo 57: 50-55	N	N/A	N/A	Pesticide residues survey. Japanese language paper.
371.	Pal, D., Majumder, C., Ghosh, R, Nongmaithem, D., Bera, S, Das, S.	2016	Weed management strategies in SRI cultivation and their impact on water uptake by weeds	International Journal of Bio-resource and Stress Management 7(6):1267-1271	N	N/A	N/A	Agronomy study.

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372.	Papadakis, E., Vryzas, Z., Kotopoulou, A., Kintzikoglou, K., Makris, K., Papadopoulou-Mourkidou, E.	2015	A pesticide monitoring survey in rivers and lakes of northern Greece and its human and ecotoxicological risk assessment	Ecotoxicology and Environmental Safety 116: 1-9	N	N/A	N/A	Pesticide monitoring survey in rivers and lakes of northern Greece.
373.	Paramasivan, M., Mohan, S., Ali, G., Mathiyazhagan, S., Muthukrishnan, N.	2009	Detection of latent infections in mango fruit with herbicides	Archives of Phytopathology and Plant Protection 42(4): 318-326	N	N/A	N/A	Effects of herbicides on the breakdown of mango.
374.	Park, J., Mamun, M., Choi, J., Abd El-Aty, A., Assayed, M., Choi, W., Yoon, K., Han, S., Kim, H., Park, B., Kim, K., Kim, S., Choi, H., Shim, J.	2010	Development of a multiresidue method for the determination of multiclass pesticides in soil using GC	Biomedical Chromatography 24(8): 893-901	N	N/A	N/A	Analytical method for detection of pesticide residues in soil.
375.	Parthipan, T.	2016	Strategies for weed management in drum seeded rice under puddled condition (<i>Oryza sativa</i> L.).	International Journal of Forestry and Crop Improvement 7 (1): 14-18	N	N/A	N/A	Agronomy study.
376.	Parthipan, T., Ravi, V., Pandiyarajan, P.	2013	Effect of weed management practices on growth and yield of transplanted rice and its residual effect on soil microorganisms	Journal of Ecobiology 32 (1 & 2), 91-97	N	N/A	N/A	Effects of pesticides on soil microorganisms; field site not relevant to the EU.
377.	Parthipan, T., Ravi, V., Subramanian, E., Ramesh, T.	2013	Integrated weed management on growth and yield of transplanted rice and its residual effect on succeeding black gram	Journal of Agronomy 12: 99-103	N	N/A	N/A	Agronomy study.
378.	Parvez, S., Salam, A., Kato-Noguchi, H., Begum, M.	2013	Effect of cultivar and weeding regime on the performance of transplant aman rice	International Journal of Agriculture and Crop Sciences 6(11): 654-666	N	N/A	N/A	Agronomy study.

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379.	Peng, X., Zhao, Z., Kang, K., Wang, Z., Chang, Q., Fan, C. Pang, G., Lmei, L.	2014	Screening 210 pesticides without reference standards in fruits and vegetables by liquid chromatography coupled time-of-flight mass spectrometry	Chinese Journal of Analysis Laboratory 2014-03	N	N/A	N/A	Analytical method for detection of pesticide residues in fruit and vegetables.
380.	Pham, T., Phan, T., Nguyen, T.	2013	Analysis of Pesticides in Soil Using Dispersive Solid Phase Extraction Coupled to GC-MS	Soil and Sediment Contamination: An International Journal 23(3): 339-352	N	N/A	N/A	Analytical method for detection of pesticides in soil.
381.	Phong, T., Vu, S., Ishihara, S., Hiramatsu, K., Watanabe, H.	2011	Exposure risk assessment and evaluation of the best management practice for controlling pesticide runoff from paddy fields. Part 2: model simulation for the herbicide pretilachlor	Pest management science 67(1): 70-76	N	N/A	N/A	Predictive modelling for controlling pesticide runoff from paddy fields.
382.	Phong, T.K., Yoshino, K., Hiramatsu, K., Harada, M., Inoue, T.	2010	Behavior of pretilachlor and dimethametryn in water of flooded rice fields	Journal of the Faculty of Agriculture 55(2): 321-326	N	N/A	N/A	Japanese monitoring study; not relevant to EU.
383.	Polgár, L., García-Reyes, J., Fodor, P., Gyepes, A., Dernovics, M., Abrankó, L., Gilbert-López, B., Molina-Díaz, A.	2012	Retrospective screening of relevant pesticide metabolites in food using liquid chromatography high resolution mass spectrometry and accurate-mass databases of parent molecules and diagnostic fragment ions	Journal of Chromatography A 1249: 83-91	N	N/A	N/A	Analytical method for detection of pesticide metabolites in food.
384.	Powell, E., Woodfield, L., Nevill, A.	2016	Increasing physical activity levels in primary school physical education: The SHARP Principles Model	Preventive Medicine Reports 3: 7-1	N	N/A	N/A	Physical education report.
385.	Prasad, J., Reddy, R., Reddy, P., Harikrishna, P.	2014	Isolation, characterization and screening of <i>Bacillus</i> spp. for plant growth promoting attributes and antagonistic activity against <i>Rhizoctonia solani</i> , <i>Sclerotium rolfsii</i> and compatibility with commonly used pesticides	Pollution Research 33(2): 373-377	N	N/A	N/A	Assessment of plant growth promoting properties of <i>Bacillus</i> spp.

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386.	Prasad, J., Reddy, R., Sarvani, B., Kumar, R., Reddy, P.	2014	Isolation and biochemical characterization of <i>Rhizobium</i> for plant growth promotion and antagonistic activities and compatibility with commonly used pesticides	Pollution Research 33(2): 379-387	N	N/A	N/A	Assessment of plant growth promoting properties of <i>Rhizobium</i> .
387.	Prasad, S., Kumar, S., Parihar, P., Singh, R.	2016	Interactive effects of herbicide and enhanced UV-B on growth, oxidative damage and the ascorbate-glutathione cycle in two <i>Azolla</i> species	Ecotoxicology and environmental safety 133: 341-9.	N	N/A	N/A	Non-standard field experiment conducted in India, not relevant to the EU.
388.	Prakash, C., Shivran, R., Koli, N., Sharma, J.	2013	Efficacy of different herbicides for weed control in transplanted rice (<i>Oryza sativa</i> . L) under vertisols of Rajasthan	Trends in Biosciences 6(1): 112-114	N	N/A	N/A	Efficacy study.
389.	Prakash, C., Shivran, R., Koli, N., Sharma, J.	2013	Bio-efficacy of herbicide combination on weed control and yield performance of transplanted rice (<i>Oryza sativa</i> . L)	Trends in Biosciences 6(1): 115-117	N	N/A	N/A	Efficacy study.
390.	Pratap, T.	2016	Herbicides combination for control of complex weed flora in transplanted rice (<i>Oryza sativa</i> L.)	Research on Crops 17 (4): 657-661	N	N/A	N/A	Efficacy study.
391.	Pratap, T., Pratap Singh, V., Singh, S., Reka	2016	Effect of herbicides and their combinations on weed growth and yield of transplanted rice	Indian Journal of Weed Science 48(4): 356–359	N	N/A	N/A	Efficacy study.
392.	Praveena, R., Naseema, A., George, S.	2007	Effect of herbicides on <i>Fusarium pallidoseum</i> – a potential biocontrol agent of water hyacinth [<i>Eichhornia crassipes</i> (Mart.) Solms]	Journal of Tropical Agriculture 45 (1-2): 55-57	N	N/A	N/A	Efficacy study.
393.	Puniya, R., Pandey, P., Bisht, P.	2009	Evaluation of new herbicides in transplanted rice (<i>Oryza sativa</i> L.)	Pantnagar Journal of Research 7(1): 115-119	N	N/A	N/A	Efficacy study.
394.	Qian, S., Lin, H.	2015	Colorimetric Sensor Array for Detection and Identification of Organophosphorus and Carbamate Pesticides	Analytical Chemistry 87(10): 5395-5400	N	N/A	N/A	Method for detection and identification of pesticides.

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395.	Qin, H., Jinlong, W., Rong, Y., Guoping, L.	2009	Analysis of pretilachlor and its impurities in technical material by GC-MS	Pesticide Science and Administration 2: 13-17	N	N/A	N/A	Analytical method for pretilachlor and its impurities.
396.	Qin, L.X.	2011	Effects of herbicides on weed control in rice	Beifang Shuidao 41(3): 38, 42	N	N/A	N/A	Agronomy study. Chinese language paper.
397.	Qiu, J., Zhang, L.S., Song, W.C., Yang, S., Dai, S., Xue, X.	2010	Simultaneous determination of chloroacetanilide herbicide residues in crops with gas chromatography-mass spectrometry.	Der Pharma Chemica 2(6): 349-357	N	N/A	N/A	Analytical method for detection of chloroacetanilide herbicide residues in crops.
398.	Raghavendra, B.M., Susheela, R., Praveen Rao, V., Madhavi, M	2015	Efficacy of different weed management practices on growth and yield of direct wet seeded rice sown through drum seeder	The Bioscan 10(1): 97-101	N	N/A	N/A	Agronomy study.
399.	Raghavendra, B.M., Susheela, R., Madhavi, M., Mahantheswara, B.	2015	Influence of weed management practices on nutrients uptake and wet seeded rice (<i>Oryza sativa</i> L.) sown through drum seeder	Annals of Plant Protection Sciences 23(1): 153-157	N	N/A	N/A	Agronomy study.
400.	Rahman, M., Juraimi, A., Suria, J., Man, A., Anwar, P.	2012	Response of weed flora to different herbicides in aerobic rice system.	Science Research and Essays 7(1): 12-23	N	N/A	N/A	Agronomy study.
401.	Rajkhowa, D.J., Deka, N., Borah, N., Barua, I.	2007	Effect of herbicides with or without paddy weeder on weeds in transplanted summer rice (<i>Oryza sativa</i>)	Indian Journal of Agronomy 52(2): 107-110	N	N/A	N/A	Agronomy study.
402.	Ramachandiran, K., Balasubramanian, R., Babu, R.	2012	Performance of new herbicides on productivity and profitability of aerobic rice.	Madras Agricultural Journal 99(7/9): 545-547	N	N/A	N/A	Agronomy study.
403.	Ramachandiran, K., Balasubramanian, R., Babu, R.	2013	Weed management in aerobic rice - a review	Agricultural Reviews 34(2): 121-128	N	N/A	N/A	Agronomy study.
404.	Ramana, A., Naidu, G., Murthy, K.	2007	Integrated weed management in rainfed upland rice (<i>Oryza sativa</i>)	Indian Journal of Agronomy 52: 311-314	N	N/A	N/A	Agronomy study.
405.	Rao, A., Wani, S., Ramesha, M., Ladha, J.	2015	Weeds and weed management of rice in Karnataka State, India	Weed technology 29(1): 1-17.	N	N/A	N/A	Agronomy study.

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406.	Rao, A., Rao, G., Ratnam, M.	2010	Bio-efficacy of sand mix application of pre-emergence herbicides alone and in sequence with imazethapyr on weed control in relay crop of blackgram	Pakistan Journal of Weed Sciences Research 16(3): 279-285	N	N/A	N/A	Agronomy study.
407.	Rao, A., Ratnam, M., Reddy, T.	2008	Weed management in direct-seeded semi dry rice	Indian Journal of Weed Sciences 40(3-4): 153-156	N	N/A	N/A	Agronomy study.
408.	Rao, H., Wang, Y., Zeng, X., Wang, X., Liu, Y., Yin, J, He, H., Zhu, F., Li, Z.	2012	In silico identification of human pregnane X receptor activators from molecular descriptors by machine learning approaches	Chemometrics and Intelligent Laboratory Systems 118: 271-279	N	N/A	N/A	Machine learning approach to identification human pregnane X receptor activators.
409.	Rashid, M., Alam, M. M., Rao, A., Ladha, J.	2012	Comparative efficacy of pretilachlor and hand weeding in managing weeds and improving the productivity and net income of wet-seeded rice in Bangladesh	Field Crops Research 17-26	N	N/A	N/A	Agronomy study.
410.	Rathika, S.	2014	Efficiency evaluation of post-emergence herbicide metamitron 70 SC and ethofumesate 50 SC on weed control and productivity in sugarbeet	International Journal of Agricultural Sciences 10(1): 416-420	N	N/A	N/A	Efficacy study in sugar beet.
411.	Ratnam, M., Rao, A., Reddy, T.	2011	Management of <i>Chrozophora rottleri</i> in chickpea (<i>Cicer arietinum</i> L).	Journal of Research ANGRAU 39(1-2): 82-83	N	N/A	N/A	Agronomy study on chickpea.
412.	Ravisankar, N., Chandrasekaran, B., Raja, R., Chaudhuri, S.	2008	Influence of integrated weed-management practices on productivity and profitability of wet-seeded rice (<i>Oryza sativa</i>).	Indian Journal of Agronomy 53(1): 57-61	N	N/A	N/A	Agronomy study.
413.	Reddy, G., Sekhar, M., Chandrasekhar, C., Muthukrishnan, P.	2013	Effect of crop establishment methods and weed management practices on productivity and economics of wet seeded rice.	Indian Journal of Agricultural Research 48(5): 425-430	N	N/A	N/A	Agronomy study.
414.	Reddy, G., Sekhar, M., Narendar, G., Reddy, K.	2013	Effect of integrated weed management on weed vegetation analysis, weed control efficiency in drum seeding and direct planting system of rice	Environment and Ecology 31(4): 1763-1767	N	N/A	N/A	Agronomy study.

No.	Author	Year	Title	Reference	Meet relevance criteria	Meet Reliability Criteria		Comments
					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
415.	Rehman, A., Cheema, Z., Khaliq, A., Arshad, M., Mohsan, S.	2010	Application of sorghum, sunflower and rice water extract combinations helps in reducing herbicide dose for weed management in rice	International Journal of Agriculture and Biology (Pakistan) 12(6): 901-906	N	N/A	N/A	Agronomy study.
416.	Riches, C., Mazid, M., Ahmed, G., Mortimer, A., Jabbar, M., Orr, A.	2008	Improved weed management for transplanted aman rice	International Rice Research Institute 91-103	N	N/A	N/A	Agronomy study.
417.	Robbat, A., Hoffmann, A., MacNamara, K., Huang, Y.	2008	Quantitative identification of pesticides as target compounds and unknowns by spectral deconvolution of gas chromatographic/mass spectrometric data	Journal of AOAC International 91(6): 1467-77	N	N/A	N/A	Analytical method for identification of pesticides.
418.	Robles-Molina, J., Lara-Ortega, F., Gilbert-López, B., García-Reyes, J., Molina-Díaz, A.	2014	Multi-residue method for the determination of over 400 priority and emerging pollutants in water and wastewater by solid-phase extraction and liquid chromatography-time-of-flight mass spectrometry	Journal of Chromatography A 1350: 30-43	N	N/A	N/A	Analytical method for detection of pollutants in water and wastewater.
419.	Roche, H., Vollaie, Y., Martin, E., Rouer, C., Coulet, E., Grillas, P., Banas, D.	2009	Rice fields regulate organochlorine pesticides and PCBs in lagoons of the Nature Reserve of Camargue	Chemosphere 75(4): 526-533	N	N/A	N/A	Biomonitoring assay in irrigation and draining channels of rice fields; multiple stressors not just pretilachlor.
420.	Rohit, J., Singhal, R., Kailasa, S.	2016	Dithiocarbamate-calix[4]arene functionalized gold nanoparticles as a selective and sensitive colorimetric probe for assay of metsulfuron-methyl herbicide via non-covalent interactions	Sensors and Actuators B: Chemical 237: 1044-1055	N	N/A	N/A	Detection of metsulfuron-methyl in environmental water and food samples.
421.	Saha, A., Pipariya, A., Bhaduri, D.	2016	Enzymatic activities and microbial biomass in peanut field soil as affected by the foliar application of tebuconazole	Environmental Earth Sciences 75.7: 1-13	N	N/A	N/A	Determination of the impact of tebuconazole on soil microbial properties and enzymatic activities.

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					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
422.	Saha, I., Joy, V.	2016	Short-term biochemical ill effects of insect growth regulator (IGR) pesticides in <i>Cyphoderus javanus</i> Börner (Collembola: Insecta) as potential biomarkers of soil pollution	Environmental Monitoring and Assessment 188 (2): 1-9	N	N/A	N/A	Use of buprofezin, flubendiamide and novaluron as potential biomarkers of soil pollution.
423.	Saha, S.	2009	Efficacy of bensulfuron-methyl for controlling sedges and non-grassy weeds in transplanted rice (<i>Oryza sativa</i>)	Indian Journal of Agricultural Sciences 79(4): 313-316	N	N/A	N/A	Efficacy study on bensulfuron-methyl.
424.	Saha, S., Rao, K.	2010	Efficacy of metsulfuron methyl for controlling broadleaf weeds in transplanted rice (<i>Oryza sativa</i>) under rainfed shallow lowland	The Indian Journal of Agricultural Sciences 80(6)	N	N/A	N/A	Efficacy study on metsulfuron methyl.
425.	Saha, S., Munda, S., Adak, T.	2016	Efficacy of azimsulfuron against complex weed flora in transplanted rice (<i>Oryza sativa</i>) under rainfed shallow lowland	Indian Journal of Agricultural Sciences 86 (2): 186-91	N	N/A	N/A	Efficacy study.
426.	Sahoo, S., Adak, T., Bagchi, T., Kumar, U., Munda, S., Saha, S., Berliner, J., Jena, M., Mishra, B.	2016	Non-target effects of pretilachlor on microbial properties in tropical rice soil	Environmental Science and Pollution Research International: 1-8	N	N/A	N/A	Soil type not relevant to EU.
427.	Sahoo, S., Adak, T., Bagchi, T., Kumar, U., Munda, S., Dahiya, S., Berliner, J., Jena, M., Mishra, B.	2017	Effect of Pretilachlor on Soil Enzyme Activities in Tropical Rice Soil	Bulletin of environmental contamination and toxicology 98 (3): 439-445	N	N/A	N/A	Study on soil enzyme activities in tropical rice soil not relevant to the EU.
428.	Saini, M., Chopra, S.	2015	Influence of weed control methods on weeds, yield, energetics and economics of basmati rice (<i>Oryza sativa</i>) under sub-montaneous conditions of Punjab	Indian Journal of Agronomy 60(3): 46-49	N	N/A	N/A	Agronomy study.

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					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
429.	Saito, Y., Kodama, S., Matsunaga, A., Yamamoto, A.	2004	Multi-residue determination of pesticides in agricultural products by gas chromatography-mass spectrometry with large volume injection	Journal of AOAC International 87 (6): 1356-1367	N	N/A	N/A	Analytical method for detection of pesticides in agricultural products.
430.	Saitoh, T., Yamaguchi, M., Hiraide, M.	2011	Surfactant-coated aluminum hydroxide for the rapid removal and biodegradation of hydrophobic organic pollutants in water	Water Research 45(4): 1879-1889	N	N/A	N/A	Study on the removal of hydrophobic organic pollutants in water.
431.	Sajjan, G., Jayadeva, H., Krishnamurthy, N.	2012	Residual effect of triasulfuron and other herbicides against greengram, blackgram and cowpea	Madras Agricultural Journal 99(10/12): 743-746	N	N/A	N/A	Agronomy study.
432.	Sana, A., Bharti, V.	2017	Efficacy of new and traditional herbicides in transplanted rice (<i>Oryza sativa</i>)	Environment and Ecology 35 (2B): 1164-1167	N	N/A	N/A	Efficacy study.
433.	Sangeetha, C., Velayutham, A., Thavaprakash, N.	2015	Impact of different crop-establishment methods and weed management practices on productivity of lowland rice (<i>Oryza sativa</i>).	Indian Journal of Agronomy 60(3): 414-419	N	N/A	N/A	Agronomy study.
434.	Sangeetha, S., Balakrishnan, A., Priya, R., Maheswari, J.	2011	Nutrient depletion by weeds, yield and economics of drum seeded rice influenced by weed management	Indian Journal of Weed Science (India) 43: 233-235	N	N/A	N/A	Agronomy study.
435.	Sanjay, M., Setty, T., Nanjappa, H.	2008	Investigation of crop establishment methods and weed management practices on productivity and economics in rice	Mysore Journal of Agricultural Sciences 42(1): 60-66	N	N/A	N/A	Agronomy study.
436.	Sapari, P., Ismail, B.	2012	Pollution levels of thiobencarb, propanil, and pretilachlor in rice fields of the muda irrigation scheme, Kedah, Malaysia	Environmental Monitoring and Assessment 184(10) :6347-56	N	N/A	N/A	Study to investigate pesticide pollution levels in Muda, Malaysia.
437.	Sarkar, S., Majumdar, B., Saha, A., Kundu, D.	2014	Effect of weed management on sisal (<i>Agave sisalana</i>) nursery	Indian Journal of Agronomy 59(3): 445-450	N	N/A	N/A	Agronomy study.

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					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
438.	Sasamoto, K., Ochiai, N., Kanda, H.	2007	Dual low thermal mass gas chromatography-mass spectrometry for fast dual-column separation of pesticides in complex sample	Talanta 72(4): 1637-1643	N	N/A	N/A	Analytical method for detection of pesticides.
439.	Satohisashi, N., Nagai, K., Keitakashi, I.	2012	Application of emission estimation model for pesticides of paddy fields to Kotsuki River	Kagoshima Prefecture Institute of Public Health and Environment Office Paper 13: 105-108	N	N/A	N/A	Modelling of pesticides in paddy fields.
440.	Saxena, D., Tewari, A., Rai, D.	2014	The <i>in vitro</i> effect of some commonly used fungicides, insecticides and herbicides for their compatibility with <i>Trichoderma harzianum</i> PBT23	World Applied Sciences Journal 31(4): 444-448	N	N/A	N/A	Microbiology study.
441.	Shang, D., Wei, S., Li, S.	2013	Determination of 72 pesticide residues in tomato paste by TSQ QUANTUM-GC	Food Science 34(12): 237	N	N/A	N/A	Analytical method for detection of pesticide residues in tomato paste.
442.	Shan, L., Liu, J., Yu, Y., Ambuchi, J., Feng, Y.	2016	Characterization of persistent colors and decolorization of effluent from biologically treated cellulosic ethanol production wastewater	Environmental Science and Pollution Research International 23 (10): 10215-10222	N	N/A	N/A	Analysis of colour compounds from biologically treated cellulosic ethanol production wastewater.
443.	Sharma, N., Reetu, T.	2013	Persistence of pretilachlor in soil and its terminal residues in rice crop	Pesticide Research Journal 25(2): 177-180	N	N/A	N/A	Study conducted in India. Not relevant to European conditions.
444.	Shen, W., Xu, J., Yang, W., Shen, C., Zhao, Z., Ding, T., Wu, B.	2007	Determination of acetanilide herbicide residues in tea by gas chromatography-mass spectrometry with two different ionization techniques	Chinese Journal of Chromatography 25(5):753-7	N	N/A	N/A	Analytical method for detection of acetanilide herbicide residues in tea.
445.	Shen, W., Yu, K., Gui, Q., Jiang, Y., Zhao, Z., Shen, C., Wu, B., Chu, X.	2009	Determination of 107 pesticide residues in vegetables using off-line dispersive solid-phase extraction and gas chromatography-tandem mass spectrometry	Chinese Journal of Chromatography 27(4): 391-400	N	N/A	N/A	Analytical method for detection of pesticide residues in vegetables.
446.	Shen, X., Gao, X., Eneji, A.E., Chen, Y.	2013	Chemical control of weedy rice in precise hill-direct-seeded rice in South China	Weed Biology and Management 13(1): 39-43	N	N/A	N/A	Agronomy study.

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447.	Shimamoto, S., Maeda, T., Kageyama, T., Yokoyama, R., Takahashi, M., Owada, K., Sakane, Y., Yamamoto, M.	2007	Study of the simultaneous analytical method for pesticide residues in agricultural products by gas chromatography with tandem mass spectrometry (GC/MS/MS)	Shizuoka-ken Kankyo Eisei Kagaku Kenkyusho Hokoku 50: 13-18.	N	N/A	N/A	Analytical method for detection of pesticide residues in agricultural products. Japanese language paper.
448.	Shimizu, M., Kobayashi, Y., Yoshizaki, M., Aoyagi, Y.	2012	Validation of testing method of pesticides in agricultural products by GC/MS	Niigata-ken Hoken Kankyo Kagaku Kenkyusho Nenpo 27: 71-75	N	N/A	N/A	Analytical method for detection of pesticides in agricultural products. Japanese language paper.
449.	Shreenivasa, K., Sukanya, T.	2017	Integrated pest management in paddy-technology performance in farmers' fields under frontline demonstrations	International Journal of Farm Sciences 7(1): 179-181	N	N/A	N/A	Efficacy study.
450.	Shukla, U., Srivastava, V., Singh, S., Kumar, V.	2014	Growth, yield and economic potential of rice (<i>Oryza sativa</i>) as influenced by different age of seedlings, cultivars and weed management under system of rice intensification.	The Indian Journal of Agricultural Sciences 84(5)	N	N/A	N/A	Agronomy study.
451.	Shukla, U., Srivastava, V., Singh, S., Ram, U., Pandey, A.	2015	Effect of seedlings age, cultivars and weed management on weed dynamics, nutrient removal and yield of rice (<i>Oryza sativa</i>) under system of rice intensification (SRI)	The Indian Journal of Agricultural Sciences 85(10)	N	N/A	N/A	Agronomy study.
452.	Shultana, R., Mamun, A., Rezvi, S., Selima, M.	2011	Performance of some pre emergence herbicides against weeds in winter rice.	Pakistan Journal of Weed Science Research 17(4): 365-372	N	N/A	N/A	Agronomy study.
453.	Sindhu, P.	2011	Stale seedbed and green manuring as an effective weed management strategy in dry-seeded rice (<i>Oryza sativa</i>).	Indian Journal of Agronomy 56(2): 109-115	N	N/A	N/A	Agronomy study.
454.	Sindhu, P., Thomas, G., Abraham, C.	2010	Seedbed manipulations for weed management in wet seeded rice.	Indian Journal of Weed Sciences 42(3-4): 173-179	N	N/A	N/A	Agronomy study.

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					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
455.	Singh, D., Tewari, A., Tripathi, A.	2007	Effect of herbicides on weed dynamics and yield of direct seeded puddled rice (<i>Oryza sativa</i>) under varying water regimes	Indian Journal of Agricultural Science 77(7): 415-149	N	N/A	N/A	Agronomy study.
456.	Singh, K., Gupta, S., Kumar, A., Mohan, D.	2014	Multispecies QSAR Modeling for Predicting the Aquatic Toxicity of Diverse Organic Chemicals for Regulatory Toxicology	Chemical Research in Toxicology 27(5): 741-753	N	N/A	N/A	QSAR modelling.
457.	Singh, M., Paikra, P.	2014	Bio-efficacy of post-emergence herbicides in transplanted rice of Chhattisgarh plains	The Bioscan 9(3): 973-976	N	N/A	N/A	Agronomy study.
458.	Singh, M., Paikra, P.	2015	Impact of post emergence herbicides on yield attributes and yield of transplanted rice in Chhattisgarh plain	Environment and Ecology 33(2): 665-670	N	N/A	N/A	Agronomy study.
459.	Singh, M., Singh, R.	2010	Influence of crop establishment methods and weed management practices on yield and economics of direct-seeded rice (<i>Oryza sativa</i>)	Indian Journal of Agronomy 55(3): 224-229	N	N/A	N/A	Agronomy study.
460.	Singh, M., Singh, R.	2010	Efficacy of herbicides under different methods of direct-seeded rice (<i>Oryza sativa</i>) establishments	Indian Journal of Agricultural Sciences 80(9): 815-819	N	N/A	N/A	Agronomy study.
461.	Singh, M., Singh, R., Singh, V., Singh, D.	2012	Nutrient removal by rice and associated weeds as affected by crop establishment methods and herbicides in direct seeded rice	New Agriculturist 23(2): 177-183	N	N/A	N/A	Agronomy study.
462.	Singh, N., Vashist, K., Mahal, S., Sidhu, A.	2012	Bio-efficacy of pretilachlor with varying irrigation regimes in furrow transplanted and furrow irrigated rice (<i>Oryza sativa</i> L.) in Punjab	Journal of Crop and Weed 8(2): 148-151	N	N/A	N/A	Agronomy study.
463.	Singh, N., Vashist, K., Mahal, S., Sidhu, A.	2013	Effect of varying irrigation regimes on irrigation water saving and water expense efficiency in furrow transplanted and furrow irrigated rice (<i>Oryza sativa</i> L.) on sandy loam soil in Central Punjab	International Journal of Agricultural Sciences 9(2): 647-652	N	N/A	N/A	Agronomy study.

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464.	Singh, S., Ladha, J., Gupta, R., Bhushan, L., Rao, A.	2008	Weed management in aerobic rice systems under varying establishment methods	Crop protection 27(3-5): 660-671	N	N/A	N/A	Agronomy study.
465.	Singh, S., Ladha, J., Gupta, R., Bhushan, L., Rao, A., Sivaprasad, B., Singh, P.	2007	Evaluation of mulching, intercropping with Sesbania and herbicide use for weed management in dry-seeded rice (<i>Oryza sativa</i> L.)	Crop Protection 26(4): 518-524	N	N/A	N/A	Agronomy study.
466.	Singh, V., Singh, S., Kumar, A., Banga, A., Tripathi, N.	2012	Effect of monsoon and weed management on growth and yield of direct-seeded rice	Indian Journal of Weed Science 44(3): 147-150	N	N/A	N/A	Agronomy study.
467.	Singh, V., Singh, S., Tripathi, N., Singh, M., Kumar, A.	2009	Bioefficacy of penoxsulam on transplanted rice weeds	Indian Journal of Weed Science 41(1-2): 28-32	N	N/A	N/A	Agronomy study.
468.	Singh, V.	2016	Bioefficacy of herbicides for weed management in transplanted rice	Indian Journal of Weed Science 48 (4): 432-434	N	N/A	N/A	Efficacy study.
469.	Singal, I., Sharma, K., Devi, S., Arya, S.	2017	Relative efficacy of different herbicides on Echinochloa accessions	Research on Crops 18 (2): 244-248	N	N/A	N/A	Efficacy study.
470.	Sivaperumal, P., Anand, P., Riddhi, L.	2015	Rapid determination of pesticide residues in fruits and vegetables, using ultra-high-performance liquid chromatography/time-of-flight mass spectrometry	Food Chemistry 168: 356-365	N	N/A	N/A	Analytical method for detection of pesticide residues in fruit and vegetables.
471.	Smith, M., Berdel, D., Nowak, D., Heinrich, J., Schulz, H.	2016	Physical Activity Levels and Domains Assessed by Accelerometry in German Adolescents from GINIplus and LISAPlus	PLoS One 11.3: e0152217	N	N/A	N/A	Physical activity levels of German adolescents.
472.	Smith, D., Lynam, K.	2016	Analysis of organochlorine pesticides and herbicides in water lower than µg·L ⁻¹ by Agilent J&W DB-35ms column and DB-XLB column and GC/µECD	Huanjing Huaxue 35 (10): 2211-2214	N	N/A	N/A	Analysis of organochlorine pesticides and herbicides in water. Chinese language paper.

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473.	Snelder, D.J., Masipiqueñab, M., de Snoo, G.	2008	Risk assessment of pesticide usage by smallholder farmers in the Cagayan Valley (Philippines)	Crop Protection 27(3-5): 747-762	N	N/A	N/A	Assessment of exposure to pesticides by smallholder farmers in the Philippines. Unlikely that the effects of pretilachlor can be separated from the other active substances also investigated.
474.	Son, N., Bang, P.	2011	Research finding on herbicides impacts to paddy rice aquatic fauna and born micro-organism	Science and Technology Journal of Agriculture and Rural Development 45-49.	N	N/A	N/A	Primary research findings to assist in choice of pesticides used in Vietnam.
475.	Song, W., Li, H., Wang, X., Zhang, M., Wu, Y.	2015	Effects of different herbicide combinations on weeds in rice fields	Nongyao 54(1): 63-65	N	N/A	N/A	Agronomy study. Chinese language paper.
476.	Steinbach, P., Schwack, W.	2013	Experiments for miniaturization and modification of the multi-pesticide residue method EN 12393	Trends in Chromatography 8: 113-129	N	N/A	N/A	Analytical method development for detection of pesticide residues.
477.	Su, J., Lin, G., Lian, W., Zhang, J., Chen, D.	2008	Two sample pretreatment methods and their applications in the determination of 111 pesticides and related chemicals in aquatic products	Chinese Journal of Chromatography 26(3): 292-300	N	N/A	N/A	Method for detection of pesticide residues in aquatic products.
478.	Su, J., Hu, C., Chen, J., Chen, P.	2009	Rapid determination of residual amounts of 103 pesticides in green soy bean by gas chromatography/mass spectrometry	Chinese Journal of Analysis Laboratory 2009-06	N	N/A	N/A	Analytical method for detection of pesticide residues in green soybean.
479.	Sudeep, M.	2017	Monitoring of multiclass pesticide residues in farmland soil from different districts of Haryana	Agricultural Research Journal 54 (1): 47-52	N	N/A	N/A	Monitoring of pesticides in soil in Haryana, India; not relevant to EU soil conditions.
480.	Sudo, M., Goto, Y., Okajima, T., Horiuchi, R., Odani, H.	2012	Effect of percolation flow on herbicide loss from rice paddies	Journal of Pesticide Science 37(2)	N	N/A	N/A	Japanese monitoring field study; not relevant to EU.
481.	Suganthi, M., Kandasamy, O., Subbian, P., Rajkumar, R.	2010	Bioefficacy evaluation and residue analysis of pretilachlor for weed control in transplanted rice-rice cropping system.	Madras Agricultural Journal 97(4-6): 138-141	N	N/A	N/A	Agronomy study.

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482.	Sumiyoshi, T.	2010	Effects of several herbicides on disc waterhyssop (<i>Bacopa rotundifolia</i> Wettst.): a naturalized paddy weed.	Report of the Kyushu Branch of the Crop Science Society of Japan 76: 41-44	N	N/A	N/A	Agronomy study.
483.	Sun, D., Liu, Y., Wu, X., Gu, Z., Guo, Z.	2013	Determination of respiratory irritants and chronic toxic components for pesticide formulations	Agrochemicals 10: 736-739	N	N/A	N/A	Analytical method for the determination of respiratory irritants and chronic toxic components of pesticide products.
484.	Suneja, S., Poonia, S., Yadav, D., Kukreja, K.	2008	Influence of continuous and rotational use of herbicides in rice under rice-wheat system on non-target soil microorganisms.	Research on Crops 3: 523-526	N	N/A	N/A	Agronomy study.
485.	Suncil, C., Shekara, B., Ashoka, P., Murthy, K., Madhukumar, V.	2011	Effect of integrated weed management practices on aerobic rice (<i>Oryza sativa</i> L.)	Research on Crops 12(3): 626-628	N	N/A	N/A	Agronomy study.
486.	Suncil, C., Shekara, B., Ashoka, P., Murthy, K., Madhukumar, V.	2011	Effect of integrated weed management practices on nutrient uptake in aerobic rice.	Research on Crops 12(3): 629-632	N	N/A	N/A	Agronomy study.
487.	Suresh, K., Nalliah, D., Daisy, M., Archana, H.	2014	Studies on weed management practices in transplanted rice	Trends in Biosciences 7(23): 3882-3885	N	N/A	N/A	Agronomy study.
488.	Suria, A., Juraimi, A., Rahman, M., Man, A., Selamat, A.	2011	Efficacy and economics of different herbicides in aerobic rice system	African Journal of Biotechnology 10(41): 8007-8022	N	N/A	N/A	Agronomy study.
489.	Sutherland, R., Campbell, E., Lubans, D., Morgan, P., Okely, A., Nathan, N., Gillham, K., Lecathelinais, C., Wiggers, J.	2016	Physical education in secondary schools located in low-income communities: Physical activity levels, lesson context and teacher interaction	Journal of Science and Medicine in Sport 19 (2): 135-41	N	N/A	N/A	Physical education report
490.	Tahara, M., Sugimoto, N., Ohtsuki, T., Tada, A., Akiyama, H., Goda, Y.	2012	Determination of the purities of commercial reagent products using qNMR for the ensuring the reliability of quantitative analysis	Journal of Environmental Chemistry 22(1): 33-41	N	N/A	N/A	Assessment of reagent purity.

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					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
491.	Takahashi, F., Kobayashi, K, Jin, J.	2016	Development and application of ultrasound-assisted microextraction to analysis of fenitrothion in environmental samples	Analytical and Bioanalytical Chemistry 408 (26): 7473-7479	N	N/A	N/A	Analysis of fenitrothion in environmental samples.
492.	Takahashi, Y., Houjyo, T., Kohjimoto, T., Takagi, Y., Mori, K., Muraoka, T., Annoh, H., Ogiyama, K., Funaki, Y., Tanaka, K., Wada, Y., Fujita, T.	2007	Impact of pretilachlor herbicide and pyridaphenthion insecticide on aquatic organisms in model streams	Ecotoxicology and Environmental Safety 67(2):227-329	N	N/A	N/A	Paddy fields in Japan not relevant to EU. Based on the abstract pretilachlor showed little impact on algae density.
493.	Takanashi, H., Kishida, M., Abiru, K., Kondo, T., Kameya, T., Matsushita, T., Nakajima, T., Ohki, A.	2013	A screening study on the mutagen formation potential of 44 pesticides	Journal of Water Supply: Research and Technology-AQUA 62(1): 14-22	N	N/A	N/A	Screening study on multiple pesticides.
494.	Takatori, S., Okihashi, M., Okamoto, Y., Kitagawa, Y., Kakimoto, S., Murata, H., Sumimoto, T., Tanaka, Y.	2008	A rapid and easy multiresidue method for the determination of pesticide residues in vegetables, fruits, and cereals using liquid Chromatography/tandem mass spectrometry	Journal of AOAC International 91(4): 871-883	N	N/A	N/A	Analytical method for detection of pesticide residues in vegetables, fruit and cereals.
495.	Takatori, S., Yamamoto, H., Fukui, N., Yamaguchi, S., Kitagawa, Y., Kakimoto, Y., Osakada, M., Okihashi, M., Kajimura, K., Obana, H.	2013	Validation study on a rapid multi-residue method for determination of pesticide residues in vegetables and fruits by LC-MS/MS	Journal of the Food Hygienic Society of Japan 54(3): 237-249	N	N/A	N/A	Analytical method for detection of pesticide residues in fruit and vegetables.

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496.	Takeuchi, S., Iida, M., Yabushita, H., Matsuda, T., Kojima, H.	2008	In vitro screening for aryl hydrocarbon receptor agonistic activity in 200 pesticides using a highly sensitive reporter cell line, DR-EcoScreen cells, and in vivo mouse liver cytochrome P450-1A induction by propanil, diuron and linuron	Chemosphere 74(1): 155-65	N	N/A	N/A	Screening for aryl hydrocarbon receptor agonistic activity in pesticides.
497.	Tamura, Y., Takano, I., Kobayashi, M., Otsuka, K., Tomizawa, S., Kamijo, K., Kageyama, Y., Nagayama, T.	2008	Survey of Pesticide Residues in Imported Crops (Organophosphorus and Organonitrogen Pesticides) (Apr. 2007-Mar. 2008)	Annual Report Tokyo Metropolitan Institute of Public Health 59: 199-205	N	N/A	N/A	Pesticide residues survey in Tokyo.
498.	Tamura, Y., Takano, I., Kobayashi, M., Tomizawa, S., Tateishi, Y., Sakai, N., Kamijo, K., Ibe, A.	2006	Classified Analysis of Residual Pesticides in Food by GC and GC/MS	Annual Report Tokyo Metropolitan Institute of Public Health 57: 173-178	N	N/A	N/A	Analytical method for detection of pesticide residues in food.
499.	Tang, Y., Li, L., Zhou, Y., Jiang, H.	2007	Field efficacy experiment of 30% pretilachlor controlling grassy weed on the direct seeding field of paddy rice	Modern Agrochemicals 2: 54-56	N	N/A	N/A	Efficacy study.
500.	Tani, K., Matsui, Y., Iwao, K., Kamata, M., Matsushita, T.	2012	Selecting analytical target pesticides in monitoring: sensitivity analysis and scoring	Water Research 46(3): 741-749	N	N/A	N/A	Development of scoring system for use in pesticide monitoring.
501.	Tani, K., Matsui, Y., Narita, K., Ohno, K., Matsushita, T.	2010	Sensitivity analysis using a diffuse pollution hydrologic model to assess factors affecting pesticide concentrations in river water	Water Science and Technology : a Journal of the International Association on Water Pollution Research 62(11): 2579-89	N	N/A	N/A	Development of scoring system for use in pesticide monitoring.
502.	Tanveer, A., Khaliq, A., Ali, H., Mahajan, G., Singh, Chauhan, B.	2015	Interference and management of parthenium: the world's most important invasive weed	Crop Protection 68: 49-59	N	N/A	N/A	Agronomy study.
503.	Tanveer, A., Khaliq, A., Siddiqui, M.	2013	Review on genus <i>Alternanthera</i> weeds implications.	Pakistan Journal of Weed Science Research 19(1): 53-58	N	N/A	N/A	Academic paper on the agronomic implications of <i>Alternanthera</i> weeds.

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					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
504.	Tao, T., Jianping, L., Ducai, L.	2009	Adaptability of the new techniques for pesticide control of main diseases and insect pests in medium super hybrid rice	Plant Protection 2009-01	N	N/A	N/A	Agronomy study.
505.	Tavakoli, M., Hajimahmoodi, M., Shemirani, F.	2014	Trace level monitoring of pesticides in water samples using fatty acid coated magnetic nanoparticles prior to GC-MS	Analytical Methods 6(9): 2988-2997	N	N/A	N/A	Analytical method for detection of pesticides in water.
506.	Telford, R., Olive, L., Cochrane, T., Davey, R., Telford, R.	2016	Outcomes of a four-year specialist-taught physical education program on physical activity: a cluster randomized controlled trial, the LOOK study	The International Journal of Behavioral Nutrition and Physical Activity 13: 64	N	N/A	N/A	Physical education report.
507.	Tian, H., Zhou, T., Liu, P., Chen, B.	2009	Development and application of multi-residue analysis of 15 herbicides in grains	Food Science 2009-14	N	N/A	N/A	Analytical method for detection of pesticide residues in grain.
508.	Toan, P., Sebesvari, Z., Bläsing, M., Rosendahl, I., Renaud, F.	2013	Pesticide management and their residues in sediments and surface and drinking water in the Mekong Delta, Vietnam	The Science of the Total Environment 452-453: 28-39	N	N/A	N/A	Survey of pesticide use in the Mekong Delta, Vietnam.
509.	Tomizawa, S., Kobayashi, M., Otsuka, K., Tamura, Y., Kamijo, K., Iwakoshi, K., Kageyama, Y., Takano, I., Nagayama, T.	2009	Survey of pesticide residues in domestic vegetables and fruits (Apr. 2008 - Mar. 2009)	Annual Report of Tokyo Metropolitan Institute of Public Health 60: 159-164	N	N/A	N/A	Pesticide residues survey in Tokyo.
510.	Tomizawa, S., Kobayashi, M., Otsuka, K., Tamura, Y., Kamijo, K., Iwakoshi, K., Sato, C., Nagayama, T., Takano, I.	2010	Survey of pesticide residues in imported crops (organophosphorus and organonitrogen pesticides) (April 2009 - March 2010)	Annual Report of Tokyo Metropolitan Institute of Public Health 61: 289-295	N	N/A	N/A	Pesticide residues survey in Tokyo.

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511.	Tong, Y; Zhao, L., Xing, L., Luo, Y., Jing, L., Tong, LJ.	2008	High yield cultivation technique for rice in bottom and deep mud field in cold region	Beifang Shuidao 38(1): 57-59	N	N/A	N/A	Agronomy study. Chinese language paper.
512.	Tong, Z. <i>et al</i>	2016	Effects of three herbicides and applying doses on japonica rice in cold regions	Zhiwu Baohu 42 (2): 114-118	N	N/A	N/A	Efficacy study. Chinese language paper.
513.	Trinh, H., Duing, H., Ta, T., Van Cao, H., Strobel, B., Le, G.	2017	Simultaneous effect of dissolved organic carbon, surfactant, and organic acid on the desorption of pesticides investigated by response surface methodology	Environmental Science and Pollution Research International 24 (23): 19338-19346	N	N/A	N/A	Desorption of fenobucarb, endosulfan and DDT in rice fields.
514.	Tripathi, P., Lal, P.	2008	Growth and yield attributes of transplanted rice as influenced by weed control methods	International Journal of Agricultural Sciences 4(1): 355-358	N	N/A	N/A	Agronomy study.
515.	Tripathi, P., Lal, P.	2008	Weed control and nitrogen losses through weeds in transplanted rice.	International Journal of Agricultural Sciences, 4(1): 404-407	N	N/A	N/A	Agronomy study.
516.	Tseng, S., Lin, Y., Lee, H., Su, S., Chou, S., Hwang, D.F.	2007	A multiresidue method for determining 136 pesticides and metabolites in fruits and vegetables: application of macroporous diatomaceous earth column	Journal of Food and Drug Analysis 15(3): 316-324	N	N/A	N/A	Analytical method for detection of pesticide residues in fruit and vegetables.
517.	Tsuchiyama, T., Katsuhara, M., Nakajima, M.	2017	Compensation of matrix effects in gas chromatography-mass spectrometry analysis of pesticides using a combination of matrix matching and multiple isotopically labeled internal standards	Journal of Chromatography A 1524: 233-245	N	N/A	N/A	Determination of pesticides from different matrices
518.	Tsuda, T., Igawa, T., Tanaka, K.	2011	Results of survey on pesticides in water from Lake Biwa and rivers around Lake Biwa	Journal of Environmental Laboratories Association 36: 81-87	N	N/A	N/A	Survey of pesticides in water in and around Lake Biwa, Japan. Japanese language paper.
519.	Tsuda, T., Igawa, T., Tanaka, K., Hirota, D.	2011	Changes of concentrations, shipment amounts and ecological risk of pesticides in river water flowing into Lake Biwa	Bulletin of Environmental Contamination and Toxicology 87(3): 307-311	N	N/A	N/A	Survey of pesticides in river water flowing into Lake Biwa, Japan; not relevant to EU.

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520.	Tsuda, T., Nakamura, T., Inoue, A., Tanaka, K.	2009	Pesticides in water and sediment from littoral area of Lake Biwa	Bulletin of Environmental Contamination and Toxicology 82(6): 683-689	N	N/A	N/A	Survey of pesticides in water and sediment in Lake Biwa, Japan; not relevant to EU.
521.	Tsuda, T., Nakamura, T., Inoue, A., Tanaka, K.	2009	Pesticides in water, fish and shellfish from littoral area of Lake Biwa	Bulletin of Environmental Contamination and Toxicology 82(6): 716-721	N	N/A	N/A	Survey of pesticides in water, fish and shellfish in Lake Biwa, Japan; not relevant to EU. Pretilachlor was found to have comparatively lower bioconcentration factors when compared to other pesticides surveyed.
522.	Tsuda, T., Nakamura, T., Inoue, A., Tanaka, K.	2009	Evaluation of pesticide concentrations in Lake Biwa water by their shipment amounts	Journal of Environmental Chemistry 19(2): 221-228	N	N/A	N/A	Survey of pesticides in water in Lake Biwa, Japan; not relevant to EU.
523.	Tsuruta, T., Iguchi, K., Tada, T., Kotera, N., Akagawa, I.	2010	Effects of predators and herbicides on community structure of benthic invertebrates in paddy fields around the Chikuma river	Japanese Journal of Limnology 70(1): 1-11	N	N/A	N/A	Survey and comparison of benthic invertebrates in two areas around the Chikuma River, Japan; not relevant to EU. Cannot differentiate the effects of pretilachlor alone as multiple active substances were applied to area surveyed.
524.	Uranishi, K., Yamashita, H., Okayama, A., Yamamoto, K.	2012	Validation study on a method for multiresidue analysis of pesticides in cereals and pulses with supercritical fluid extraction	Journal of the Food Hygienic Society of Japan 53(6): 278-290	N	N/A	N/A	Analytical method for detection of pesticide residues in cereals and pulses.
525.	Uranishi, K., Yamashita, H., Yamamoto, K.	2012	Validation study on a method for multiresidue analysis of pesticides in vegetables and fruits with supercritical fluid extraction	Journal of the Food Hygienic Society of Japan 53(1): 63-74	N	N/A	N/A	Analytical method for detection of pesticide residues in fruit and vegetables.
526.	Vallal, K. S.	2016	Compendium for mechanised direct sown rice cultivation in Cauvery New Delta Zone	Madras Agricultural Journal 103 (4-6): 110-113	N	N/A	N/A	Agronomy study.

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527.	Vikram, P., Swamy, B., Dixit, S., Trinidad, J., Crus, M., Maturan, P., Amante, M., Kumar, A.	2016	Linkages and Interactions Analysis of Major Effect Drought Grain Yield QTLs in Rice	PLoS One 11.3: e0151532	N	N/A	N/A	Resistance study.
528.	Wahl-Alexander, Z., Morehead, C.	2017	Comparing Campers' Physical Activity Levels Between Sport Education And Traditional Instruction in a Residential Summer Camp	Journal of Physical Activity & Health 14 (9): 665-670	N	N/A	N/A	Physical education report
529.	Walia, U., Walia, S., Sidhu, A., Nayyar, S.	2012	Bioefficacy of pre-and post-emergence herbicides in direct-seeded rice in Central Punjab	Indian Journal of Weed Science 44(1): 30-33	N	N/A	N/A	Agronomy study.
530.	Wang, F., Li, T., Ma, C.	2013	Determination of triazole fungicide and triazine herbicide residues in Chinese herbs by ultra-performance liquid chromatography-tandem mass spectrometry	Chinese Journal of Chromatography 31(3): 191-199	N	N/A	N/A	Analytical method for detection of herbicide residues in Chinese herbs.
531.	Wang, H., Chen, Z., Shen, J., Xiang, F., Liu, Y., Zhai, X.	2011	Rapid determination of four acetanilide herbicides in water by liquid-liquid micro-extraction and gas chromatography	China Water & Wastewater 27(12): 90-93	N	N/A	N/A	Analytical method for detection of acetanilide herbicides in water.
532.	Wang, J., Cheung, W.	2016	UHPLC/ESI-MS/MS determination of 187 pesticides in wine	J. AOAC Int. 99 (2):539-57	N	N/A	N/A	Determination of pesticides in wine.
533.	Wang, J., Cheung, W., Chow, W.	2013	Ultra-high performance liquid chromatography/electrospray ionization-tandem mass spectrometry determination of 151 pesticides in soybeans and pulses	Journal of AOAC International 96(5): 114-1133	N	N/A	N/A	Analytical method for detection of pesticides in soybeans and pulses.
534.	Wang, J., Cheung, W., Leung, D.	2014	Determination of Pesticide Residue Transfer Rates (Percent) from Dried Tea Leaves to Brewed Tea	Journal of Agricultural and Food Chemistry 62(4): 966-983	N	N/A	N/A	Study of the transfer of pesticides from dried tea leaves to brewed tea.

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535.	Wang, J., Chow, W., Chang, J., Wong, J.	2014	Ultrahigh-performance liquid chromatography electrospray ionization q-Orbitrap mass spectrometry for the analysis of 451 pesticide residues in fruits and vegetables: Method development and validation	Journal of Agricultural and Food Chemistry 62(42): 10375-10391	N	N/A	N/A	Analytical method for detection of pesticide residues in fruit and vegetables.
536.	Wang, J., Chow, W., Chang, J., Wong, J.	2017	Development and Validation of a Qualitative Method for Target Screening of 448 Pesticide Residues in Fruits and Vegetables Using UHPLC/ESI Q-Orbitrap Based on Data-Independent Acquisition and Compound Database	J. Agric. Food Chem. 65 (2): 473–493	N	N/A	N/A	Determination of pesticides in fruit and vegetables.
537.	Wang, J., Chow, W., Cheung, W.	2011	Application of a Tandem Mass Spectrometer and Core-Shell Particle Column for the Determination of 151 Pesticides in Grains	Journal of Agricultural and Food Chemistry 59(16): 8589-8608	N	N/A	N/A	Analytical method for detection of pesticides in grains.
538.	Wang, J., Chow, W., Leung, D.	2011	Applications of LC/ESI-MS/MS and UHPLC/Qq-TOF-MS for the Determination of 141 Pesticides in Tea	Journal of AOAC International 94(6): 1685-1714(30)	N	N/A	N/A	Analytical method for detection of pesticides in tea.
539.	Wang, J., Chow, W., Leung, D., Chang, J.	2012	Application of ultrahigh-performance liquid chromatography and electrospray ionization quadrupole orbitrap high-resolution mass spectrometry for determination of 166 pesticides in fruits and vegetables	Journal of Agricultural and Food Chemistry 60(49): 12088-12104	N	N/A	N/A	Analytical method for detection of pesticide residues in fruit and vegetables.
540.	Wang, J., He, Z., Wang, L., Xu, Y., Peng, Y., Liu, X.	2017	Automatic single-step quick, easy, cheap, effective, rugged and safe sample preparation devices for analysis of pesticide residues in foods	Journal of Chromatography A 1521: 10-18	N	N/A	N/A	Determination of pesticide residues in foods.

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541.	Wang, J., Leung, D.	2009	Applications of Ultra-performance Liquid Chromatography Electrospray Ionization Quadrupole Time-of-Flight Mass Spectrometry on Analysis of 138 Pesticides in Fruit- and Vegetable-Based Infant Foods	Journal of Agricultural and Food Chemistry 57(6): 2162-2173	N	N/A	N/A	Analytical method for detection of pesticides in fruit and vegetable based infant foods.
542.	Wang, J., Leung, D.	2009	Determination of 142 pesticides in fruit- and vegetable-based infant foods by liquid chromatography/electrospray ionization-tandem mass spectrometry and estimation of measurement uncertainty	Journal of AOAC International 92(1): 279-301	N	N/A	N/A	Analytical method for detection of pesticides in fruit and vegetable based infant foods.
543.	Wang, J., Leung, D., Chow, W.	2010	Applications of LC/ESI-MS/MS and UHPLC QqTOF MS for the Determination of 148 Pesticides in Berries	Journal of Agricultural and Food Chemistry 58(10): 5904-5925	N	N/A	N/A	Analytical method for detection of pesticides in berries.
544.	Wang, J., Wang, Y., Mu, J., Chu, X.	2009	Determination of herbicide residues in vegetables by GC-MS with two different ionization techniques	Chinese Journal of Analysis Laboratory 2009-03	N	N/A	N/A	Analytical method for detection of herbicide residues in vegetables.
545.	Wang, L., Li, C., Li, C., Li, X., Xu, C., Tian, J.	2008	A rapid multi-residue determination method of herbicides in grain by GC-MS-SIM	Journal of Chromatographic Science 46(5): 424-429	N	N/A	N/A	Analytical method for detection of herbicide residues in grain.
546.	Wang, M., Huang, W., Zhou, Y.M., Huang J., Yian, Z.	2009	Application of sofit 30% EC against weeds and weedy rice on direct seeding rice field	Modern Agrochemicals 4: 54-56	N	N/A	N/A	Efficacy trial.
547.	Wang, Q., Zheng, Y., Zhang, X., Han, X., Wang, T., Zhang, Z.	2015	A silica coated paper substrate: development and its application in paper spray mass spectrometry for rapid analysis of pesticides in milk	The Analyst 140(23): 8048-8056	N	N/A	N/A	Analytical method for detection of pesticides in milk.
548.	Wang, T., Hu, J.	2012	Multiresidue analysis of 20 herbicides in soil and water by gas chromatography-mass spectrometry	Chinese Journal of Pesticide Science 2012-06	N	N/A	N/A	Analytical method for detection of pesticide residues in soil and water.

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549.	Wang, Y., Jin, H., Ma, S., Lu, J., Lin, R.	2011	Determination of 195 pesticide residues in Chinese herbs by gas chromatography-mass spectrometry using analyte protectants	Journal of Chromatography A 1218(2): 334-42	N	N/A	N/A	Analytical method for detection of pesticide residues in Chinese herbs.
550.	Wang, Y., Jin, H., Sun, L., Ma, S.	2011	Research of pretreatment platform for simultaneous determination of 198 pesticides in traditional Chinese medicine	Chinese Journal of Pharmaceutical Analysis 31(12): 2199-2207	N	N/A	N/A	Methods to determine pesticides in Chinese medicine.
551.	Wang, Y., Jin, X., Zhao, D., Guo, X., Li, R.	2015	Molecularly imprinted solid-phase extraction coupled with gas chromatography for the determination of four chloroacetamide herbicides in soil	Analytical Methods 7(15): 6411-6418	N	N/A	N/A	Analytical method for detection of chloroacetamide herbicides in soil.
552.	Wang, Y., Wu, S., Chen, L., Wu, C., Yu, R., Wang, Q., Zhao, X.	2012	Toxicity assessment of 45 pesticides to the epigeic earthworm <i>Eisenia fetida</i>	Chemosphere 88(4): 484-491	N	N/A	N/A	Comparative toxicities of pesticides to <i>E. fetida</i> , filter paper studies not a relevant route of exposure and acute studies are not a data requirement.
553.	Wang, Y., Zhao, D., Jin, X., Guo, X., Li, R.	2015	Preparation and characterization of molecular imprinted polymers for chloroacetamide herbicides	Agrochemicals 2015-04	N	N/A	N/A	Development of analytical methods used with chloroacetamide herbicides.
554.	Wang, Z., Chang, Q., Kang, J., Cao, Y., Ge, N., Fan, C., Pang, G.	2015	Screening and identification strategy for 317 pesticides in fruits and vegetables by liquid chromatography-quadrupole time-of-flight high resolution mass spectrometry	Analytical Methods 7: 6385-6402	N	N/A	N/A	Analytical method for detection of pesticides in fruit and vegetables.
555.	Wang, Z., Wang, B., Zhang, M., Luo, X.	2016	Synchronous spraying technology with weeding and dynamic rule of herbicide degradation	Transactions of the Chinese Society of Agricultural Engineering 32 (16): 59-64	N	N/A	N/A	Agronomy study. Chinese language paper.
556.	Watanabe, S., Uemura, H., Murakami, K.	2007	Degradation of pesticides by chlorination in the process of water treatment for drinking	Kanagawa-ken Eisei Kenkyusho Kenkyu Hokoku 37: 1-5	N	N/A	N/A	Degradation of pesticides by chlorination. Japanese language paper.

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557.	Weaver, R., Brazendale, K., Chandler, J., Turner-McGrievy, G., Moore, J., Huberty, J., Ward, D., Beets, M.	2017	First year physical activity findings from turn up the HEAT (Healthy Eating and Activity Time) in summer day camps	PLoS One 12.3: e0173791.	N	N/A	N/A	Physical education report.
558.	Weaver, R., Webster, C., Erwin, H., Beighle, A., Beets, M., Choukroun, H., Kaysing, N.	2016	Modifying the System for Observing Fitness Instruction Time to Measure Teacher Practices Related to Physical Activity Promotion: SOFIT+	Measurement in Physical Education and Exercise Science 20 (2): 121-130	N	N/A	N/A	Physical education report.
559.	Wei, J., Feng, Y., Liu, J., Zhu, L.	2011	Preparation and electrocatalytic characteristics of ceramic ring particle electrodes loaded with Sb doped SnO ₂	Journal of The Chinese Ceramic Society 39(5): 799-805	N	N/A	N/A	Analytical methodology.
560.	Wei, J., Feng, Y., Sun, X., Liu, J., Zhu, L.	2011	Effectiveness and pathways of electrochemical degradation of pretilachlor herbicides	Journal of Hazardous Materials 189(1-2): 84-91	N	N/A	N/A	Electrochemical degradation pathways of pretilachlor.
561.	Wei, S., Fu, D., Ji, M., Gu, Z., Oi, Z. Wang, Y.	2010	Pot experiment of two chemical herbicides on weedy rice	Agrochemicals 11: 844-846	N	N/A	N/A	Efficacy study.
562.	Wu, C.	2017	Multiresidue method for the determination of pesticides in Oolong tea using QuEChERS by gas chromatography-triple quadrupole tandem mass spectrometry	Food Chem. 229: 580-587	N	N/A	N/A	Determination of pesticides in Oolong tea.
563.	Wu, G., Bao, X., Zhao, S., Wu, J., Han, A., Ye, Q.	2011	Analysis of multi-pesticide residues in the foods of animal origin by GC-MS coupled with accelerated solvent extraction and gel permeation chromatography cleanup	Food Chemistry 126(2): 646-654	N	N/A	N/A	Analytical method for detection of pesticide residues in foods of animal origin.
564.	Wu, Y., Kang, Q.H., Liu, Y.	2010	GC-MS determination of residual acetanilide herbicides in cereals after purification with gel permeation chromatography and solid-phase extraction	Physical Testing and Chemical Analysis Part B: Chemical Analysis 9:1066-1069	N	N/A	N/A	Analytical method for detection of acetanilide herbicide residues in cereals.

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					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
565.	Wu, S., Yao, H., Lu, Z., Li, X., Huang, J., Ye, G.	2012	Contact toxicities of various pesticides commonly applied in the paddy field to <i>Cotesia chilonis</i> female adults from four different locations.	Acta Phytophyl Sinica 39(4):369-375	N	N/A	N/A	Academic paper on the comparison of pesticide toxicities to <i>C. chilonis</i> .
566.	Wyszkowska, J., Tomliel, Bacmaga, M., Borowik, A, Kucharski, J.	2016	Response of microorganisms and enzymes to soil contamination with a mixture of pethoxamid terbuthylazine	Environmental Earth Sciences 75 (18): 1-12	N	N/A	N/A	Effects of pethoxamid and terbuthylazine to soil microorganisms and enzymes.
567.	Xia, G., Fang, X., Wang, Y., Yang, X.	2016	Determination of Herbicides in Corn Flour by Novel Extraction and Gas Chromatography-Mass Spectrometry	Journal of Analytical Letters 50 (5) 787-796	N	N/A	N/A	Determination of herbicides in corn flour.
568.	Xiangmei, Z., Ying, D., Hesheng, W., Yunxian, T., Xiuqin, C.	2010	Determination of multi-residues for 12 pesticides in rice by QuEChERS and GC-MS-SIM	Journal of Chinese Institute of Food Science and Technology 2: 50	N	N/A	N/A	Analytical method for detection of pesticide residues in rice.
569.	Xiao, Z., Le, C., Xu, Z., Gu, Z., Lu, J, Shamsi, I.	2017	Vertical Leaching of Allelochemicals Affecting Their Bioactivity and the Microbial Community of Soil	Journal of Agricultural and Food Chemistry 65 (36): 7847-7853	N	N/A	N/A	Academic research on soils not relevant to the EU. Chinese language paper.
570.	Xie, L., Lan, F., Lin, L., Jin, B., Zhao, Q., Wu, W., Han, R.	2008	Determination of multiple acetanilide herbicide residues in cereals and oil seeds by capillary gas chromatography	Food Science 29(2): 310-313	N	N/A	N/A	Analytical method for detection of acetanilide herbicide residues in cereals and oil seeds.
571.	Xie, L., Lan, F., Lin, L., Zhao, Q.H., Jin, B., Wu, W., Cai, Y.	2007	Simultaneous determination of multiple amide herbicide residues in cereals and oilseeds by gas chromatography-mass spectrometry	Journal of Instrumental Analysis 2007-03	N	N/A	N/A	Analytical method for detection of amide herbicide residues in cereals and oil seeds.
572.	Xu, Q., Lu, D., Feng, C., Xiong, L., Wang, G.	2014	Determination of 97 pesticide residues in processed vegetarian dietary sample by gas chromatography-triple quadrupole mass spectrometry	Journal of Food Safety and Quality 5(2): 359-368	N	N/A	N/A	Analytical method for detection of pesticide residues in vegetarian diet.
573.	Xu, X., Li, L., Zhong, W., He, Y.	2009	Multi-residue analysis of 205 crop pesticides using mini-solid phase extraction-large volume injection-GC-MS	Chromatographia 70: 173-183	N	N/A	N/A	Analytical method for detection of pesticide residues.

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574.	Xyu, X., Tang, W., Chen, J., Yao, Y.	2013	Herbicidal activity of soil treatment herbicides in different types of soils	Acta Agriculturae Zhejiangensis 25(4): 823-826	N	N/A	N/A	Agronomy study. Chinese language paper.
575.	Yadav, D., Yadav, A., Malik, R., Gill, G.	2011	Efficacy of azimsulfuron alone and as tank-mix with metsulfuron-methyl for weed control in wet direct seeded rice	Environment and Ecology 29(4): 1729-1735	N	N/A	N/A	Efficacy study.
576.	Yadav, D., Yadav, A., Malik, R., Gill, G.	2011	Optimization of dose and time of application of bispyribac sodium for weed control in direct seeded rice	Environment and Ecology 29(4): 1736-1741	N	N/A	N/A	Agronomy study.
577.	Yadav, D., Yadav, A., Kamboj, B., Dahiya, S., Gill, G.	2011	Direct seeded rice in haryana, and options for pre-emergence herbicides	Environment and Ecology 29(4): 1745-1751	N	N/A	N/A	Agronomy study.
578.	Yadav, D., Yadav, A., Malik, R., Gill, G.	2011	Evaluation of bispyribac in combination with other herbicides for post-emergence control of complex weed flora in direct seeded rice	Environment and Ecology 29(4): 1832-1836	N	N/A	N/A	Agronomy study.
579.	Yadav, D., Yadav, A., Malik, R., Gill, G.	2011	Combination of bispyribac-sodium with azimsulfuron or pyrazosulfuron for control of complex weed flora in direct seeded rice	Environment and Ecology 29(4): 1840-1844.	N	N/A	N/A	Agronomy study.
580.	Yadav, D., Yadav, A., Punia, S., Balyan, R.	2008	Evaluation of azimsulfuron for the control of complex weed flora in transplanted rice.	Indian Journal of Weed Science 40(3-4): 132-136	N	N/A	N/A	Agronomy study.
581.	Yakadri, M., Madhavi, M., Ramprakash, T., Rani, L	2016	Herbicide combinations for control of complex weed flora in transplanted rice	Indian Journal of Weed Science 48(2): 155-157	N	N/A	N/A	Efficacy study.
582.	Yamada, K., Okamura, Y., Wada, T.	2008	Determination of pesticide residues in vegetable oils by GC/MS spectrometry	Shimadzu Hyoron 65(1/2): 15-23.	N	N/A	N/A	Analytical method for detection of pesticide residues in vegetable oils. Japanese language paper.
583.	Yan, R., Shao, M., Ju, F., Song, D.	2013	Determination of pesticides in soil by accelerated solvent extraction-liquid chromatography tandem mass spectrometry	Chinese Journal of Analytical Chemistry 2: 27	N	N/A	N/A	Analytical method for detection of pesticides in soil.

No.	Author	Year	Title	Reference	Meet relevance criteria	Meet Reliability Criteria		Comments
					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
584.	Yamada, K., Wada, T., Okamura, Y., Hine, T.	2007	Examination of simplified analysis of pesticide residues in agricultural products. Comparison of improved QuEChERS method with other analysis methods	Shimadzu Hyoron 64(3/4): 185-196	N	N/A	N/A	Analytical method for detection of pesticide residues in agricultural products. Japanese language paper.
585.	Yang, P., Chang, J.S., Wong, J., Zhang, K., Krynitsky, A.J., Bromirski, M., Wang, J.	2015	Effect of Sample Dilution on Matrix Effects in Pesticide Analysis of Several Matrices by Liquid Chromatography-High-Resolution Mass Spectrometry	Journal of Agricultural and Food Chemistry 63(21): 5169-5177	N	N/A	N/A	Analytical method for detection of pesticides.
586.	Yao, C., Shi, Z., Cao, Y., Shi, L., Wang, N., Pang, G.	2010	Determination of 164 pesticide residues in animal fat by gel permeation chromatography-gas chromatography-tandem mass spectrometry	Chinese Journal of Analysis Laboratory 2: 20	N	N/A	N/A	Analytical method for detection of pesticide residues in animal fat.
587.	Yi, X., Shi, Y., Zhao, S., Meng, L., Pan, X., Sheng, Y., Han, L., Zhu, J., Deng, X., Duo, D.	2016	Rapid screening of 182 pesticide residues in foods by gas chromatography coupled with quadrupole-time of flight mass spectrometry	Chinese Journal of Chromatography 34 (11): 1097-1105	N	N/A	N/A	Determination of pesticides in foods. Chinese language paper.
588.	Yin, C., Wei, M., Liu, H.	2017	Predictive models for identifying the binding activity of structurally diverse chemicals to human pregnane X receptor	Environmental Science and Pollution Research International 24 (24): 20063-20071	N	N/A	N/A	Development of classification models used to identify the binding activity of structurally diverse chemicals to human pregnane X receptor.
589.	Yoamin, Z., Yan, X., Linfeng, Y., Lifang, H., Linguang, L.	2010	QuEChERS and gas chromatography determination of amide herbicides in rice	Journal of the Chinese Cereals and Oils Association 8: 27	N	N/A	N/A	Analytical method for detection of amide herbicides in rice.
590.	Yoshida, M., Suzuki, D., Matsumoto, K., Shirota, M., Inoue, K., Takahashi, M., Morita, T., Ono, A.	2013	Simulation of acute reference dose (ARfD) settings for pesticides in Japan	The Journal of Toxicological Sciences 38(2): 205-214	N	N/A	N/A	Development of guidelines for ARfD settings in Japan.

No.	Author	Year	Title	Reference	Meet relevance criteria	Meet Reliability Criteria		Comments
					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
591.	Yoshida, T., Murakawa, H., Hukushima, K., Yoshimoto, H., ; Tobino, T.	2008	Pesticide residue monitoring method in agricultural products with shaking and salting-out	Kumamoto-ken Hoken Kankyo Kagaku Kenkyushoho 38: 40-50	N	N/A	N/A	Monitoring method for detection of pesticide residues in agricultural products. Japanese language paper.
592.	Yoshioka, T., Kenmotsu, K., Fujiwara, H., Nakagiri, M., Maeda, D., Takano, H., Fujita, K.	2009	Environmental survey of pesticides in the river water of Okayama	Okayama Prefecture Environmental Health Centre Annual Report 33:65-72	N	N/A	N/A	Survey of pesticides in river water in Okayama, Japan. Japanese language paper.
593.	Yu, L., Song, W., Lu, Y., Zhao, M., Zhou, F., Hu, Y., Zheng, P.	2015	Rapid determination of 204 pesticide residues in tea by ultra performance liquid chromatography coupled with quadrupole-time of flight mass spectrometry	Chinese Journal of Chromatography 33(6): 597-612	N	N/A	N/A	Analytical method for detection of pesticide residues in tea.
594.	Zhao, X., Wang, L., Zheng, X., Liu, Y., Wang, L. Wu, L., Li, Q.	2014	Control effect and security of pretilachlor-mesotrione 5% GR against weeds in transplanted rice field	Agrochemicals 5: 363-365	N	N/A	N/A	Efficacy study.
595.	Zhang, B., Zhang, Z., Jin, Y., Xu, J., Dong, L.	2015	Control technology of pretilachlor for weedy rice in direct-seeded rice	Plant Protection 41(2): 205-209	N	N/A	N/A	Agronomy study.
596.	Zhang, F., Fu, H., Zhang, Y., Liang, X.	2010	Preliminary report on weeds' chemical control in directly sowing rice field	Modern Agrochemicals 2010-02	N	N/A	N/A	Agronomy study.
597.	Zhang, G., Zang, X., Li, Z., Chang, Q., Wang, C., Wang, Z.	2014	Solid phase microextraction using a graphene composite-coated fiber coupled with gas chromatography for the determination of acetanilide herbicides in water samples	Analytical Methods 6(8): 2756-2761	N	N/A	N/A	Analytical method for detection of acetanilide herbicides in water.
598.	Zhang, H., Chen, Z., Yang, G., Wang, W., Li, X., Li, R., Wu, Y.	2008	Microwave pretreatment and gas chromatography-mass spectrometry determination of herbicide residues in onion	Analytical Methods 108(1): 322-328	N	N/A	N/A	Analytical method for detection of herbicide residues in onion.

No.	Author	Year	Title	Reference	Meet relevance criteria	Meet Reliability Criteria		Comments
					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
599.	Zhang, H., Zhang, P., Wang, Y., Niu, S., Zhou, Y., Liu, X., Ma, W.	2007	Rapid determination of six herbicides in corn by gas chromatography	World Pesticides 2: 50-52	N	N/A	N/A	Analytical method for detection of herbicides in corn.
600.	Zhang, J., Zheng, J., Liang, B., Wang, C. Cai, S., Ni, Y., He, J., Li, S.	2011	Biodegradation of chloroacetamide herbicides by <i>Paracoccus</i> sp. FLY-8 <i>in vitro</i>	Journal of Agricultural and Food chemistry	N	N/A	N/A	Microbial degradation of chloracetamide herbicides.
601.	Zhang, L., Han, F., Hu, Y., Zheng, P., Sheng, X., Sun, H., Song, W., Lu, Y.	2012	Selective trace analysis of chloroacetamide herbicides in food samples using dummy molecularly imprinted solid phase extraction based on chemometrics and quantum chemistry	Analytica Chimica Acta 729: 36-44	N	N/A	N/A	Analytical method for detection of chloroacetamide herbicides in food.
602.	Zhang, L., Wang, X.	2009	Matrix solid-phase dispersion extraction and gas chromatography-mass spectrometry determination of multi-residue pesticides in fruits	Shipin Kexue (Beijing, China 30(16): 262-265.	N	N/A	N/A	Analytical method for detection of pesticide residues in fruit. Chinese language paper.
603.	Zhang, L.J., Wang, X.	2010	Determination of multi-residue pesticides of vegetables by matrix solid-phase dispersion and gas chromatography-mass spectrometry	Shandong Science 1:4	N	N/A	N/A	Analytical method for detection of pesticide residues in vegetables.
604.	Zhang, L., Wang, C., Li, Z., Zhao, C., Zhang, H., Zhang, D.	2018	Extraction of acetanilides in rice using ionic liquid-based matrix solid phase dispersion-solvent flotation	Food chemistry 245: 1190-1195	N	N/A	N/A	Extraction of acetanilides in rice.
605.	Zhang, Y., Li, J., Deng, J.	2008	Analysis method of 500 g/L pretilachlor EW by GC	Modern Agrochemicals 6:32-33	N	N/A	N/A	Analytical methods for determination of pretilachlor.
606.	Zhang, Y., Yang, J., Shi, R., Su, Q., Yao, L., Li, P.	2011	Determination of acetanilide herbicides in cereal crops using accelerated solvent extraction, solid-phase extraction and gas chromatography-electron capture detector	Journal of Separation Science 34(14): 1675-1682	N	N/A	N/A	Analytical method for detection of acetanilide herbicides in cereal crops.

No.	Author	Year	Title	Reference	Meet relevance criteria	Meet Reliability Criteria		Comments
					Y or N	Y, N or N/A	Result of reliability assessment/ Justification if not reliable	
607.	Zhang, Z., Feng, M., Zhu, K., Han, L., Sapozhnikova, Y., Lehotay, S.	2016	Multiresidue Analysis of Pesticides in Straw Roughage by Liquid Chromatography-Tandem Mass Spectrometry	J. Agric. Food Chem. 64 (31): 6091-9	N	N/A	N/A	Determination of pesticides in straw roughage.
608.	Zheng, J., Pang, G., Fan, C., Wang, M.	2009	Simultaneous determination of 128 pesticide residues in milk by liquid chromatography-tandem electrospray mass spectrometry	Chinese Journal of Chromatography 27(3): 254-263	N	N/A	N/A	Analytical method for detection of pesticide residues in milk.
609.	Zou, N., Han, Y., Li, Y., Qin, Y., Gu, K., Zhang, J., Pan, C., Li, X.	2015	Multiresidue method for determination of 183 pesticide residues in leeks by rapid multiplug filtration cleanup and gas chromatography-tandem mass spectrometry	Journal of Agricultural and Food Chemistry (In press)	N	N/A	N/A	Analytical method for detection of pesticide residues in leeks.
610.	Zushi, Y., Hashimoto, S., Tamabe, K.	2016	Nontarget approach for environmental monitoring by GC × GC-HRTOFMS in the Tokyo Bay basin	Chemosphere 156: 398-406	N	N/A	N/A	Approach used in the environmental monitoring of rivers in the Tokyo Bay basin, Japan.

Appendix 5: Details of relevancy criteria for individual data categories

Chemistry

Data requirements (data point)	Relevancy criteria considered
Physical and chemical properties (CA 2.1 to 2.15)	<ol style="list-style-type: none">1. Well defined test material (including purity/content)2. Sufficient experimental information provided to substantiate and evaluate whether the study conclusions and endpoints are robust (e.g. pre-treatment details, characterisation of physico-chemical parameters, replication, statistical methods, and appropriate sampling regime).3. Study conditions should not differ significantly from recommended protocols* and internationally agreed tests methods (CIPAC MT and OECD methods).4. Study conditions should not interfere with the interpretation of the study results.5. End-points or positions stated as a result of the study significantly affect the proposed risk assessment in the dossier.

Toxicology

As part of the determination of relevancy, the following criteria are considered to be fundamental when considering the relevance of an open-literature study: the test species, the test material and the use of different doses and the specific endpoints of interest. Studies that are relevant to the data requirements as detailed in Section 4.2 above are therefore studies that appropriately address these components i.e. studies which present a well-identified test material (including purity and impurity profile), a test relevant to the mammalian toxicological assessment (preferred species are rats and mice; the dog is the preferred non-rodent species), a number of animals per group sufficient to establish a statistical significance, several dose levels tested (at least 3), preferably including a negative control, to establish a dose response, relevant route of administration in terms of risk assessment (oral, dermal or inhalation) and a description of the observations, examinations and analysis or necropsy performed.

In the EFSA Guidance³, only well-identified test material (but without including purity or impurity profile), a test which can be clearly related to mammalian toxicology and partly relevant (physiological) route of administration were considered as criteria which should be fulfilled in order to consider the study as relevant. Criteria such as purity profile, number of animals per group, dose levels tested, controls, examinations, analysis or necropsy performed are instead considered to be reliability criteria.

The criteria considered for relevancy of studies relating to individual toxicology data requirements are detailed in the table below:

Data requirement (data point)	Relevancy criteria considered
Active substance	
Studies on absorption, distribution, metabolism and excretion in mammals (KCA 5.1)*	<ol style="list-style-type: none"> 1. Well-defined test material including purity and impurity profile. 2. <i>In vivo</i> tests in relevant test species; rat, mouse, dog. 3. <i>In vitro</i> tests. 4. PBPK modelling. 5. Specific endpoint can be clearly related to this data requirement, e.g. ADME measurement or metabolite identification. 6. Well described condition of the test and quantitative assessment of results to substantiate and evaluate whether the study conclusions and endpoints are robust.
Acute toxicity (KCA 5.2)*	<ol style="list-style-type: none"> 1. Well-defined test material including purity and impurity profile. 2. Relevant test species; rat, mouse, rabbit, guinea pig. 3. Relevant route of exposure for risk assessment. 4. Specific endpoint can be clearly related to this data requirement. 5. Well described observations, examinations, with details analyses or necropsy performed. 6. Different outcome to those studies currently reported.
Short-term toxicity (KCA 5.3)*	<ol style="list-style-type: none"> 1. Well-defined test material 2. Relevant test species. 3. Relevant route of exposure. 4. Specific endpoint can be clearly related to this data requirement.

³ EFSA Journal 2011;9(2):2092

Data requirement (data point)	Relevancy criteria considered
Genotoxicity (KCA 5.4)*	<ol style="list-style-type: none"> 1. Well-defined test material including purity and impurity profile. 2. <i>In vitro</i> tests. 3. <i>In vivo</i> tests in relevant test species; rat, mouse, dog. 4. Sufficient number of animals per group to establish statistical significance 5. At least three dose levels tested. 6. Relevant route of exposure for risk assessment. 7. Preferable use inclusion of negative control. 8. Dose response established. 9. Well described observations, examinations, with details analyses or necropsy performed. 10. Specific endpoint can be clearly related to this data requirement. 11. Contradicts submitted studies and/or changes key endpoints.
Long-term toxicity and carcinogenicity (KCA 5.5)*	<ol style="list-style-type: none"> 1. Well-defined test material including purity and impurity profile. 2. <i>In vitro</i> tests. 3. <i>In vivo</i> tests in relevant test species; rat, mouse, dog. 4. Sufficient number of animals per group to establish statistical significance 5. At least three dose levels tested. 6. Relevant route of exposure for risk assessment. 7. Preferable use inclusion of negative control. 8. Dose response established. 9. Well described observations, examinations, with details analyses or necropsy performed. 10. Specific endpoint can be clearly related to this data requirement. 11. Contradicts submitted studies and/or changes key endpoints.
Reproductive toxicity (KCA 5.6)*	<ol style="list-style-type: none"> 1. Well-defined test material including purity and impurity profile. 2. <i>In vitro</i> tests. 3. <i>In vivo</i> tests in relevant test species; rat, mouse, dog. 4. Sufficient number of animals per group to establish statistical significance 5. At least three dose levels tested. 6. Relevant route of exposure for risk assessment. 7. Preferable use inclusion of negative control. 8. Dose response established. 9. Well described observations, examinations, with details analyses or necropsy performed. 10. Specific endpoint can be clearly related to this data requirement. 11. Contradicts submitted studies and/or changes key endpoints.

Data requirement (data point)	Relevancy criteria considered
Neurotoxicity studies (KCA 5.7)*	<ol style="list-style-type: none"> 1. Well-defined test material including purity and impurity profile. 2. <i>In vitro</i> tests. 3. <i>In vivo</i> tests in relevant test species; rat, mouse, dog. 4. Sufficient number of animals per group to establish statistical significance 5. At least three dose levels tested. 6. Relevant route of exposure for risk assessment. 7. Preferable use inclusion of negative control. 8. Dose response established. 9. Well described observations, examinations, with details analyses or necropsy performed. 10. Specific endpoint can be clearly related to this data requirement. 11. Contradicts submitted studies and/or changes key endpoints.
Studies on metabolites (KCA 5.8.1)*	<ol style="list-style-type: none"> 1. Well-defined test material including purity and impurity profile. 2. <i>In vitro</i> tests. 3. <i>In vivo</i> tests in relevant test species; rat, mouse, dog. 4. Sufficient number of animals per group to establish statistical significance 5. At least three dose levels tested. 6. Relevant route of exposure for risk assessment. 7. Preferable use inclusion of negative control. 8. Dose response established. 9. Well described observations, examinations, with details analyses or necropsy performed. 10. Specific endpoint can be clearly related to this data requirement. 11. Contradicts submitted studies and/or changes key endpoints.
Supplementary studs on the active substance (KCA 5.8.2)	<ol style="list-style-type: none"> 1. Identified test material. 2. Unusual routes of exposure acceptable as they may introduce important information on other possible toxicological effects. 3. Regulatory use usually limited to addressing species sensitivity /safety factors etc. 4. Examples of studies <ol style="list-style-type: none"> a. Effects of combined exposures b. Hormonal effects (if not guideline studies or included in 5.8.3) c. Hypersensitivity of specific sub-populations d. Gender and age variation in susceptibility (if not included in 5.6 Reproductive studies) e. Mode of action investigations
Endocrine disrupting properties (KCA 5.8.3)	<ol style="list-style-type: none"> 1. Identified test material 2. All studies considered relevant at this stage – need to be checked for reliability

Data requirement (data point)	Relevancy criteria considered
Medical data (KCA 5.9)	<ol style="list-style-type: none"> 1. Well-defined test material. 2. Epidemiological studies. 3. Poisonings, clinical cases. 4. Relevant route of exposure. 5. All studies considered relevant at this stage – need to be checked for reliability
Plant protection products	
Acute toxicity (KCP 7.1)	<ol style="list-style-type: none"> 1. Well-defined test material. 2. Relevant test species. 3. Relevant route of exposure. 4. Specific endpoint can be clearly related to this data requirement. 5. All studies considered relevant at this stage – need to be checked for reliability
Data on exposure (KCP 7.2)	<ol style="list-style-type: none"> 1. Well-defined test material. 2. Field studies. 3. Calculations. 4. Specific endpoint can be clearly related to this data requirement. 5. All studies considered relevant at this stage – need to be checked for reliability
Dermal absorption (KCP 7.3)	<ol style="list-style-type: none"> 1. Well-defined test material. 2. <i>In vitro</i> tests. 3. <i>In vivo</i> tests in relevant test species. 4. Specific endpoint can be clearly related to this data requirement. 5. All studies considered relevant at this stage – need to be checked for reliability

*Recommended protocols under each data point include but are not limited to those listed in the current technical guidance documents SANCO 11844/2010, Rev. 4–Jan 2013 DRAFT and SANCO 11843/2010, Rev. 4–Jan 2013 DRAFT

Human Health Risk Assessments

General criteria:

- Sufficient replicates must be included in the study to demonstrate statistical robustness
- Agronomic practices must be relevant to scenario in submission, including:
 - Crop type
 - Application method and parameters (e.g. boom height)
 - Application rate
- Leaf type and plant growth stage must be relevant to scenario in submission
- Climatic/meteorological conditions of study must be relevant to scenario in submission, including:
 - Rainfall
 - Wind speed
 - Temperature
- Raw data must be available for analysis
- Statistical analysis must be robust and relevant
- Assessment of outliers/extreme values must be robust and relevant

In addition to the above criteria, the following criteria are stipulated for specific study/data types

Operator/worker exposure studies:

- Studies should follow accepted OECD protocol
- Studies performed to GLP are preferred
- Replicates should be minimum of 10

Biomonitoring studies:

- Internal exposures must be clearly related to specific external doses
- Replicates should be minimum of 10

Air monitoring studies:

- Monitoring parameters must be relevant to bystander/resident exposures, including:
 - Monitoring distance
 - Monitoring height
 - Monitoring duration
- Accurate logs of relevant local activity must be available (e.g. crop spraying)
- Accurate logs of local climatic/meteorological conditions must be available for the duration of the monitoring period, including:
 - Rainfall
 - Wind speed
 - Wind direction
 - Temperature
 - Humidity

Dislodgeable Foliar Residue studies:

- Study must have been conducted on a similar formulation
- Application number and interval must be relevant
- Replicates must be minimum of 40

Foliar decline studies:

- Data must demonstrate minimum of two clear half lives
- Sufficient data points must be provided to demonstrate decline curves between repeat applications
- Studies with significant rainfall in first 48 hours should be discounted
- Replicates must be minimum of 10

Residues

The guidance on relevancy criteria detailed below is taken from AGES Interpretation⁴ of EFSA's Guidance document:

- Studies dealing with any crop treated with the active substance are considered to be relevant and not just studies dealing with the representative crops only. A broader spectrum of relevant literature might therefore show useful information considering the MRL setting and MRL review program at EU level; 'real' residue data that do not reflect the representative uses might be considered separately 'for MRL setting'.
- Bibliographic databases may also contain useful information about minor uses. Such studies can be considered as relevant for inclusion into the dossier, although the chances of finding such studies in the literature databases are rather limited; residue trials performed on minor uses are usually conducted by growers' associations and those studies are usually not published in peer-reviewed journals.
- Genetically modified (GMO) crops are covered by the present search concept and the corresponding studies should be selected for further consideration.
- Monitoring studies are not considered data requirements for the review of the active substances. However, in some cases monitoring data can be the basis for MRL setting. Monitoring data could be included on a case-by-case basis, after careful consideration.
- For active substances that are used in stores and containers, cross-contamination may be an issue. This issue should be considered on a case-by-case basis.

The Criteria for Relevance applied to the Residues and Metabolism sections are summarised below. Specific examples (not exhaustive) are listed against the relevant criteria for relevance in each section in the table below.

1. Well defined test material.
2. Applicable test species.
3. Study conditions should not differ significantly from guidelines and recommended protocols, and must be relevant to those in the submission.
4. Trial site/test system should not have been previously exposed to the test material or other contaminants
5. Sufficient experimental information is provided to substantiate and evaluate whether the study conclusions and endpoints are robust.
6. Validated analytical methodology employed.
7. Study conditions do not interfere with the interpretation of the study results.

⁴ EFSA supporting publication 2013:EN-511

Data requirement (data point)	Relevancy criteria considered*
Active substance	
Storage stability of residues (plant and animal) (KCA 6.1)	<p>Content of paper addresses data requirements for stability of residues of the active substance (defined test material) in representative substrates to ensure that the residue situation of a sample remains accurately quantifiable from the time of sampling to analysis.</p> <ol style="list-style-type: none">1. Well defined test material, e.g. are purity and batch data provided?2. Applicable test species, e.g. is the crop a representative use; were relevant animal commodities used?3. Study conditions should not differ significantly from guidelines and recommended protocols, and must be relevant to those in the submission, e.g. did the study meet the relevant guidelines and GAP?4. Sufficient experimental information is provided to substantiate and evaluate whether the study conclusions and endpoints are robust, e.g. were storage intervals recorded; are weather conditions and plot histories available?6. Validated analytical methodology employed, e.g. were control samples used, acceptable recoveries obtained, clear example chromatograms given?7. Study conditions do not interfere with the interpretation of the study results, e.g. starting processing material residue is robust and there is measurable residue in processed products?

Data requirement (data point)	Relevancy criteria considered*
Metabolism, distribution and expression of residues in plants (KCA 6.2)	<p>Content of paper addresses data requirements for the metabolism, distribution and expression of residues of the active substance (defined test material with one or more radiolabelled forms) in plants in order to:</p> <ul style="list-style-type: none">- provide an estimate of the total terminal residues in the relevant portion of crops at harvest following treatment as proposed;- identify the major components of the total terminal residue;- indicate the distribution of residues between relevant crop parts;- quantify components of the residue and establish the efficiency of extraction procedures for these components; and- decide on the definition and expression of a residue. <ol style="list-style-type: none">1. Well defined test material, e.g. if radiolabelled material was used, was an appropriate isotope used?2. Study conditions should not differ significantly from guidelines and recommended protocols, and must be relevant to those in the submission, e.g. is the application rate relevant and equivalent to maximum seasonal rate on rotated crops?3. Trial site/test system not previously exposed to the test material or other contaminants, e.g. is plot history supplied?4. Sufficient experimental information is provided to substantiate and evaluate whether the study conclusions and endpoints are robust, e.g. Were metabolites identified by appropriate techniques?5. Validated analytical methodology employed, e.g. were representative clear chromatograms provided to support metabolite identification?6. Study conditions do not interfere with the interpretation of the study results, e.g. if the test item is photolabile was the study conducted outdoors?

Data requirement (data point)	Relevancy criteria considered*
Metabolism, distribution and expression of residues in livestock (KCA 6.2)	<p>Content of paper addresses data requirements for metabolism, distribution and expression of residues of the active substance (defined test material with one or more radiolabelled forms) in livestock (poultry, ruminants, pigs, fish) in order to:</p> <ul style="list-style-type: none"> - identify the major components of the total terminal residue in edible animal products; - quantify the rate of degradation and excretion of the total residue in certain animal products (milk or eggs) and excreta; - to indicate the distribution of residues between relevant edible animal products; - quantify the major components of the residues and to show the efficiency of the extraction procedures for these components; - generate data from which a decision on the need for livestock feeding studies can be made; and - decide on the definition and expression of a residue. <ol style="list-style-type: none"> 1. Well defined test material, e.g. if radiolabelled material was used, was an appropriate isotope used? 2. Applicable test species, e.g. ruminant, poultry, etc.? 3. Study conditions should not differ significantly from guidelines and recommended protocols, and must be relevant to those in the submission, e.g. is the application rate relevant and equivalent to maximum seasonal rate on rotated crops? 4. Trial site/test system not previously exposed to the test material or other contaminants, e.g. is plot history supplied? 5. Sufficient experimental information is provided to substantiate and evaluate whether the study conclusions and endpoints are robust, e.g. Were metabolites identified by appropriate techniques? 6. Validated analytical methodology employed, e.g. were representative clear chromatograms provided to support metabolite identification? 7. Study conditions do not interfere with the interpretation of the study results, e.g. if the test item is photolabile was the study conducted outdoors?

Data requirement (data point)	Relevancy criteria considered*
Magnitude of residue trials in plants (KCA 6.3)	<p>Content of paper addresses data requirements for the presence of residues of the active substance (defined test material) on and in plants and plant products in order to determine the level of residues, and where appropriate, the decline of residues, and to assess the consequences of these residues on the health of man.</p> <ol style="list-style-type: none"> 1. Well defined test material (including purity/content), e.g. was the formulation comparable to the proposed representative formulation? 2. Applicable test species, e.g. is it a representative use crop? 3. Study conditions should not differ significantly from guidelines and recommended protocols, e.g. Is the GAP relevant? 4. Trial site/test system not previously exposed to the test material or other contaminants, e.g. Plot history supplied 5. Sufficient experimental information provided to substantiate and evaluate whether the study conclusions and endpoints are robust. 6. Validated Analytical methodology employed, e.g. control samples used, acceptable recoveries obtained, clear example chromatograms etc. 7. Study conditions should not interfere with the interpretation of the study results.
Feeding studies (KCA 6.4)	<p>Content of paper addresses data requirements for feeding studies to determine the residue of the active substance (defined test material) in products of animal origin (ruminants, poultry, pigs, fish) which will result from residues in feedingstuffs or fodder crops in order to assess the consequences of these on human health.</p> <ol style="list-style-type: none"> 1. Well defined test material (including purity/content) 2. Applicable test species, e.g. Ruminant, poultry, pig, fish, any edible animal. 3. Study conditions should not differ significantly from recommended protocols, e.g. is the dosing level extreme? 4. Trial site/test system not previously exposed to the test material or other contaminants, e.g. is it clear that additional animal feed did not contain treated substance? 5. Sufficient experimental information provided to substantiate and evaluate whether the study conclusions and endpoints are robust, e.g. were all the components for the animal residue definition analysed for? 6. Validated Analytical methodology employed, e.g. control samples used, acceptable recoveries obtained, clear example chromatograms etc. 7. Study conditions should not interfere with the interpretation of the study results, e.g. were acceptable recoveries obtained?

Data requirement (data point)	Relevancy criteria considered*
Effects of processing (KCA 6.5)	<p>Content of paper addresses data requirements for effects of processing on:</p> <ul style="list-style-type: none">- the nature of the active substance (defined test material) in order to show whether or not breakdown or reaction products arise during processing which may require a risk assessment;- the magnitude of the active substance (defined test material) in order to determine the quantitative distribution of residues in processed commodities, to estimate processing factors and to allow a more realistic estimation of dietary intake of residues. <ol style="list-style-type: none">1. Well defined test material (including purity/content), e.g. if radiolabelled test item was used in a high temperature hydrolysis study, was an appropriate isotope used?2. Applicable test system, e.g. Was the high temperature hydrolysis study undertaken in a sterilised buffer medium?3. Study conditions should not differ significantly from guidelines and recommended protocols, e.g. Were the temperature and pH conditions applied typical of processing operations carried out on commodities relevant to the test item? e.g. Was processing conducted in such a way as to mimic industrial processing conditions?4. Trial site/test system not previously exposed to the test material or other contaminants.5. Sufficient experimental information provided to substantiate and evaluate whether the study conclusions and endpoints are robust, e.g. Were metabolites identified by appropriate techniques? Has a clear description of the processing technique been included?6. Validated Analytical methodology employed, e.g. control samples used, acceptable recoveries obtained, clear example chromatograms etc., were relevant control experiments carried out when harsher techniques (e.g. acid/base hydrolysis) were used to identify metabolites (i.e. to ensure metabolites identified are not merely artefacts)?7. Study conditions should not interfere with the interpretation of the study results.

Data requirement (data point)	Relevancy criteria considered*
Residues in rotational crops (KCA 6.6)	<p>Content of paper addresses data requirements for residues of the active substance in crops grown in rotation to a treated crop to allow the determination:</p> <ul style="list-style-type: none"> - of the nature and extent and potential residue accumulation of the active substance (defined test material with one or more radiolabelled forms) in rotational crops from soil uptake; - of the magnitude of residues of the active substance (defined test material) in rotational crops under realistic field conditions in order to assess the consequences of these on human health. <ol style="list-style-type: none"> 1. Well defined test material, e.g. purity/content, if radiolabelled material was used, was an appropriate isotope used? 2. Applicable test species. 3. Study conditions should not differ significantly from guidelines and recommended protocols, and must be relevant to those in the submission, e.g. is the application rate relevant and equivalent to maximum seasonal rate on rotated crops? 4. Trial site/test system not previously exposed to the test material or other contaminants, e.g. Plot history supplied 5. Sufficient experimental information provided to substantiate and evaluate whether the study conclusions and endpoints are robust. 6. Validated Analytical methodology employed, e.g. control samples used, acceptable recoveries obtained, clear example chromatograms etc. 7. Study conditions should not interfere with the interpretation of the study results.
Proposed residue definition and MRLs (CA 6.6)	<p>Content of paper addresses data requirements for the presence of residues of the active substance (defined test material) on and in plants and plant products in order to determine the level of residues, and where appropriate, the decline of residues, and to assess the consequences of these residues on the health of man.</p> <ol style="list-style-type: none"> 1. Well defined test material (including purity/content), e.g. was the formulation comparable to the proposed representative formulation? 2. Applicable test species, e.g. is it a representative use crop? 3. Study conditions should not differ significantly from guidelines and recommended protocols, e.g. Is the GAP relevant? 4. Trial site/test system not previously exposed to the test material or other contaminants, e.g. Plot history supplied 5. Sufficient experimental information provided to substantiate and evaluate whether the study conclusions and endpoints are robust. 6. Validated Analytical methodology employed, e.g. control samples used, acceptable recoveries obtained, clear example chromatograms etc. 7. Study conditions should not interfere with the interpretation of the study results.

Data requirement (data point)	Relevancy criteria considered*
Estimation of the potential and actual exposure through diet and other sources (CA 6.9)	Content of the paper addresses data requirements for the consumer exposure assessment. This involves the possible presence of residues according to the residue definition established for risk assessment (defined test material) from other sources than plant protection product uses (biocides, veterinary drugs) and their aggregate exposure and the cumulative exposure to more than one active substance.
Effect on the residue level in pollen and bee products (CA 6.10.1)	Content of paper addresses data requirements for residue levels of the active substance (defined test material) in pollen and bee products for human consumption resulting from residues taken up by honeybees from crops at blossom in order to assess the consequences of these on human health.

*Recommended protocols under each data point include but are not limited to those listed in the current technical guidance documents SANCO 11844/2010, Rev. 4–Jan 2013 DRAFT and SANCO 11843/2010, Rev. 4–Jan 2013 DRAFT

Environmental fate

As part of the determination of relevancy, the following criteria are considered to be fundamental when considering the relevance of an open-literature study:

- Generally, degradation studies are considered relevant if they are carried out with the active substance only, and not with mixtures, since this may significantly influence the degradation behaviour. For laboratory soil degradation studies, the substrate used needs to be considered; in order to realistically reflect agro-ecosystems, it is crucial that the study is conducted with soil and that the soil is not contaminated and is representative of European agricultural soils. Temperature and moisture should be considered as reliability criteria. For field studies, relevance is based on (pedo-)climatic conditions being representative for European agriculture.
- The application of the test material needs to be considered because studies are not considered relevant if the application rates are significantly outside the representative use or the active substance is applied as a by-product (e.g. as a component of organic soil amendments).
- For adsorption studies, the substrate used needs to be considered.
- Relevance criteria for the aquatic compartment are analogous to those of soil-related data requirements.
- Monitoring studies, including those for air, may be considered relevant if the areas investigated are representative for Europe. Studies which are purely analytical, i.e. they determine levels of the active substance in certain environmental compartments, are not considered as relevant

The criteria considered for relevancy of studies relating to individual environmental fate data requirements are detailed in the table below:

Data requirement (data point)	Relevancy criteria considered*
Active substance	
Route and rate of degradation in soil – Laboratory Studies – aerobic and anaerobic, parent and metabolites KCA 7.1, 7.1.1, 7.1.2 KCA 7.2, 7.2.1, 7.2.2, 7.2.3, 7.2.4, 7.2.5	<ol style="list-style-type: none"> 1. Well defined test material (including purity/content) 2. Soil(s) must be agricultural and relevant for the EU e.g. from temperate zone, no extreme characteristics (e.g. meets the criteria in OECD 307) 3. Soil collection, preparation and storage did not differ significantly from recommended protocols 4. Test soils had not previously been exposed to the test material or structural analogues. 5. Experimental conditions did not differ significantly from recommended protocols e.g. temperature and moisture 6. Application rate is within the range of the proposed use and can be verified from the data (time zero samples) 7. Sufficient number of samples taken to determine kinetics (minimum 5) 8. Extraction system was appropriate e.g. avoidance of excessive or inadequate methods 9. Analytical method well described, LOD/LOQ at appropriate level 10. Mass balance or recovery for radiolabelled and unlabelled studies respectively is adequate to support the conclusions, e.g. >90%. 11. Analytical method appears robust with suitable reproducibility and supports the conclusions made e.g. for unlabelled studies are suitable blank controls included 12. Identification of ‘new’ metabolites is robust with appropriate details of method used 13. Anaerobic conditions are verified by measurement
Route and rate of degradation in soil – Field Studies KCA 7.3, 7.3.1, 7.3.2, 7.3.3	In addition to criteria under laboratory route and rate: <ol style="list-style-type: none"> 1. Field site(s) must be geoclimatically relevant for the EU 2. Adequate weather data available to verify relevance of study 3. Application technique relevant to proposed use (foliar, ST granule etc.) 4. Sufficient sampling detail and description of sample handling prior to analysis 5. Initial and procedural recoveries are adequate to support the conclusions, e.g. 70-120%.
Soil photolysis IIA 7.1.3	In addition to criteria under laboratory route and rate: <ol style="list-style-type: none"> 1. Light source was suitable with details of spectrum and intensity available 2. Dark control included and reported

Data requirement (data point)	Relevancy criteria considered*
<p>Mobility studies Adsorption, desorption – parent and metabolites KCA 7.4, 7.4.1, 7.4.2</p> <p>Column or TLC leaching KCA 7.4.3, 7.4.4, 7.4.5, 7.4.6</p>	<ol style="list-style-type: none"> 1. Well defined test material (including purity/content) 2. Soil(s) must be agricultural and relevant for EU e.g. from temperate zone, no extreme characteristics (e.g. meets the criteria in OECD 106) 3. Soil collection, preparation and storage did not differ significantly from recommended protocols 4. Test soils had not previously been exposed to the test material or structural analogues. 5. Experimental conditions did not differ significantly from recommended protocols 6. Application rate is appropriate to the proposed use and can be verified from the data 7. Sufficient number of samples taken to determine isotherm (if done) 8. Stability of the test item in the system was demonstrated 9. Extraction system was appropriate e.g. avoidance of excessive or inadequate methods 10. Mass balance or recovery for radiolabelled and unlabelled studies respectively is adequate to support the conclusions, e.g. >90% 11. Analytical method well described, LOD/LOQ at appropriate level? 12. Analytical method appears robust with suitable reproducibility and supports the conclusions made e.g. for unlabelled studies are suitable blank controls included
<p>Lysimeter studies KCA 7.4.7</p>	<p>In addition to criteria under laboratory route and rate:</p> <ol style="list-style-type: none"> 1. Field site(s) must be geoclimatically relevant for the EU 2. Adequate weather data available to verify relevance of study. Combined rainfall/irrigation sufficient to meet guideline requirements 3. Minimum 1 m depth soil monolith 4. Study continued for sufficient years to support the conclusions
<p>Field leaching KCA 7.4.8</p>	<p>In addition to criteria under laboratory route and rate:</p> <ol style="list-style-type: none"> 1. Field site(s) must be geoclimatically relevant for the EU 2. Adequate weather data and groundwater data (depth, direction) available to verify the validity of study 3. Installation and operation of lysimeters and/or wells and samplers follows recommended protocols 4. Study continued for sufficient years to support the conclusions
<p>Volatility From soil and plants, laboratory and field KCA 7.4.9</p>	<p>In addition to criteria under laboratory route and rate:</p> <ol style="list-style-type: none"> 1. Adequate controls were in place 2. Key experimental conditions are fully reported e.g. wind speed, temperature, humidity etc. and controlled

Data requirement (data point)	Relevancy criteria considered*
Hydrolysis KCA 7.5	<ol style="list-style-type: none"> 1. Well defined test material (including purity/content) 2. Experimental conditions should not differ significantly from recommended protocols 3. Application rate is within an acceptable the range (e.g. consider solubility) and can be verified from the data (time zero samples) 4. Sufficient number of samples taken to determine kinetics (minimum 5) 5. Analytical method well described, LOD/LOQ at appropriate level 6. Mass balance or recovery for radiolabelled and unlabelled studies respectively is adequate to support the conclusions, e.g. >90%. 7. Analytical method appears robust with suitable reproducibility and supports the conclusions made e.g. for unlabelled studies are suitable blank controls included 8. Identification of 'new' metabolites is robust with appropriate details of method used
Aqueous photolysis KCA 7.6	<p>In addition to criteria under hydrolysis:</p> <ol style="list-style-type: none"> 1. Light source was suitable with details of spectrum and intensity available 2. Dark control included and reported
Degradation in aquatic systems KCA 7.7, 7.8, 7.8.1, 7.8.2, 7.8.3	<ol style="list-style-type: none"> 1. Well defined test material (including purity/content) 2. Water(s) and sediment(s) must be from an agricultural area and relevant for the EU e.g. from temperate zone, no extreme characteristics (e.g. meets the criteria in OECD 308) 3. Water/sediment collection, preparation and storage do not differ significantly from recommended protocols 4. Experimental conditions do not differ significantly from recommended protocols e.g. temperature and aeration 5. Application rate is within the range of the proposed use and can be verified from the data (time zero samples) 6. Sufficient number of samples taken to determine kinetics (minimum 5) 7. Extraction system was appropriate e.g. avoidance of excessive or inadequate methods 8. Analytical method well described, LOD/LOQ at appropriate level 9. Analytical method appears robust with suitable reproducibility and supports the conclusions made e.g. for unlabelled studies are suitable blank controls included 10. Mass balance or recovery for radiolabelled and unlabelled studies respectively is adequate to support the conclusions, e.g. >90% 11. Identification of 'new' metabolites is robust with appropriate details of method used 12. Anaerobic conditions are verified by measurement

Data requirement (data point)	Relevancy criteria considered*
Degradation in the saturated zone KCA 7.9	<ol style="list-style-type: none"> 1. For laboratory studies refer to criteria under laboratory route and rate 2. Field site(s) must be geoclimatically relevant for the EU 3. Adequate site characterisation data available e.g. soils, geology, hydrology 4. Installation of samplers e.g. wells, lysimeters follows recommended protocols 5. Analytical method well described, LOD/LOQ at appropriate level 6. Analytical method appears robust with suitable reproducibility and supports the conclusions made e.g. for unlabelled studies are suitable blank controls included
Route and rate of degradation in air KCA 7.10	<ol style="list-style-type: none"> 1. Experimental conditions or calculations differ significantly from recommended protocols 2. Analytical method well described, LOD/LOQ at appropriate level 3. Analytical method appears robust with suitable reproducibility and supports the conclusions made e.g. for unlabelled studies are suitable blank controls included
Monitoring KCA 7.12	<ol style="list-style-type: none"> 1. Site(s) or areas must be geoclimatically relevant for the EU 2. Adequate site characterisation data available e.g. soils, geology, hydrology 3. Installation of samplers e.g. wells, lysimeters follows recommended protocols OR adequate description of wells is available (depth of well, length of screen, depth of screen opening, depth of groundwater) 4. Appropriate sampling methodology. 5. Analytical method well described, LOD/LOQ at appropriate level 6. Analytical method appears robust with suitable reproducibility and supports the conclusions made e.g. suitable blank controls included 7. For surface water: description of sampling methodology and handling of detects (peaks, interpolated time-step?), linked to rainfall intensity and volume). Discharge volumes, catchment drained area.

*Recommended protocols under each data point include but are not limited to those listed in the current technical guidance documents SANCO 11844/2010, Rev. 4–Jan 2013 DRAFT and SANCO 11843/2010, Rev. 4–Jan 2013 DRAFT

Ecotoxicology

As part of the determination of relevancy, the following criteria are considered to be fundamental when considering the relevance of an open-literature study:

All Studies:

1. Studies should address the data requirements detailed in Commission Regulations (EU) No. 283/2013 and 284/2013.
2. Studies need to be performed with defined test material which is the appropriate active substance, metabolite or plant protection product.
3. Both the route of exposure and length of exposure of the test material should be appropriate. Studies which have exposure which is either too long or too short or via an inappropriate route are not considered to be relevant. Studies with *in vivo* or *ex vivo* exposure are considered relevant; *in vitro* tests may potentially be relevant and should be considered appropriately.
4. Toxicity modelling (e.g. QSAR), literature review papers, meta-analysis papers, risk analysis papers and environmental monitoring papers are generally considered to not be relevant.
5. Apart from mixture toxicity, other multi-stressor studies e.g. active substance and physico-chemical stress are not considered to be relevant.

Laboratory Studies:

1. Well defined test material (including purity/content)
2. Number of organisms per group sufficient to establish a statistical significance
3. Applicable test species. The test species should preferably be relevant to the EU. However, studies which contain test species which are not found in the EU may in some cases be deemed relevant by expert judgement.
4. Test organisms are not previously exposed to the test material or other contaminants
5. Several dose levels tested, at least 3, including a negative control, to establish a dose-response, unless the study design is specifically a limit test. Control must be run concurrently with treatments and mortality to be within test validity criteria.
6. Exposure route is clearly defined, is environmentally relevant and, if appropriate, suitably quantified.
7. If conducted, analytical confirmation of dosing or sufficient information provided to determine concentrations were within acceptable range (e.g. 80-120%) of nominal targets.
8. Effects are related to single test item, and a quantitative relationship exists between the reported endpoint and risk assessment endpoints of growth, mortality, behaviour and/or reproduction.
9. Sufficient experimental information provided to substantiate and evaluate whether the study conclusions and endpoints are robust.
10. Study conditions should not differ significantly from recommended protocols.
11. Study conditions should not interfere with the interpretation of the study results.

Field Studies:

1. Appropriate and relevant geoclimatic conditions (setting), appropriate application method and rates (exposure) and observation data (biological relevance) to derive endpoints.
2. Well defined test material (including purity/content)
3. Applicable test species
4. Exposure route is clearly defined, is environmentally relevant and, if appropriate, suitably quantified.
5. Sufficient experimental information provided to substantiate and evaluate whether the study conclusions and endpoints are robust (e.g. pre-treatment details, characterisation of physico-chemical parameters, replication, statistical methods, appropriate sampling regime).
6. Study conditions should not differ significantly from recommended protocols, if available for field study.
7. Study conditions should not interfere with the interpretation of the study

The criteria considered for relevancy of studies relating to individual ecotoxicology data requirements are detailed in the table below:

Data requirement (data point)	Relevancy criteria considered
Active substance	
Effects on birds and other terrestrial vertebrates (KCA 8.1)	<ol style="list-style-type: none"> 1. Study is appropriate to data requirements detailed in Regulations 283/2013 and 284/2013. 2. Well-defined test material applied as the appropriate active substance, metabolite or plant protection product. 3. Test species is preferably relevant to the EU though non-EU species may also be deemed relevant (by expert judgement). Studies on mammals are covered by the toxicology section except for non-target vertebrate species. 4. Route and length of exposure should be appropriate.
Effects on aquatic organisms (KCA 8.2)	<ol style="list-style-type: none"> 1. Study is appropriate to data requirements detailed in Regulations 283/2013 and 284/2013. 2. Well-defined test material applied as the appropriate active substance, metabolite or plant protection product. 3. Test species is preferably relevant to the EU though non-EU species may also be deemed relevant (by expert judgement). 4. Route and length of exposure should be appropriate.
Effect on arthropods (KCA 8.3)	<ol style="list-style-type: none"> 1. Study is appropriate to data requirements detailed in Regulations 283/2013 and 284/2013. 2. Well-defined test material applied as the appropriate active substance, metabolite or plant protection product. 3. Test species is preferably relevant to the EU though non EU species may also be deemed relevant (by expert judgement). 4. Route and length of exposure should be appropriate.
Effects on non-target soil meso- and macrofauna (KCA 8.4)	<ol style="list-style-type: none"> 1. Study is appropriate to data requirements detailed in Regulations 283/2013 and 284/2013. 2. Well-defined test material applied as the appropriate active substance, metabolite or plant protection product. 3. Test species is preferably relevant to the EU though non-EU species may also be deemed relevant (by expert judgement). 4. Length of exposure should be appropriate.
Effects on soil nitrogen transformation (KCA 8.5)	<ol style="list-style-type: none"> 1. Study is appropriate to data requirements detailed in Regulations 283/2013 and 284/2013. 2. Well-defined test material applied as the appropriate active substance, metabolite or plant protection product. 3. Length of exposure should be appropriate. 4. Substrate used should be appropriate.
Effects on terrestrial non-target higher plants (KCA 8.6)	<ol style="list-style-type: none"> 1. Study is appropriate to data requirements detailed in Regulations 283/2013 and 284/2013. 2. Well-defined test material applied as the appropriate active substance, metabolite or plant protection product. 3. Test species is preferably relevant to the EU though non-EU species may also be deemed relevant (by expert judgement). 4. Route and length of exposure should be appropriate.

Data requirement (data point)	Relevancy criteria considered
Effects on other terrestrial organisms (flora and fauna) (KCA 8.7)	<ol style="list-style-type: none">1. Study is appropriate to data requirements detailed in Regulations 283/2013 and 284/2013.2. Well-defined test material applied as the appropriate active substance, metabolite or plant protection product.3. Test species is preferably relevant to the EU though non-EU species may also be deemed relevant (by expert judgement).4. Route and length of exposure should be appropriate.
Effects on biological methods for sewage treatment (KCA 8.8)	<ol style="list-style-type: none">1. Study is appropriate to data requirements detailed in Regulations 283/2013 and 284/2013.2. Well-defined test material applied as the appropriate active substance, metabolite or plant protection product.3. Route and length of exposure should be appropriate.4. Substrate used should be appropriate.