Renewal Assessment Report

Dimethenamid-P

Volume 3 – B.9 Appendix

Evaluation of open literature regarding ecotoxicology data

Rev. 0 - 10 August 2016

Rapporteur Member State: Germany

Co-Rapporteur Member State: Bulgaria

Version history

When	What
10 August 2016	First version submitted to EFSA

Table of contents

B Summary of the data and information

B.9 Evaluation of open literature regarding the ecotoxicology data

B.9.1 Search strategy of open literature search

Literature search report- dimethenamid-P

Author:	Zander-El-Metwally responsible for Section 2-6
	Esswein, U. responsible for Sections 1, 7-11
Title:	Literature Search report for dimethenamid-P
Date:	Date of main search: 2013-02-01 (Sec 1, 7-11)
	Date of main search: 2013-02-07, 2013-02-08 (Sec 2-6)
	Date of update search: 2013-12-19 (Sec. 1, 2-6)
	Date of update search: 2014-01-14 (Sec. 2-6)
Doc ID:	BASF DocID 2014/1103028

Material and Methods

A search for open literature which included papers in peer-reviewed journals and reports from government and other agencies in the EU and several other countries was performed by the applicant. The literature search regarding the ecotoxicology of dimethenamid-P and its metabolites was done via the databases BIOSIS, CAPLUS, and CAB Abstracts using the key-word “dimethenamid” or “dimethenamid-P” and the CAS Numbers 87674-68-8 and 163515-14-8, respectively, together with key words representative for the environment like e.g. “ecotox”, “exposure”, “NOEC”, “collembola” or “mesocosm”.

Main search was performed at the 6th and 7th of February 2013 and a last update search was done on 10th of January 2013 and 08th of January 2014, for CAPLUS and BIOSIS/ CAB Abstracts, respectively. The search process was documented according to EFSA guidance 2011; 9(2):2092.

Details on the databases used for the literature search are presented in Table B.9.1-1:

Table B.9.1-1: Details on the databases used for open literature search of dimethenamid-P and its metabolites in air, soil and water

Database	**BIOSIS**	**CAB Abstracts**	**CAPLUS Chemical Abstracts Plus**
Provider	STN International	STN International	STN International
Justification for choosing the source: **for STN dadabases referring to STN database summary sheets**	BIOSIS-Previews® is the largest and most comprehensive life science database in the world. Amongst others subject coverage includes Agriculture, Biochemistry, Biophysies, Botany, Environmental Biology, Physiology, Toxicology. Sources include periodicals, journals, conference proceedings, reviews, reports, patents, and short communications. Nearly 6,000 life source 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.	The CAB-Abstracts database covers worldwide literature from all areas of agriculture anel related sciences inluding Agriculture, Agricultural chemicals, Anirnal sciences and production, Crop protection, Crop sciences and production, Environment, Soils and fertilisers. Sources for CABA include journals, books, reports, published theses, conference proceedings, and patents. Bibliographie information, indexing terms, abstracts, and CAS Registry Numbers are searchable.	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 organisations, technical reports, books, conference proceedings, and dissertations. Eleetronic only journals and Web preprints are also covered. Bibliographie terms, indexing temls, roles, CAS Registry Numbers, International Patent Classification, and abstracts are searchable.
Data span of the source	1926 - present	1973 – to present	1907 – to present
Data of main search	2013-02-07, 2013-02-08	2013-02-07, 2013-02-08	2013-02-07, 2013-02-08
Data span of the search	2004 - 2013	2004 - 2013	2004 - 2013
Data of the latest database update inclded in the search	20130206/UP	20130206/UP	20130206/UP

The process of selection of relevant scientific open literature was done in two steps:

In the first selection step for relevance based on summary records (e.g. titles, abstracts, index terms, keywords) obviously irrelevant records were tagged as ‘ballast’. This ‘ballast’ was not further processed. Summary records which appear to be relevant and those of unclear relevance were tagged as ‘hit’ and evaluated further.

In the second detailed assessment the relevance of the ‘hits’ was performed.
In a first step, the ‘hits’ were reviewed based on the information given in the title and the abstract with regard to relevance for the regulators endpoints in the respective regulatory area. Records that were clearly judged as not assignable to any regulatory endpoint were shifted together with an explaining reasoning into the register ‘no relevant endpoint’.
In a second step, all remaining records were assessed in detail based on the complete report and separated into relevant reports for further discussion and not relevant publications.

Criteria to assign a record to the register '**evaluated – not-relevant**' were:

- Those records which provided information supporting the existing regulatory data package without any new relevant data or information were classified as "confirmatory data"
- Those records which were not assignable to the substance of interest (for example mixtures, not about test substance or other relevant substance)
- Secondary literature linking to primary literature already discussed under relevant records
- Records with limited reliability of grade 3 or 4 based on the 'Klimisch' scoring system (see below)
- those which were judged as not relevant due to other reasons with a respective justification.

Criteria to assign a record to the register '**used for dossier**' were:

- Records providing information about additional / new / unknown / potentially contradictory effects or data which might impact the hazard assessment endpoints or the risk assessments parameters and which in addition have a high grade of reliability of grade 1 or 2 based on the 'Klimisch' scoring system (see below)

Those records assigned to the category 'used for dossier' were provided with a Doc ID and discussed in detail in Volume 3, B.9 of dimethenamid-P.

Additionally to the relevance, the reliability of the literature tagged as 'hits' were assessed using a reliability scoring system based on Klimisch et al (1997)[1]:

Reliability 1: reliable without restrictions: studies or data generated according to generally valid and/or internationally accepted testing guidelines (preferably performed according to GLP) or in which the test parameters documented are based on a specific (national) testing guideline or in which all parameters described are closely related / comparable to a guideline method. (e.g. literature about toxicity / ecotoxicity study consistent with requests of international testing guidelines and performed under GLP conditions with experienced and trained personal)

Reliability 2: reliable with restrictions: studies or data (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 (appropriately documented studies which meets basic scientific principles, mechanistic studies)

Reliability 3: not reliable: studies or data in which there were 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 assessment and which is not convincing for an expert judgement (e.g. literature studies with insufficient information or according to unvalidated method)

Reliability 4: not assignable: studies or data which do not give sufficient experimental details and which are only listed in short abstracts or secondary literature

In addition to the Klimisch criteria, also the criteria for reliability and relevance given by Kase et al. (2012)[2] have been used for the assessment of literature data.

[1] Klimisch, H., Andrea, M. Tillmann, U., 1997. A systematic approach for evaluating the quality of experimental toxicological and ecotoxicological data. Regulatory Toxicology and Pharmacology, 55, pp. 276-280.

[2] Kase, R. *et al,* 2012. Klimisch 2.0 – Raising the bar to increase the scientific quality of environmental risk assessments; Poster, SETAC Conference Berlin http://www.oekotoxzentrum.ch/projekte/klimisch/doc/setac2012

Results and Discussion

The numbers of hits before and after the first selection step for relevance are summarised in Table B.9.1-2.

Table B.9.1-2: Number of records after of the first step of the open literature search regarding the ecotoxicology of dimethenamid-P and its metabolites

	Total	Database		
		BIOSIS	CAB Abstracts	CAPLUS Chemical Abstracts Plus
First search on the 7th and 8th of Feburary 2013				
Category: Ecotox General				
Total number of summary records for dimethenamid-P and metabolites retrieved		121	40	346
Total number of summary records for after removing duplicates	467	99	22	346
Total number of summary records for after removing duplicates from section Wildlife, Terrestric, Aquatic	387 (at least 349 records with only heptan)	88	17	282
Totals number of summary records removed after first selection step ('Ballast')	372			
Totals number of summary records retrieved after first selection step (hits)	**15**			
Category: Ecotox Wildlife				
Total number of summary records for dimethenamid-P and metabolites retrieved		13	1	60
Total number of summary records for after removing duplicates	69 (at least 50 records with only heptan)	8	1	10
Totals number of summary records removed after first selection step ('Ballast')	50			
Totals number of summary records retrieved after first selection step (hits)	**19**			
Category: Ecotox Terrestric				
Total number of summary records for dimethenamid-P and metabolites retrieved		24	28	66
Total number of summary records for after removing duplicates	98 (at least 51 records with only heptan)	15	17	66
Totals number of summary records removed after first selection step ('Ballast')	71			
Totals number of summary records retrieved after first selection step (hits)	**27**			
Category: Ecotox Aquatic				
Total number of summary records for dimethenamid-P and metabolites retrieved		21	13	183

	Total	**Database**		
		BIOSIS	**CAB Abstracts**	**CAPLUS Chemical Abstracts Plus**
Total number of summary records for after removing duplicates	204 (at least 147 records with only heptan)	15	6	183
Totals number of summary records removed after first selection step ('Ballast')	176			
Totals number of summary records retrieved after first selection step (hits)	**28**			
Search update BIOSIS, CAB on the 8th of January 2014,CAPLUS on the 10th of January 2014				
Total number of summary records for dimethenamid-P and metabolites retrieved		n.a.	n.a.	n.a.
Total number of summary records for after removing duplicates	76	21	53	2
Totals number of summary records removed after first selection step ('Ballast')	74			
Totals number of summary records retrieved after first selection step (hits)	**2** (both Aquatic)			
Additional search for new dimethenamid-P metabolites and impuritiers				
Total number of summary records for dimethenamid-P and metabolites retrieved		n.a.	n.a.	n.a.
Total number of summary records for after removing duplicates	520	264	256	0
Totals number of summary records removed after first selection step ('Ballast')	507			
Totals number of summary records retrieved after first selection step (hits)	**13** (all Ecotox General)			

n.a. not available

Thus, according to document K-CA 9 (BASF DocID 2014/1103028) for a total of **104** open literature studies were subjected to a more detailed assessment the relevance.

In the provided Excel Sheet, the assessed studies were four categories 'check of ballast', 'check for relevance', 'check for reliability' and 'used for dossier'. The first step was to select the records for 'ballast' or 'hit'. The 'hits' were further sorted in the category 'check for relevance'which is listed in Table B.9.1-3. In the next step the hits sorted in the category 'check for reliability' are listed in Table B.9.1-4. The applicant sorted none of the studies in the category 'used for dossier'.
However in the Excel Sheet summarising the results of the more detail assessment, the numbers of open literature studies selected and discussed differ from the numbers given in document K-CA 9 (BASF DocID 2014/1103028).

Regarding the category Ecotox-general in total 982 records were listed, 29 of them selected as 'hits' and 953 as 'ballast'. No reasoning to select records as 'ballast' has been provided. 19 records were selected for the next step ('check of relevance'; see Table 9.1-3). None of them was selected for the 'check for reliability'.
For the category Ecotox-wildlife in total 71 records were listed, 20 of them selected as 'hits' and 50 as 'ballast'. The reasons given to select a record as ballast were 'wrong subject' and 'heptanes'. All 20 'hits' were selected for the next step ('check of relevance'; see Table B.9.1-3). None of them was selected for the 'check for reliability'.

In the categories Ecotox-aquatic in total 205 records were listed, 29 of them selected as ‘hits’ and 176 as ’ballast’. If provided, the reasons given to select a record as ballast were: weed control, wrong subject and heptanes. All 29 ‘hits’ plus 2 ‘hits’ additionally found in the update literature review were selected for the next step (‘check of relevance’; see Table B.9.1-3). One of them was selected for the ‘check for reliability’; see Table B.9.1-4.
In the categories Ecotox-terrestric in total 106 records were listed, 35 of them selected as ‘hits’ and 71 as ’ballast’. If provided, the reasons given to select a record as ballast were: yield; weed control, efficacy; human health; wrong subject and heptanes. All 35 ‘hits’ were selected for the next step (‘check of relevance’; see Table B.9.1-3). 15 of them were selected for the ‘check for reliability’; see Table B.9.1-4.

Table B.9.1-3: Records selected as 'hits' in the first assessment step sorted in the category 'check for relevance'

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
Dimethenamid-P Ecotox General						
6419	An Improved Screening Tool for Predicting Volatilisation of Pesticides Applied to Soils	Davie-Martin, Cleo L. Hageman, Kimberly J. Chin, Yu-Ping	Environmental Science + Technology (2013), 47(2), 868-876 CODEN: ESTHAG; ISSN: 0013-936X	no	x appropriate test species? --> no x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? -->no x relevant and appropriate life-stage(s)? --> no x relevant substance? --> no x relevant concentration range? --> no x water parameter during test? --> no x relevant route of exposure, exposure scenario, exposure time? --> no x new/additional useful information? --> no --> no additional information, therefore study is not considered for risk assessment	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6420	Pesticide Nonextractable Residue Formation in Soil: Insights from Inverse Modeling of Degradation Time Series	Loos, Martin Krauss, Martin Fenner, Kathrin	Environmental Science + Technology (2012), 46(18), 9830-9837 CODEN: ESTHAG; ISSN: 0013-936X	no	x appropriate test species? --> no x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? -->no x relevant and appropriate life-stage(s)? --> no x relevant substance? --> no x relevant concentration range? --> no x relevant route of exposure, exposure scenario, exposure time? --> no x new/additional useful information? --> no --> no additional information, therefore study is not considered for risk assessment	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6421	Patterning ecological risk of pesticide contamination at the river basin scale	Faggiano, Leslie de Zwart, Dick Garcia-Berthou, Emili Lek, Sovan Gevrey, Muriel	Science of the Total Environment (2010), 408(11), 2319-2326 CODEN: STENDL; ISSN: 0048-9697	no	x appropriate test species? --> no x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? -->no x relevant and appropriate life-stage(s)? --> no x relevant substance? --> no x relevant concentration range? --> no x relevant route of exposure, exposure scenario, exposure time? --> no x new/additional useful information? --> no --> no additional information, therefore study is not considered for risk assessment	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6422	Improving the knowledge of pesticide and nitrate transfer processes using age-dating tools (CFC, SF6, 3H) in a volcanic island (Martinique, French West Indies)	Gourcy, Laurence Baran, Nicole Vittecoq, Benoit	Journal of Contaminant Hydrology (2009), 108(3-4), 107-117 CODEN: JCOHE6; ISSN: 0169-7722	no	x appropriate test species? --> no x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? -->no x relevant and appropriate life-stage(s)? --> no x relevant substance? --> no x relevant concentration range? --> no x water parameter during test? --> no x relevant route of exposure, exposure scenario, exposure time? --> no x new/additional useful information? --> no --> no additional information, therefore study is not considered for risk assessment	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6426	Pesticides in fluvial wetlands catchments under intensive agricultural activities.	Poissant, Laurier [Reprint Author] Beauvais, Conrad Lafrance, Pierre Deblois, Christian	Science of the Total Environment, (OCT 1 2008) Vol. 404, No. 1, pp. 182-195. CODEN: STENDL. ISSN: 0048-9697.	no	x appropriate test species? --> no x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? -->no x relevant and appropriate life-stage(s)? --> no x relevant substance? --> no x relevant concentration range? --> no x water parameter during test? --> no x relevant route of exposure, exposure scenario, exposure time? --> no x new/additional useful information? --> no --> no additional information, therefore study is not considered for risk assessment	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
update Dimethenamid-P Ecotox General						
9689	Sample preparation for combined chemical analysis and *in vitro* bioassay application in water quality assessment	Kolkman, Annemieke Schriks, Merijn Brand, Walter Baeuerlein, Patrick S. van der Kooi, Margaretha M. E. van Doorn, Rene H. Emke, Erik Reus, Astrid A. van der Linden, Sander C. de Voogt, Pim Heringa, Minne B.	Environmental Toxicology and Pharmacology (2013), 36(3), 1291-1303 CODEN: ETOPFR; ISSN: 1382-6689	no	x not relevant; wrong topic x study does not contain ecotox. relevant endpoints for the risk assessment of dimethenamid-P. --> no additional information, therefore study is not considered for risk assessment	agreed
update Dimethenamid-P metabolites Ecotox General						
10349	Making fate and exposure models for freshwater ecotoxicity in life cycle assessment suitable for organic acids and bases	van Zelm, Rosalie Stam, Gea Huijbregts, Mark A. J. van de Meent, Dik	Chemosphere (2013), 90(2), 312-317 CODEN: CMSHAF; ISSN: 0045-6535	no	x not relevant; wrong topic x study does not contain ecotox. relevant endpoints for the risk assessment of dimethenamid-P. --> no additional information, therefore study is not considered for risk assessment	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
10350	A multimethod for the determination of 150 pesticide metabolites in surface water and groundwater using direct injection liquid chromatography-mass spectrometry	Reemtsma, Thorsten Alder, Lutz Banasiak, Ursula	Journal of Chromatography A (2013), 1271(1), 95-104 CODEN: JCRAEY; ISSN: 0021-9673	no	x not relevant; wrong topic x study does not contain ecotox. relevant endpoints for the risk assessment of dimethenamid-P. --> no additional information, therefore study is not considered for risk assessment	agreed
10351	Plant protection legal irrelevant metabolites in groundwater	Hamer, Kay Freudenberger, Uta	Wasser und Abfall (Wiesbaden, Germany) (2011), 13(9), 42-45 CODEN: WAABFE; ISSN: 1436-9095	no	x not relevant; wrong topic x study does not contain ecotox. relevant endpoints for the risk assessment of dimethenamid-P. --> no additional information, therefore study is not considered for risk assessment	agreed
10352	Support vector machine (SVM) as alternative tool to assign acute aquatic toxicity warning labels to chemicals	Michielan, Lisa Pireddu, Luca Floris, Matteo Moro, Stefano	Molecular Informatics (2010), 29(1-2), 51-64 CODEN: MIONBS; ISSN: 1868-1743	no	x not relevant; wrong topic x study does not contain ecotox. relevant endpoints for the risk assessment of dimethenamid-P. --> no additional information, therefore study is not considered for risk assessment	agreed
10353	Is the fish embryo toxicity test (FET) with the zebrafish (Danio rerio) a potential alternative for the fish acute toxicity test?	Lammer, E. Carr, G. J. Wendler, K. Rawlings, J. M. Belanger, S. E. Braunbeck, Th.	Comparative Biochemistry and Physiology, Part C: Toxicology + Pharmacology (2009), 149C(2), 196-209 CODEN: CBPPFK; ISSN: 1532-0456	no	x not relevant; methodology paper, describing the fish embryo toxicity test x study does not contain ecotox. relevant endpoints for the risk assessment of dimethenamid-P. --> no additional information, therefore study is not considered for risk assessment	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
10354	The proposal of architecture for chemical splitting to optimise QSAR models for aquatic toxicity	Colombo, Andrea Benfenati, Emilio Karelson, Mati Maran, Uko	Chemosphere (2008), 72(5), 772-780 CODEN: CMSHAF; ISSN: 0045-6535	no	x not relevant; wrong topic x study does not contain ecotox. relevant endpoints for the risk assessment of dimethenamid-P. --> no additional information, therefore study is not considered for risk assessment	agreed
10355	Combinatorial QSAR Modeling of Chemical Toxicants Tested against Tetrahymena pyriformis	Zhu, Hao Tropsha, Alexander Fourches, Denis Varnek, Alexandre Papa, Ester Gramatica, Paola Oberg, Tomas Dao, Phuong Cherkasov, Artem Tetko, Igor V.	Journal of Chemical Information and Modeling (2008), 48(4), 766-784 CODEN: JCISD8; ISSN: 1549-9596	no	x not relevant; wrong topic x study does not contain ecotox. relevant endpoints for the risk assessment of dimethenamid-P. --> no additional information, therefore study is not considered for risk assessment	agreed
10356	A Novel Logic-Based Approach for Quantitative Toxicology Prediction	Amini, Ata Muggleton, Stephen H. Lodhi, Huma Sternberg, Michael J. E.	Journal of Chemical Information and Modeling (2007), 47(3), 998-1006 CODEN: JCISD8; ISSN: 1549-9596	no	x not relevant; wrong topic x study does not contain ecotox. relevant endpoints for the risk assessment of dimethenamid-P. --> no additional information, therefore study is not considered for risk assessment	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
10357	Mechanistic and kinetic aspects as well as biological effects of pesticide photocomposition	Kiss, A. Virag, D.	Environmental Fate and Ecological Effects of Pesticides, Symposium Pesticide Chemistry, 13th, Piacenza, Italy, Sept. 3-6, 2007 (2007), 175-186. Editor(s): Del Re, Attilio Amerigo Maria. Publisher: Goliardica Pavese s.r.l., Pavia, Italy. CODEN: 69KOGX; ISBN: 978-88-7830-473-4	no	x not relevant; wrong topic x study does not contain ecotox. relevant endpoints for the risk assessment of dimethenamid-P. --> no additional information, therefore study is not considered for risk assessment	agreed
10358	Validation of a QSAR model for acute toxicity	Pavan, M. Netzeva, T. I. Worth, A. P.	SAR and QSAR in Environmental Research (2006), 17(2), 147-171 CODEN: SQERED; ISSN: 1062-936X	no	x not relevant; wrong topic x study does not contain ecotox. relevant endpoints for the risk assessment of dimethenamid-P. --> no additional information, therefore study is not considered for risk assessment	agreed
10359	Description of the Electronic Structure of Organic Chemicals Using Semiempirical and Ab Initio Methods for Development of Toxicological QSARs	Netzeva, Tatiana I. Aptula, Aynur O. Benfenati, Emilio Cronin, Mark T. D.	Journal of Chemical Information and Computer Sciences (2005), 45(1), 106-114 CODEN: JCISD8; ISSN:	no	x not relevant; wrong topic x study does not contain ecotox. relevant endpoints for the risk assessment of dimethenamid-P. --> no additional information, therefore study is not considered for risk assessment	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
		Gini, Giuseppina Lessigiarska, Iglika Maran, Uko Vracko, Marjan Schueuermann, Gerrit	0095-2338			
10360	A QSAR for Baseline Toxicity: Validation, Domain of Application, and Prediction	Oeberg, Tomas	Chemical Research in Toxicology (2004), 17(12), 1630-1637 CODEN: CRTOEC; ISSN: 0893-228X	no	x not relevant; wrong topic x study does not contain ecotox. relevant endpoints for the risk assessment of dimethenamid-P. --> no additional information, therefore study is not considered for risk assessment	agreed
10361	Using fragment chemistry data mining and probabilistic neural networks in screening chemicals for acute toxicity to the fathead minnow	Niculescu, S. P. Atkinson, A. Hammond, G. Lewis, M.	SAR and QSAR in Environmental Research (2004), 15(4), 293-309 CODEN: SQERED; ISSN: 1062-936X	no	x not relevant; wrong topic x study does not contain ecotox. relevant endpoints for the risk assessment of dimethenamid-P. --> no additional information, therefore study is not considered for risk assessment	agreed
Dimethenamid-P Ecotox wildlife						

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6242	Toxicity of pesticide and fertiliser mixtures simulating corn production to eggs of snapping turtles (Chelydra serpentina).	Solla, S. R. de Martin, P. A. Mikoda, P. de Solla, S. R.	Science of the Total Environment (2011) Volume 409, Number 20, pp. 4306-4311 ISSN: 0048-9697 DOI: 10.1016/j.scitotenv.2011.06.046 Published by: Elsevier Ltd, Oxford	no	x appropriate test species? --> eggs of snapping turtle (*Chelydra serpentina*, freshwater turtle) x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? --> yes x relevant and appropriate life-stage(s)? --> ?? it is not clear if the tested compounds are able to pass the eggshell and thus, if exposure of the embryo was achived; no analyses of pesticide conc. in egg / embryo --> eggs were collected from clutches either by locating ovipositing females or by visually searching for obvious signs of nesting left by the female --> different stages of eggs at start of exposure x relevant substance? --> yes; formulated product Frontier; however, no further information on the test item available x relevant concentration range? --> yes, application at a typical field application rate and higher rates x water parameter / environmental conditions measured during test? --> exposure via soil; no information on soil specification/ environmental conditions x clear endpoint (effect conc.)? --> no, not reported x relevant route of exposure, exposure scenario, exposure time? --> exposure of eggs via soil until hatching --> outdoor and laboratory exposures --> no information on age, etc. of egg laying female / quality of eggs --> see above: ?? it is not clear if the tested compounds are able to pass the eggshell and thus, if exposure of the embryo was achived; no analyses of pesticide conc. in egg / embryo	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
					x new/additional useful information? yes; DMTA is not acutely toxic to turtle eggs, exposed in soil at rates much higher than those recommended. Even 10× recommended rates did not impact hatching success --> study might provide some additional information; however, it is not clear if the tested compounds are able to pass the eggshell and thus, if exposure of the embryo was achived; no analyses of pesticide conc. in egg / embryo	
6904	Predictive Models of Prenatal Developmental Toxicity from ToxCast High-Throughput Screening Data	Sipes, Nisha S. Martin, Matthew T. Reif, David M. Kleinstreuer, Nicole C. Judson, Richard S. Singh, Amar V. Chandler, Kelly J. Dix, David J. Kavlock, Robert J. Knudsen, Thomas B.	Toxicological Sciences (2011), 124(1), 109-127 CODEN: TOSCF2; ISSN: 1096-0929	no	Appropriate test species ? - rat, rabbit Magnitude of effects significant? - Relevant life-stages ? - Gene induction vs. Apical endpoints (groth, reproduction? - Tested substance representative for substance assessed? - Exposure scenario relevant? - Conc. Related to PEC? Route of exposure relevant for species? - Does exposure scenario exist for substance? Time of exposure relevant for endpoints? - Useful information: no test - high-throughput screening for pathway-level models predictive of developmental toxicity	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6905	Development of quantitative structure-activity relationship (QSAR) models to predict the carcinogenic potency of chemicals. II. Using oral slope factor as a measure of carcinogenic potency	Wang, Nina Ching Yi Venkatapathy, Raghuraman Bruce, Robert Mark Moudgal, Chandrika	Regulatory Toxicology and Pharmacology (2011), 59(2), 215-226 CODEN: RTOPDW; ISSN: 0273-2300	no	Appropriate test species ? - rat, mouse, human Magnitude of effects significant? - Relevant life-stages ? - Gene induction vs. Apical endpoints (groth, reproduction? - Tested substance representative for substance assessed? - Exposure scenario relevant? - no, inhalation Conc. Related to PEC? Route of exposure relevant for species? Does exposure scenario exist for substance? Time of exposure relevant for endpoints? - Useful information: developing quant. structure-activity relationship (QSAR) models to predict the oral slope factors of chems (A slope factor is an upper bound, approximating a 95 % confidence limit, on the increased cancer risk from a lifetime exposure to an agent by ingestion or inhalation)	agreed
6906	Endocrine profiling and prioritisation of environmental chemicals using ToxCast data	Reif, David M. Martin, Matthew T. Tan, Shirlee W. Houck, Keith A. Judson, Richard S. Richard, Ann M. Knudsen, Thomas B. Dix, David J. Kavlock, Robert J.	Environmental Health Perspectives (2010), 118(12), 1714-1720 CODEN: EVHPAZ; ISSN: 0091-6765	no	Appropriate test species ? - *in vitro* high troughput Magnitude of effects significant? - Relevant life-stages ? - Gene induction vs. Apical endpoints (groth, reproduction? - endocrine disruption Tested substance representative for substance assessed? - Exposure scenario relevant? - Conc. Related to PEC? Route of exposure relevant for species? Does exposure scenario exist for substance? Multigender and multisite in rat tumorigens in ToxRefDB Time of exposure relevant for endpoints? - Useful information: rational prioritisation of chems. for further evaluation, Toxicol. Priority Index (ToxPi), Endocrine Disruptor Screening Program (EDSP)	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6907	Xenobiotic-Metabolising Enzyme and Transporter Gene Expression in Primary Cultures of Human Hepatocytes Modulated by Toxcast Chemicals	Rotroff, Daniel M. Beam, Andrew L. Dix, David J. Farmer, Adam Freeman, Kimberly M. Houck, Keith A. Judson, Richard S. LeCluyse, Edward L. Martin, Matthew T. Reif, David M. Ferguson, Stephen S.	Journal of Toxicology and Environmental Health, Part B: Critical Reviews (2010), 13(2-4), 329-346 CODEN: JTECFR; ISSN: 1093-7404	no	Appropriate test species ? - rodents Magnitude of effects significant? - Relevant life-stages ? - Gene induction vs. Apical endpoints (groth, reproduction? - *in vitro* Tested substance representative for substance assessed? - Exposure scenario relevant? - Conc. Related to PEC? Route of exposure relevant for species? Does exposure scenario exist for substance? Time of exposure relevant for endpoints? - Useful information: Significant relative risk assocns. with rodent *in vitro* chronic toxicity effects are reported for the five major receptor pathways	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6908	*In vitro* Screening of Environmental Chemicals for Targeted Testing Prioritisation: The ToxCast Project	Judson, Richard S. Houck, Keith A. Kavlock, Robert J. Knudsen, Thomas B. Martin, Matthew T. Mortensen, Holly M. Reif, David M. Rotroff, Daniel M. Shah, Imran Richard, Ann M. Dix, David J.	Environmental Health Perspectives (2010), 118(4), 485-492 CODEN: EVHPAZ; ISSN: 0091-6765	no	Appropriate test species ? - human cells, rat hepatocytes Magnitude of effects significant? - significant inverse assocn. between the no. of pathways perturbed by a chem. at low *in vitro* concns. and the lowest *in vitro* dose at which a chem. causes toxicity Relevant life-stages ? - Gene induction vs. Apical endpoints (groth, reproduction? - endocrine and xenobiotic metab. enzyme activity Tested substance representative for substance assessed? - Exposure scenario relevant? - evaluation for *in vitro* and in silico Conc. Related to PEC? Route of exposure relevant for species? Does exposure scenario exist for substance? Time of exposure relevant for endpoints? - Useful information: ToxCast, targeted testing of environmental contaminants, endocrine and xenobiotic metab. enzyme activity, significant inverse assocn. between the no. of pathways perturbed by a chem. at low *in vitro* concns. and the lowest *in vitro* dose at which a chem. causes toxicity	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6909	Impact of Environmental Chemicals on Key Transcription Regulators and Correlation to Toxicity End Points within EPA's ToxCast Program	Martin, Matthew T. Dix, David J. Judson, Richard S. Kavlock, Robert J. Reif, David M. Richard, Ann M. Rotroff, Daniel M. Romanov, Sergei Medvedev, Alexander Poltoratskaya, Natalia Gambarian, Maria Moeser, Matt Makarov, Sergei S. Houck, Keith A.	Chemical Research in Toxicology (2010), 23(3), 578-590 CODEN: CRTOEC; ISSN: 0893-228X	no	Appropriate test species ? - Magnitude of effects significant? - Relevant life-stages ? - Gene induction vs. Apical endpoints (groth, reproduction? - Tested substance representative for substance assessed? - Exposure scenario relevant? - Conc. Related to PEC? Route of exposure relevant for species? Does exposure scenario exist for substance? Time of exposure relevant for endpoints? - Useful information: ToxCast, rapid, high-content assessment of a compd.'s impact on gene regulatory networks, the authors identify mol. targets that assoc. with *in vitro* end points	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6910	Evaluation of high-throughput genotoxicity assays used in profiling the US EPA ToxCast chemicals	Knight, Andrew W. Little, Stephen Houck, Keith Dix, David Judson, Richard Richard, Ann McCarroll, Nancy Akerman, Gregory Yang, Chihae Birrell, Louise Walmsley, Richard M.	Regulatory Toxicology and Pharmacology (2009), 55(2), 188-199 CODEN: RTOPDW; ISSN: 0273-2300	no	Appropriate test species ? - e.g. rodents Magnitude of effects significant? - Relevant life-stages ? - Gene induction vs. Apical endpoints (groth, reproduction? - in silico Tested substance representative for substance assessed? - Exposure scenario relevant? - high-throughput screening (HTS) genotoxicity assays Conc. Related to PEC? Route of exposure relevant for species? Does exposure scenario exist for substance? Time of exposure relevant for endpoints? - Useful information: HTS assays demonstrated low sensitivity for rodent tumorigens	agreed
6911	Profiling chemical based on chronic toxicity results from the U.S. EPA ToxRef Database	Martin, Matthew T. Judson, Richard S. Reif, David M. Kavlock, Robert J. Dix, David J.	Environmental Health Perspectives (2009), 117(3), 392-399 CODEN: EVHPAZ; ISSN: 0091-6765	no	Appropriate test species ? - rat, mouse Magnitude of effects significant? - Relevant life-stages ? - Gene induction vs. Apical endpoints (groth, reproduction? - endpoints , *in vitro* Tested substance representative for substance assessed? - Exposure scenario relevant? - Conc. Related to PEC? Route of exposure relevant for species? Does exposure scenario exist for substance? Time of exposure relevant for endpoints? - Useful information: toxicity profiles from ToxRefDB based on long-term rodent bioassays; species specific overall susceptebility for liver tumors in mice e.g. by chemical group --> species specific LD_{50} and NOAEl according to chemical group for worst case approach	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6912	Optimisation of correlation weights of SMILES invariants for modeling oral quail toxicity	Toropov, Andrey A. Benfenati, Emilio	European Journal of Medicinal Chemistry (2007), 42(5), 606-613 CODEN: EJMCA5; ISSN: 0223-5234	no	Appropriate test species ? - quail Magnitude of effects significant? - Relevant life-stages ? - Gene induction vs. Apical endpoints (groth, reproduction? - Tested substance representative for substance assessed? - Exposure scenario relevant? - Conc. Related to PEC? Route of exposure relevant for species? Does exposure scenario exist for substance? Time of exposure relevant for endpoints? - Useful information: SMILES (simplified mol. input line entry system)	agreed
6913	A QSAR study of avian oral toxicity using support vector machines and genetic algorithms	Mazzatorta, Paolo Cronin, Mark T. D. Benfenati, Emilio	QSAR + Combinatorial Science (2006), 25(7), 616-628 CODEN: QCSSAU; ISSN: 1611-020X	no	Appropriate test species ? - aves Magnitude of effects significant? - Relevant life-stages ? - Gene induction vs. Apical endpoints (groth, reproduction? - Tested substance representative for substance assessed? - Exposure scenario relevant? - Conc. Related to PEC? Route of exposure relevant for species? - oral Does exposure scenario exist for substance? Time of exposure relevant for endpoints? - Useful information: the interaction of pesticides with steroid receptors, microsomal enzymes and cholinesterase activity was confirmed by *in vitro* tests	agreed
6914	Validation study on 660 pesticide residues in animal tissues by gel permeation chromatography cleanup/gas	Pang, Guo-Fang Cao, Yan-Zhong Zhang, Jin-Jie Fan, Chun-Lin	Journal of Chromatography, A (2006), 1125(1), 1-30 CODEN: JCRAEY; ISSN:	no	Appropriate test species ? - animal tissues (beef, mutton, pork, chicken, and rabbit) Magnitude of effects significant? - Relevant life-stages ? - Gene induction vs. Apical endpoints (groth, reproduction? -	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
	chromatography-mass spectrometry and liquid chromatography-tandem mass spectrometry	Liu, Yong-Ming Li, Xue-Min Jia, Guang-Qun Li, Zeng-Yin Shi, Yu-Qiu Wu, Yan-Ping Guo, Tong-Tong	0021-9673		Tested substance representative for substance assessed? - Exposure scenario relevant? - Conc. Related to PEC? Route of exposure relevant for species? Does exposure scenario exist for substance? Time of exposure relevant for endpoints? - Useful information: quantitative determination, limits of detection 0.2-600 .mu.g/kg, depending on each pesticide	
6915	Increasing efficiency of QSAR-analysis of carcinogenic activity of halogenated hydrocarbons	Tarasov, A. V. Abilev, S. K. Velibekov, R. M. Tarasov, V. A.	Ekologicheskaya Genetika (2005), 3(2), 5-14 CODEN: EGKEAE; ISSN: 1811-0932	no	Appropriate test species ? - rodents Magnitude of effects significant? - Relevant life-stages ? - Gene induction vs. Apical endpoints (groth, reproduction? - Tested substance representative for substance assessed? - Exposure scenario relevant? - Conc. Related to PEC? Route of exposure relevant for species? Does exposure scenario exist for substance? Time of exposure relevant for endpoints? - Useful information: selection of compd. influencing biol. activity.carcinogenic activity for 79 halogenated hydrocarbons	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6916	Evaluation of the ability of a battery of three *in vitro* genotoxicity tests to discriminate rodent carcinogens and non-carcinogens. I. Sensitivity, specificity and relative predictivity. [Erratum to document cited in CA143:243161]	Kirkland, David Aardema, Marilyn Henderson, Leigh Mueller, Lutz	Mutation Research, Genetic Toxicology and Environmental Mutagenesis (2005), 588(1), 70 CODEN: MRGMFI; ISSN: 1383-5718	no abstract available	Appropriate test species ? - Magnitude of effects significant? - Relevant life-stages ? - Gene induction vs. Apical endpoints (groth, reproduction? - Tested substance representative for substance assessed? - Exposure scenario relevant? - Conc. Related to PEC? Route of exposure relevant for species? Does exposure scenario exist for substance? Time of exposure relevant for endpoints? - Useful information:	agreed
6917	Evaluation of the ability of a battery of three *in vitro* genotoxicity tests to discriminate rodent carcinogens and non-carcinogens. I. Sensitivity, specificity and relative predictivity	Kirkland, David Aardema, Marilyn Henderson, Leigh Mueller, Lutz	Mutation Research, Genetic Toxicology and Environmental Mutagenesis (2005), 584(1-2), 1-256 CODEN: MRGMFI; ISSN: 1383-5718	no	Appropriate test species ? - Ames + mouse lymphoma assay (MLA) + *in vitro* micronucleus (MN) or chromosomal aberrations (CA) tes Magnitude of effects significant? - Relevant life-stages ? - Gene induction vs. Apical endpoints (groth, reproduction? - Tested substance representative for substance assessed? - Exposure scenario relevant? - Conc. Related to PEC? Route of exposure relevant for species? Does exposure scenario exist for substance? Time of exposure relevant for endpoints? - Useful information: discrimination of rodent carcinogens	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6918	Evaluation of the salmonella umu test with 83 NTP chemicals	Yasunaga, Katsuaki Kiyonari, Akiko Oikawa, Takeshi Abe, Naoki Yoshikawa, Kunie	Environmental and Molecular Mutagenesis (2004), 44(4), 329-345 CODEN: EMMUEG; ISSN: 0893-6692	no	Appropriate test species ? - *Salmonella typhimurium* TA1535/pSK1002 with and without a rat liver S9 mix Magnitude of effects significant? - Relevant life-stages ? - Gene induction vs. Apical endpoints (groth, reproduction? - Tested substance representative for substance assessed? - Exposure scenario relevant? - no Conc. Related to PEC? Route of exposure relevant for species? Does exposure scenario exist for substance? Time of exposure relevant for endpoints? - Useful information:	agreed
6919	A comparison between *in vitro* rat and human and *in vitro* rat skin absorption studies	van Ravenzwaay, B. Leibold, E.	Human + Experimental Toxicology (2004), 23(9), 421-430 CODEN: HETOEA; ISSN: 0960-3271	no	Appropriate test species ? - *In vitro* rat and man compared to *in vitro* in rats. Magnitude of effects significant? - Relevant life-stages ? - Gene induction vs. Apical endpoints (groth, reproduction? - Tested substance representative for substance assessed? - Exposure scenario relevant? - dermal application Conc. Related to PEC? Route of exposure relevant for species? skin penetration Does exposure scenario exist for substance? Time of exposure relevant for endpoints? - Useful information: penetration rates *in vitro* > *in vitro*, rats > man	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6920	Prediction of Chemical Carcinogenicity from Molecular Structure	Sun, Hongmao	Journal of Chemical Information and Computer Sciences (2004), 44(4), 1506-1514 CODEN: JCISD8; ISSN: 0095-2338	no	Appropriate test species ? - silico models for virtual screening, male mouse (MM), female mouse (FM), male rat (MR), and female rat (FR) Magnitude of effects significant? - Relevant life-stages ? - Gene induction vs. Apical endpoints (groth, reproduction? - Tested substance representative for substance assessed? - Exposure scenario relevant? Conc. Related to PEC? Route of exposure relevant for species? Does exposure scenario exist for substance? Time of exposure relevant for endpoints? - Useful information: identification of the specific atom types and fragments that contributed most significantly to carcinogenicity and response differences across species and gender.	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6921	The significance of *in vitro* rat skin absorption studies to human risk assessment	van Ravenzwaay, B. Leibold, E.	Toxicology *in vitro* (2004), 18(2), 219-225 CODEN: TIVIEQ; ISSN: 0887-2333	no	Appropriate test species ? - rat, man Magnitude of effects significant? - Relevant life-stages ? - Gene induction vs. Apical endpoints (groth, reproduction? - Tested substance representative for substance assessed? - Exposure scenario relevant? - dermal penetration Conc. Related to PEC? Route of exposure relevant for species? no Does exposure scenario exist for substance? Time of exposure relevant for endpoints? - Useful information: Absorption data for 3 compds. with a log10 (POCTANOL/WATER) of 2.9-3.0 show inverse relationship between mol. wt./aq. soly. and the rate of dermal absorption. Lipophilic compds. with low aq. soly. (<4 mg/L) showed the highest penetration rates through rat skin, but this was not always the case for human skin	agreed
6922	A unified algorithm for predicting partition coefficients for PBPK modeling of drugs and environmental chemicals	Peyret, Thomas Poulin, Patrick Krishnan, Kannan	Toxicology and Applied Pharmacology (2010), 249(3), 197-207 CODEN: TXAPA9; ISSN: 0041-008X	no	Appropriate test species ? - macro (i.e. whole tissue) and micro (i.e. cells and fluids) for rat Magnitude of effects significant? - Relevant life-stages ? - Gene induction vs. Apical endpoints (groth, reproduction? - Tested substance representative for substance assessed? - Exposure scenario relevant? - Conc. Related to PEC? Route of exposure relevant for species? Does exposure scenario exist for substance? Time of exposure relevant for endpoints? - Useful information:	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
Dimethenamid-P aquatic Ecotox						
6215	Evaluation of the partial renewal of in situ phytoplankton microcosms and application to the impact assessment of bentazon and dimethenamid	de la Broise, Denis, Stachowski-Haberkorn, Sabine	Marine Pollution Bulletin (2012), 64(11), 2480-2488 CODEN: MPNBAZ; ISSN: 0025-326X	yes	x appropriate test species? --> yes (phytoplankton population in natural surface seawater) x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? --> yes (phytoplankton population; chlorophyll measurements, pigment fingerprints and flow cytometry) x relevant and appropriate life-stage(s)? --> yes, natural community x relevant substance? --> yes; formulated product Frontier x relevant concentration range? --> yes, however, no measurement of initial concentrations in the bottles!! significant loss of the test substance over exposure time x water parameter / environmental conditions measured during test? --> no!! x clear endpoint (effect conc.)? --> no, not reported; however, a NOEC of < 1 µ as/L could be derived? however, "positive" effect (increase; see blow) was measured!! x relevant route of exposure, exposure scenario, exposure time? --> saltwater?? --> no sediment (as buffering element) --> daily exchange of 10 % of the test solutions with natural seawater and no measurement of initial test concentrations -->exposure concentrations during the study can not be estimated!! x no recovery period x new/additional useful information? --> increase of chlorophyll a after exposure to 1 µg as/L (nominal) over 12 days and significant increase of chlorophyll a and larger eukaryote counts after	Agreed, relevant

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
					exposure to 10 and 100 µg as/L (nominal) over 12 days with significant dose-correlation --> dimethenamid induced modifications of the phytoplankton community starting at 1 µg as/L, the lowest tested concentration. This suggests that these pesticides could impact phytoplankton communities in polluted coastal areas --> however, relevance of the measured (positive) effects on aquatic ecosystem is unclear --> study may be relevant and might provide some additional information; however, the study is not reliable since no analytical measurement at start of exposure were made and due to the daily exchange of 10 % of test solution with natural seawate; see reliability check)	
6216	Agricultural pesticide residues of farm runoff in the Okanagan Valley, British Columbia, Canada	Kuo, Jen-ni Soon, Alicia Y. Garrett, Christine Wan, Michael T. K. Pasternak, John P.	Journal of Environmental Science and Health, Part B: Pesticides, Food Contaminants, and Agricultural Wastes (2012), 47(4), 250-261 CODEN: JPFCD2; ISSN: 0360-1234	no	x no ecotoxicology study; no biological test system x site specific monitoring study x no investigation of effects of dimethenamid on aquatic organisms; x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment was generated within this study x article not available electronically via BASF; however, based on the abstract it can be expected that the study is not relevant for DMTA aquatic risk assessemnt	agreed
6217	Quantitative structure-activity relationship analysis of acute toxicity of diverse chemicals to Daphnia magna with whole molecule descriptors	Moosus, M. Maran, U.	SAR and QSAR in Environmental Research (2011), 22(7-8), 757-774 CODEN: SQERED; ISSN: 1026-776X	no	x no ecotoxicology study; no biological test system x modeling study using existing toxicity data x no investigation of effects of DMTA on aquatic organisms; x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment was generated within this study	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6218	Occurrence and endocrine effects of agrichemicals in a small Nebraska, USA, watershed	Jeffries, Marlo K. Sellin Abbott, Kelty I. Cowman, Tim Kolok, Alan S.	Environmental Toxicology and Chemistry (2011), 30(10), 2253-2260 CODEN: ETOCDK; ISSN: 0730-7268 URL: http://onlinelibrary.wiley.com/doi/10.1002/etc.615/pdf	no	x site-specific assessments x determined endocrine disrupting effects can not be related to single pesticides (e.g. DMTA) x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment was generated within this study	agreed
6219	The anti-estrogenic activity of sediments from agriculturally intense watersheds: Assessment using *in vitro* and *in vitro* assays	Sellin Jeffries, Marlo K. Conoan, Nicholas H. Cox, Marc B. Sangster, Jodi L. Balsiger, Heather A. Bridges, Andrew A. Cowman, Tim Knight, Lindsey A. Bartelt-Hunt, Shannon L. Kolok, Alan S.	Aquatic Toxicology (2011), 105(1-2), 189-198 CODEN: AQTODG; ISSN: 0166-445X	no	x site-specific assessments x determined endocrine disrupting effects can not be related to the (single) pesticides (e.g.DMTA) x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment was generated within this study	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6220	Occurrence and Toxicity of 331 Organic Pollutants in Large Rivers of North Germany over a Decade (1994 to 2004)	Schafer, Ralf B. von der Ohe, Peter Carsten Kuhne, Ralph Schuurmann, Gerrit Liess, Matthias	Environmental Science + Technology (2011), 45(14), 6167-6174 CODEN: ESTHAG; ISSN: 0013-936X	no	x site specific assessment of potential risk based on existing toxicity data on fish, daphnids and algae or based on values estimated from results for similar compounds x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment was generated within this study	agreed
6221	Using field data to assess the effects of pesticides on crustacea in freshwater aquatic ecosystems and verifying the level of protection provided by water quality guidelines	Guy, Martha Singh, Lucina Mineau, Pierre	Integrated Environmental Assessment and Management (2011), 7(3), 426-436 CODEN: IEAMCK; ISSN: 1551-3777	no	x estimated toxicity / risk based on existing toxicity data and modeling x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment was generated within this study	agreed
6222	Current-use pesticides in inland lake waters, precipitation, and air from Ontario, Canada	Kurt-Karakus, Perihan Binnur Teixeira, Camilla Small, Jeff Muir, Derek Bidleman, Terry F.	Environmental Toxicology and Chemistry (2011), 30(7), 1539-1548 CODEN: ETOCDK; ISSN: 0730-7268 URL: http://onlinelibrary.wiley.com/doi/10.1002/etc.545/pdf	no	x site-specific monitoring of pesticide concentrations in different lakes in Canada x no ectoxicological study x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk asses	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6223	Passive Sampling of Bioavailable Organic Chemicals in Perry County, Missouri Cave Streams	Fox, J. Tyler Adams, Ginny Sharum, Martin Steelman, Karen L.	Environmental Science + Technology (2010), 44(23), 8835-8841 CODEN: ESTHAG; ISSN: 0013-936X	no	x site-specific monitoring study; invetigation of the applicability of passive samplers for monitoring water quality; no ectoxicological study x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk asses	agreed
6224	Reductions in hepatic vitellogenin and estrogen receptor alpha expression by sediments from an agriculturally impacted waterway	Sellin, Marlo K. Snow, Daniel D. Kolok, Alan S.	Aquatic Toxicology (2010), 96(2), 103-108 CODEN: AQTODG; ISSN: 0166-445X	no	x site-specific assessments x investigation of endocrine disrupting effects of river sediment / water in fish x determined endocrine disrupting effects can not be related to single pesticides (e.g. DMTA) x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment was generated within this study	agreed
6225	Agrichemicals in Nebraska, USA, watersheds: occurrence and endocrine effects	Sellin, Marlo K. Snow, Daniel D. Schwarz, Matthew Carter, Barbara J. Kolok, Alan S.	Environmental Toxicology and Chemistry (2009), 28(11), 2443-2448 CODEN: ETOCDK; ISSN: 0730-7268	no	x site-specific monitoring study x endocrine disrupting effects could not be definitely linked to any of the agrichems. (e.g. DMTA) x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6226	Assessment of toxic effects of pesticide extracts on different green algal species by using chlorophyll a fluorescence	Chalifour, Annie Spear, Philip A. Boily, Monique H. DeBlois, Christian Giroux, Isabelle Dassylva, Nathalie Juneau, Philippe	Toxicological and Environmental Chemistry (2009), 91(7), 1315-1329 CODEN: TECSDY; ISSN: 0277-2248	no	x site specific monitoring & toxicity study x investigation of effects of pesticide mixture on aquatic organisms; observed effects can not be related to single compounds (e.g. DMTA) x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment was generated within this study x article not available electronically via BASF; however, based on the abstract it can be expected that the study is not relevant for DMTA aquatic risk assessemnt	agreed
6227	Utility of benthic foraminifera for biomonitoring of contamination in marine sediments: A case study from the Naples harbour (Southern Italy)	Ferraro, Luciana Sammartino, Simone Feo, Maria Luisa Rumolo, Paola Manta, Daniela Salvagio Marsella, Ennio Sprovieri, Mario	Journal of Environmental Monitoring (2009), 11(6), 1226-1235 CODEN: JEMOFW; ISSN: 1464-0325	no	x site specific monitoring study x no investigation of effects of dimethenamid on aquatic organisms; x investigation of effects of pesticide mixture on aquatic organisms; observed effects can not be related to single compounds (e.g. DMTA) x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment was generated within this study x article not available electronically via BASF; however, based on the abstract it can be expected that the study is not relevant for DMTA aquatic risk assessemnt	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6228	Predicting Pesticide Environmental Risk in Intensive Agricultural Areas. II: Screening Level Risk Assessment of Complex Mixtures in Surface Waters	Verro, Roberto Finizio, Antonio Otto, Stefan Vighi, Marco	Environmental Science + Technology (2009), 43(2), 530-537 CODEN: ESTHAG; ISSN: 0013-936X	no	x modelling appoach; x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment was generated in this study; x no evaluation of the effect of single substance DMTA on aquatic organisms x side-specific assessment of pesticide mixtures in a river basin in northeast Italy; however, different environmental conditions and agriculture conditions at other sites will result in differnent composition of mixtures and thus, results are not relevant/valid for other regions x Risk Characterisation for Pesticide Mixtures has been performed by calculating toxic units and using a risk index (PRISW-1 index) based on existing toxicity data.	agreed
6229	Predicting Pesticide Environmental Risk in Intensive Agricultural Areas. I: Screening Level Risk Assessment of Individual Chemicals in Surface Waters	Verro, Roberto Finizio, Antonio Otto, Stefan Vighi, Marco	Environmental Science + Technology (2009), 43(2), 522-529 CODEN: ESTHAG; ISSN: 0013-936X	no	x modelling appoach; x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment was generated in this study; x calculation of site-specific chemical concentrationsin a river basin in northeast Italy; however, different environmental conditions and agriculture conditions at other regions will result in different substance concentrations and thus, results are not relevant/valid for other regions x screening level risk for the aquatic community was estimated using a risk index (PRISW-1 index) based on existing toxicity data.	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6230	Partitioning of current-use and legacy pesticides in salmon habitat in British Columbia, Canada	Harris, Kate A. Dangerfield, Neil Woudneh, Million Brown, Tom Verrin, Stacey Ross, Peter S.	Environmental Toxicology and Chemistry (2008), 27(11), 2253-2262 CODEN: ETOCDK; ISSN: 0730-7268	no	x no ecotoxicology study; no biological test system x study might be relevant for E-Fate x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment was generated within this study	agreed
6231	Deriving trigger values for, and assessing hazard posed by, volatile chlorinated hydrocarbons in a Sydney estuary	Hunt, James Birch, Gavin Warne, Michael St. J.	Australasian Journal of Ecotoxicology (2007), 13(1), 33-42 CODEN: AJECFS; ISSN: 1323-3475	no	x site specific hazard assessment x dimethenamid is not mentioned within the study x no investigation of effects of dimethenamid on aquatic organisms; x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment was generated within this study	agreed
6232	Comparison of a score-based approach with risk-based ranking of in-use agricultural pesticides in Canada to aquatic receptors	Whiteside, Melanie Mineau, Pierre Morrison, Clare Knopper, Loren D.	Integrated Environmental Assessment and Management (2008), 4(2), 215-236 CODEN: IEAMCK; ISSN: 1551-3777	no	x ranking of pesticides and their potential risk to aquatic life based on existing toxicity data x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment was generated in this study	agreed
6233	An algal toxicity database of organic toxicants derived by a closed-system technique	Tsai, Kuo-Pei Chen, Chung-Yuan	Environmental Toxicology and Chemistry (2007), 26(9), 1931-1939 CODEN: ETOCDK; ISSN: 0730-7268	no	x dimethenamid (and/or other chloroacetamides) is not mentioned /was not tested within the study	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6234	Quantitative structure-activity relationships for toxicity of nonpolar narcotic chemicals to Pseudokirchneriella subcapitata	Hsieh, Shih-Hung Hsu, Chih-Hsiung Tsai, Din-Yu Chen, Chung-Yuan	Environmental Toxicology and Chemistry (2006), 25(11), 2920-2926 CODEN: ETOCDK; ISSN: 0730-7268	no	x dimethenamid (and/or other chloroacetamides) is not mentioned /was not tested within the study	agreed
6235	Top-Priority Fragment QSAR Approach in Predicting Pesticide Aquatic Toxicity	Casalegno, Mose' Sello, Guido Benfenati, Emilio	Chemical Research in Toxicology (2006), 19(11), 1533-1539 CODEN: CRTOEC; ISSN: 0893-228X	no	x no ecotoxicology study; no biological test system x modeling study using existing data x DMTA was not tested / is not mentioned within this study x no investigation of effects of DMTA on aquatic organisms; x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment was generated within this study	agreed
6236	QSAR models for Daphnia toxicity of pesticides based on combinations of topological parameters of molecular structures	Toropov, Andrey A. Benfenati, Emilio	Bioorganic + Medicinal Chemistry (2006), 14(8), 2779-2788 CODEN: BMECEP; ISSN: 0968-0896	no	x modelling study; no ecotoxicology study; no biological test system x comparison of predicted and experimental toxicity to *D. magna* based on calculated and already existing toxicity data, respectively x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment was generated within this study	agreed
6237	Predicting pesticide mixtures load in surface waters from a given crop	Finizio, A. Villa, S. Vighi, M.	Agriculture, Ecosystems + Environment (2005), 111(1-4), 111-118 CODEN: AEENDO; ISSN: 0167-8809	no	x modelling study; no biological test system x site-specific predictings of pesticide mixtures and risk characterisation for the mixture (not single substances) using a modelling appoach based on already existing toxicity data; x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment was generated within this study	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6238	Oxidative stress and endocrine endpoints in white sucker (Catostomus commersoni) from a river impacted by agricultural chemicals	Dorval, Jocelyn Leblond, Vincent Deblois, Christian Hontela, Alice	Environmental Toxicology and Chemistry (2005), 24(5), 1273-1280 CODEN: ETOCDK; ISSN: 0730-7268	no	x site-specific assessments x investigation of oxidative stress and endocrine disrupting effects in fish from a river system contaminated with different agrucultural chemicals x determined (endocrine disrupting) effects can not be related to single pesticides (e.g. DMTA) x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment was generated within this study	agreed
6239	Hepatic retinoids of bullfrogs in relation to agricultural pesticides	Boily, Monique H. Berube, Virginie E. Spear, Philip A. DeBlois, Christian Dassylva, Nathalie	Environmental Toxicology and Chemistry (2005), 24(5), 1099-1106 CODEN: ETOCDK; ISSN: 0730-7268	no	x site-specific assessments and monitoring x investigation of effects on hepatic retinoids of bullfrogs in relation to site-specific agrucultural contamination in surface water x determined effects can not be related to single pesticides (e.g. DMTA) x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment was generated within this study	agreed
6240	Plasma retinoid profile in bullfrogs, Rana catesbeiana, in relation to agricultural intensity of sub-watersheds in the Yamaska River drainage basin, Quebec, Canada	Berube, Virginie E. Boily, Monique H. DeBlois, Chistian Dassylva, Nathalie Spear, Philip A.	Aquatic Toxicology (2005), 71(2), 109-120 CODEN: AQTODG; ISSN: 0166-445X	no	x site-specific assessments and monitoring x investigation of effects on plasma retinoid profile of bullfrogs in relation to site-specific agrucultural contamination in surface water x determined effects can not be related to single pesticides (e.g. DMTA) x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment was generated within this study	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6241	Differential toxicity of new generation herbicides to cyanobacteria and eukaryotic phytoplankton: Can they be responsible for cyanobacterial harmful algal blooms in Missisquoi Bay, Lake Champlain?	Basara, T. J. [Reprint Author] Mihuc, T. B. Twiss, M. R.	IAGLR Conference Program and Abstracts, (2006) Vol. 49, pp. 7. Meeting Info.: 49th Annual Conference on Great Lakes in a Changing Environment. Ontario, CANADA. May 22 -28, 2006. Int Assoc Great Lakers Res. ISSN: 1010-4224.	no	x neither paper nor abstract is available on the internet x based on the titel an evaluation of the study is not possible	agreed
7065	Are Neutral Chloroacetamide Herbicide Degradates of Potential Environmental Concern? Analysis and Occurrence in the Upper Chesapeake Bay	Hladik, Michelle L. Hsiao, Jonie J. Roberts, A. Lynn	Environmental Science and Technology (2005), 39(17), 6561-6574 CODEN: ESTHAG; ISSN: 0013-936X	no	x description of a method for analysis of DMTA / other chloroacetamides and site specific monitoring/analysis x no investigation of effects of dimethenamid on aquatic organisms; x no (new) biological endpoint / relevant ecotoxicological information for DMTA aquatic risk assessment was generated within this study	agreed
7066	Evaluation of the partial renewal of in situ phytoplankton microcosms and application to the impact assessment of bentazon and dimethenamid.	de la Broise, Denis [Reprint Author] Stachowski-Haberkorn, Sabine	Marine Pollution Bulletin, (NOV 2012) Vol. 64, No. 11, pp. 2480-2488. CODEN: MPNBAZ. ISSN: 0025-326X. E-ISSN: 1879-3363.	No, see comment	(articel available); this is the same study as already listed above (see Nr. 6215; AN: 2012:1581967	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
Dimethenamid-P aquatic Ecotox update						
9585	The spring runoff in Nebraska's (USA) Elkhorn River watershed and its impact on two sentinel organisms	Knight, Lindsey A. Christenson, Matthew K. Trease, Andrew J. Davis, Paul H. Kolok, Alan S.	Environmental Toxicology and Chemistry (2013), 32(7), 1544-1551 CODEN: ETOCDK; ISSN: 0730-7268	no	x site specific (Elkhorn River, Nebraska, USA) x is an appropriate test species studied? yes: fathead minnow and northern leopard frog x dimethenamid was detected in river water in the range of ng (8.0 ng/L) x no endpoint directly related to dimethenamid	agreed
9586	Evaluation of the partial renewal of in situ phytoplankton microcosms and application to the impact assessment of bentazon and dimethenamid.	de la Broise, Denis [Reprint Author] Stachowski-Haberkorn, Sabine	Marine Pollution Bulletin, (NOV 2012) Vol. 64, No. 11, pp. 2480-2488. CODEN: MPNBAZ. ISSN: 0025-326X. E-ISSN: 1879-3363.	No, see comment	(articel available); this is the same study as already listed above (see Nr. 6215; AN: 2012:1581967	agreed
Dimethenamid-P terrestic Ecotox						
6806	Selectivity of fomesafen based systems for preemergence weed control in cucurbit crops	Peachey, Ed Doohan, Doug Koch, Tim	Crop Protection (2012), 40, 91-97 CODEN: CRPTD6; ISSN: 0261-2194	no	x dimethenamid-P was not tested in this study and is only mentioned as possible mixing partner in tank mixes with Fomesafen. --> no additional information, therefore study is not considered for risk assessment	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6807	Impact of herbicide application intensity in relation to environment and tillage on earthworm population in sugar beet in Germany	Marwitz, Andreas Ladewig, Erwin Maerlaender, Bernward	European Journal of Agronomy (2012), 39, 25-34 CODEN: EJAGET; ISSN: 1161-0301	no	x dimethenamid-P is not mentioned in the abstract (only in the index terms) x study evaluates the response of earthworms to different herbicides in relation to environmetnal conditions and tillage x no terrestial risk assessment and no endpoints for dimethenamid-P visible in the figures and tables peer view of the journal --> no additional information, therefore study is not considered for risk assessment	agreed
6808	Predicting biological functions of compounds based on chemical-chemical interactions	Hu, Le-Le Chen, Chen Huang, Tao Cai, Yu-Dong Chou, Kuo-Chen	PLoS One (2011), 6(12), e29491 CODEN: POLNCL; ISSN: 1932-6203	no	x dimethenamid-P is not mentioned at all --> no additional information, therefore study is not considered for risk assessment	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6809	Predictive Models of Prenatal Developmental Toxicity from ToxCast High-Throughput Screening Data	Sipes, Nisha S. Martin, Matthew T. Reif, David M. Kleinstreuer, Nicole C. Judson, Richard S. Singh, Amar V. Chandler, Kelly J. Dix, David J. Kavlock, Robert J. Knudsen, Thomas B.	Toxicological Sciences (2011), 124(1), 109-127 CODEN: TOSCF2; ISSN: 1096-0929	no	x dimethenamid-P is not mentioned at all --> no additional information, therefore study is not considered for risk assessment	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6810	Late-season weed control in glyphosate-resistant sugarbeet	Wilson, Robert G. Sbatella, Gustavo M.	Weed Technology (2011), 25(3), 350-355 CODEN: WETEE9; ISSN: 0890-037X	yes?	x appropriate test species? --> yes (sugarbeet) x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? --> yes (% sugarbeet injury, weed density) x relevant and appropriate life-stage(s)? --> yes (2-8 true leaf) x relevant substance? --> yes (among others tested in the study) x relevant concentration range? --> yes (0.24 and 0.74 kg as/ha) x relevant route of exposure, exposure scenario, exposure time? --> yes (post emergence spray application) x new/additional useful information? --> yes --> although rather efficacy-like, the study might be relevant for risk assessment of dimethenamid-P or be used as additional information	Agreed, relevant
6811	Occurrence and Toxicity of 331 Organic Pollutants in Large Rivers of North Germany over a Decade (1994 to 2004)	Schafer, Ralf B. von der Ohe, Peter Carsten Kuhne, Ralph Schuurmann, Gerrit Liess, Matthias	Environmental Science + Technology (2011), 45(14), 6167-6174 CODEN: ESTHAG; ISSN: 0013-936X	no	x study on pesticides and organic pollutants on auqatic fauna in river basins x dimethenamid-P is not mentioned in the abstract --> no additional information, therefore study is not considered for risk assessment	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6812	Impact of herbicide strategies on earthworm population and soil fauna activity in sugarbeet as affected by soil tillage and site characteristics	Marwitz, Andreas Ladewig, Erwin Marlander, Bernward	Zuckerindustrie (Berlin, Germany) (2011), 136(1), 41-52 CODEN: ZUCKDI; ISSN: 0344-8657	no	x appropriate test species? --> yes (earthworm) x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? --> yes x relevant and appropriate life-stage(s)? --> ? x relevant substance? --> ? (dimethenamid-P is not mentioned in the abstract (only in the index terms) x relevant concentration range? --> ? x relevant route of exposure, exposure scenario, exposure time? --> ? x the effect of different herbicide rates in combination with mulching or tillage was related to earthworm population, litter decomposition and feeding activity of soil fauna --> no additional information, therefore study is not considered for risk assessment	agreed
6813	Mechanisms of action of herbicides and manifestations of their effects on plants. Inhibitors of the biosynthesis of long chains of fatty acids	Jursik, Miroslav Soukup, Josef Holec, Josef Andr, Jiri	Listy Cukrovarnicke a Reparske (2011), 127(1), 15-19 CODEN: LCUREK; ISSN: 1210-3306	no	x study investigates mode of action and efficacy of herbicides x based on abstract there is no indication for the study to contain relevant ecotoxicological information for terrestrial risk assessment --> no additional information, therefore study is not considered for risk assessment	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6814	Sodium safens saflufenacil applied postemergence to corn (Zea mays)	Moran, Meghan Sikkema, Peter H. Hall, J. Christopher Swanton, Clarence J.	Weed Science (2011), 59(1), 4-13 CODEN: WEESA6; ISSN: 0043-1745	yes?	x appropriate test species? --> yes (corn) x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? --> yes (% corn injury, yield (T/ha)) x relevant and appropriate life-stage(s)? --> yes (pre-emergence, 2-4 true leaf) x relevant substance? --> yes (in combination with saflufenacil, BAS 781 and safeners) x relevant concentration range? --> yes (660 and 1320 g as/ha) x relevant route of exposure, exposure scenario, exposure time? --> yes x new/additional useful information? --> yes x appropriate statistical evaluation --> study might be relevant for risk assessment of dimethenamid-P or be used as additional information	Agreed, relevant

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6815	Miscanthus .times. giganteus response to preemergence and postemergence herbicides	Anderson, Eric K. Voigt, Thomas B. Bollero, German A. Hager, Aaron G.	Weed Technology (2010), 24(4), 453-460 CODEN: WETEE9; ISSN: 0890-037X	yes?	x appropriate test species? --> yes (miscanthus) x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? --> yes (injury, shoot length, dry weight) x relevant and appropriate life-stage(s)? --> yes (pre-emergence, 2-4 true leaf) x relevant substance? --> yes (in combination with saflufenacil) x relevant concentration range? --> yes (1220-4880 g as/ha) x relevant route of exposure, exposure scenario, exposure time? --> yes x new/additional useful information? --> yes x appropriate test design (randomised block, 6 replicates) x appropriate statistical evaluation --> study might be relevant for risk assessment of dimethenamid-P or be used as additional information	agreed , relevant; injury, shoot length, dry weight
6816	QSAR modeling of toxicity of diverse organic chemicals to Daphnia magna using 2D and 3D descriptors	Kar, Supratik Roy, Kunal	Journal of Hazardous Materials (2010), 177(1-3), 344-351 CODEN: JHMAD9; ISSN: 0304-3894	no	x study investigates QSAR models/*Daphnia magna* x based on abstract there is no indication for the study to contain relevant ecotoxicological information for terrestrial risk assessment --> no additional information, therefore study is not considered for risk assessment	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6817	Effect of reduced herbicide rates on weed control, environmental impact and profitability on corn	Soltani, Nader Vyn, Richard J. Van Eerd, Laura L. Shropshire, Christy Sikkema, Peter H.	Canadian Journal of Plant Science (2009), 89(5), 969-975 CODEN: CPLSAY; ISSN: 0008-4220	yes?	x appropriate test species? --> yes (corn) x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? --> yes (yied) x relevant and appropriate life-stage(s)? --> yes (pre-emergence, 1 true leaf) x relevant substance? --> yes (in combination with dicamba/atrazine) x relevant concentration range? --> yes (1000 g as/ha) x relevant route of exposure, exposure scenario, exposure time? --> yes x new/additional useful information? --> yes x appropriate test design (randomised block, 4 replicates) x appropriate statistical evaluation --> although rather efficacy-/economically-like, study might be relevant for risk assessment of dimethenamid-P or be used as additional information	agreed , relevant yield

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6818	Control of common waterhemp (Amaranthus tuberculatus var. rudis) in corn and soybean with sequential herbicide applications	Soltani, Nader Vyn, Joshua D. Sikkema, Peter H.	Canadian Journal of Plant Science (2009), 89(1), 127-132 CODEN: CPLSAY; ISSN: 0008-4220	yes?	x appropriate test species? --> yes (corn, soybean) x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? --> yes (yied, injury) x relevant and appropriate life-stage(s)? --> ? (time of application in relation to height of weed) x relevant substance? --> yes (in combination with dicamba/atrazine) x relevant concentration range? --> yes (1250 g as/ha) x relevant route of exposure, exposure scenario, exposure time? --> yes x new/additional useful information? --> yes x appropriate test design (randomised block, 4 replicates) x appropriate statistical evaluation --> although rather efficacy-like, study might be relevant for risk assessment of dimethenamid-P or be used as additional information	Agreed, relevant yield, injury
6819	The effect of herbicides on some microbiological parameters of carbon-cycle in maize monoculture	Sandor, Zsolt Katai, Janos Nagy, Peter Tamas	Cereal Research Communications (2008), 36(Suppl.), 1175-1178 CODEN: CRCMCL; ISSN: 0133-3720	no	x study investigates 4 different herbicides and "some parameters of C-cycle" in corn monoculture x based on abstract there is no indication for the study to contain relevant ecotoxicological information for terrestrial risk assessment --> no additional information, therefore study is not considered for risk assessment	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6820	Comparison of a score-based approach with risk-based ranking of in-use agricultural pesticides in Canada to aquatic receptors	Whiteside, Melanie Mineau, Pierre Morrison, Clare Knopper, Loren D.	Integrated Environmental Assessment and Management (2008), 4(2), 215-236 CODEN: IEAMCK; ISSN: 1551-3777	no	x study investigates risk-based approch for ranking risk of pesticides to aquatic organisms x based on abstract there is no indication for the study to contain relevant ecotoxicological information for terrestrial risk assessment --> no additional information, therefore study is not considered for risk assessment	agreed
6821	Additive SMILES-based optimal descriptors in QSAR modeling bee toxicity: Using rare SMILES attributes to define the applicability domain	Toropov, A. A. Benfenati, E.	Bioorganic + Medicinal Chemistry (2008), 16(9), 4801-4809 CODEN: BMECEP; ISSN: 0968-0896	no	x study deals with descriptors for a modelling approch for bee toxicity x based on abstract there is no indication for the study to contain relevant ecotoxicological information for terrestrial risk assessment --> no additional information, therefore study is not considered for risk assessment	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6822	Optimising s-metolachlor and dimethenamid-P in sugarbeet microrate treatments	Bollman, Scott L. Sprague, Christy L.	Weed Technology (2007), 21(4), 1054-1063 CODEN: WETEE9; ISSN: 0890-037X	yes?	x appropriate test species? --> yes (sugarbeet) x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? --> yes (yied, injury) x relevant and appropriate life-stage(s)? --> yes (2-6 true leaf) x relevant substance? --> yes (in combination with s-metachlor) x relevant concentration range? --> yes (0.84 kg as/ha) x relevant route of exposure, exposure scenario, exposure time? --> yes x new/additional useful information? --> yes x appropriate test design (randomised block, 3-4 replicates) x appropriate statistical evaluation --> although rather efficacy-like, study might be relevant for risk assessment of dimethenamid-P or be used as additional information	Agreed, relevant yield, injury

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6823	The effect of herbicides applied in maize on the dynamics of some soil microbial groups and soil enzyme activity	Sandor, Zsolt Katal, Janos Tallal, Magdolna Varga, Anita Balogh, Edina	Cereal Research Communications (2007), 35(2, Pt. 2), 1025-1028 CODEN: CRCMCL; ISSN: 0133-3720	no	x appropriate test species? --> yes (soil microorgnaisms) x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? --> yes (abundance and enzyme activity) x relevant and appropriate life-stage(s)? --> ? x relevant substance? --> yes (87674-68-8 and 193681-19-5 as hits in the search) x relevant concentration range? --> yes (5-fold the intended dose/ha) x relevant route of exposure, exposure scenario, exposure time? --> ? x new/additional useful information? --> ? x based on abstract and introduction there is no indication for the study to contain relevant ecotoxicological information for terrestrial risk assessment on soil microorganisms, as the abundance of soil bacteria and microscopic fungi was assessed --> no additional information, therefore study is not considered for risk assessment	agreed
6824	Chemical control of wild-oat (Avena sterilis L.) and other weeds in wheat (Triticum durum Desf.) in Jordan	Qasem, J. R.	Crop Protection (2007), 26(8), 1315-1324 CODEN: CRPTD6; ISSN: 0261-2194	no	x although pytotoxicity of dimethenamid-P in wheat was mentioned in the abtstract there is no indication for the study to contain relevant ecotoxicological information for DMTA-P terrestrial risk assessment --> comparison of efficacy of "certain herbicides on wild-oat in wheat" x publication not available for free --> no additional information, therefore study is not considered for risk assessment	Agreed, tested rate 1.8 L a.s. ha^{-1}

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6825	Tolerance of direct-seeded green onions to herbicides applied before or after crop emergence	Norsworthy, Jason K. Smith, John P. Meister, Charles	Weed Technology (2007), 21(1), 119-123 CODEN: WETEE9; ISSN: 0890-037X	yes?	x appropriate test species? --> yes (green onions) x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? --> yes (phytotoxicity, fresh weight, height) x relevant and appropriate life-stage(s)? --> yes (pre-emergence) x relevant substance? --> yes (87674-68-8 and 193681-19-5 as hits in the search) x relevant concentration range? --> yes (448 g as/ha) x relevant route of exposure, exposure scenario, exposure time? --> yes (assessments of field pre-emergence tests: 7 weeks) x new/additional useful information? --> yes x appropriate test design (randomised block, 4 replicates) x appropriate statistical evaluation --> study might be relevant for risk assessment of dimethenamid-P or be used as additional information	Agreed, relevant phytotoxicity, fresh weight, height
6826	The effect of some herbicides on microbes and their activity in soil	Sandor, Zsolt	Cereal Research Communications (2006), 34(1), 275-278 CODEN: CRCMCL; ISSN: 0133-3720	no	x study is not available x study seems to be related to a PhD thesis x based on abstract there is no indication for the study to contain relevant ecotoxicological information for terrestrial risk assessment --> no additional information, therefore study is not considered for risk assessment	agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6827	Impact of herbicide application intensity in relation to environment and tillage on earthworm population in sugar beet in Germany (vol 39, pg 25, 2012).	Marwitz, Andreas Ladewig, Erwin Maerlaender, Bernward [Reprint Author]	European Journal of Agronomy, (JUL 2012) Vol. 40, pp. 120. ISSN: 1161-0301. E-ISSN: 1873-7331.	no	x study was found and evaluated as hit #6807 in this list	agreed
6828	The effect of residual corn herbicides on injury and yield of soybean seeded in the same season.	Soltani, Nader [Reprint Author] Mashhadi, Hamid R. Mesgaran, Mohsen B. Cowbrough, Mike Tardif, Francois J. Chandler, Kevin Nurse, Robert E. Swanton, Clarence J. Sikkema, Peter H.	Canadian Journal of Plant Science, (MAY 2011) Vol. 91, No. 3, pp. 571-576. CODEN: CPLSAY. ISSN: 0008-4220.	yes?	x appropriate test species? --> yes (soybean) x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? --> yes (phytotoxicity, biomass, yield) x relevant and appropriate life-stage(s)? --> yes (pre-emergence) x relevant substance? --> yes (in combination with dicamba/atrazine) x relevant concentration range? --> yes (1250 g as/ha) x relevant route of exposure, exposure scenario, exposure time? --> yes (application time was 6,4,2 and 0 weeks before seeding) x new/additional useful information? --> yes x appropriate test design (randomised block, 4 replicates) x appropriate statistical evaluation x Study available for free: http://pubs.aic.ca/doi/pdf/10.4141/cjps10110 --> study might be relevant for risk assessment of dimethenamid-P or be used as additional information	Agreed, relevant phytotxicity, biomass, yield

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6829	Weed control, environmental impact and profitability with glyphosate tank mixes in glyphosate-tolerant corn.	Soltani, N. Eerd, L. L. van Vyn, R. J. Shropshire, C. Sikkema, P. H. van Eerd, L. L.	Canadian Journal of Plant Science (2010) Volume 90, Number 1, pp. 125-132, 30 refs. ISSN: 0008-4220 Published by: Agricultural Institute of Canada, Ottawa	yes?	x appropriate test species? --> yes (corn) x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? --> yes (corn injury, weed control) x relevant and appropriate life-stage(s)? --> yes (3-4 leaf corn) x relevant substance? --> yes (in glyphosate tankmix combination + atrazine) x relevant concentration range? --> yes 750 g as/ha) x relevant route of exposure, exposure scenario, exposure time? --> yes (application time was 6,4,2 and 0 weeks before seeding) x new/additional useful information? --> yes x appropriate test design (randomised block, 4 replicates) x appropriate statistical evaluation --> although rather efficacy-like, study might be relevant for risk assessment of dimethenamid-P or be used as additional information	Agreed, relevant injury, weed control (eficacy)

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6830	White oak and northern red oak leaf injury from exposure to chloroacetanilide herbicides.	Samtani, J. B. Masiunas, J. B. Appleby, J. E.	HortScience (2010) Volume 45, Number 4, pp. 696-700, 33 refs. ISSN: 0018-5345 Published by: American Society for Horticultural Science, Alexandria	yes?	x appropriate test species? --> yes (white oak, northern red oak) x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? --> yes (leaf injury and recovery 10, 20 and 82 DAT) x relevant and appropriate life-stage(s)? --> yes (treatment at leaf unfolding stage) x relevant substance? --> yes (dimethenamid-p alone and + atrazine) x relevant concentration range? --> yes (8, 80 and 200 g as/ha) x relevant route of exposure, exposure scenario, exposure time? --> yes (injury after 45 and 85 days) x new/additional useful information? --> yes x appropriate test design (randomised block, 5 single-seedling replicates) x appropriate statistical evaluation x Study available for free: http://hortsci.ashspublications.org/content/45/4/696.full.pdf+html --> study might be relevant for risk assessment of dimethenamid-P or be used as additional information	Agreed, relevant leaf injury, recovery

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6831	Tolerance of direct-seeded leafy greens to herbicides applied before or after crop emergence.	Norsworthy, J. K. Smith, J. P.	Crop Protection (2007) Volume 26, Number 8, pp. 1158-1165, 16 refs. ISSN: 0261-2194 DOI: 10.1016/j.cropro.2006.10.010 Published by: Elsevier, Amsterdam	yes?	x appropriate test species? --> yes (different varieties of Brassica) x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? --> yes (density, height, fresh weight) x relevant and appropriate life-stage(s)? --> yes (treatment at leaf unfolding stage) x relevant substance? --> yes x relevant concentration range? --> yes (448 g as/ha) x relevant route of exposure, exposure scenario, exposure time? --> yes (injury after 45 and 85 days) x new/additional useful information? --> ? --> study might be relevant for risk assessment of dimethenamid-P or be used as additional information	Agreed, relevant density, height, fresh weight

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
6832	Bio-efficacy of tepraloxydim and dimethenamid in soybean.	Singh, V. P. Govindra Singh Mahendra Singh Singh, G. Singh, M.	Indian Journal of Weed Science (2004) Volume 36, Number 3/4, pp. 271-273, 2 refs. ISSN: 0253-8040 Published by: Indian Society of Weed Science, Hisar	no	x appropriate test species? --> yes (soybean) x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? --> yes (phytotoxicity) x relevant and appropriate life-stage(s)? --> yes (treatment 1 day after sowing) x relevant substance? --> yes x relevant concentration range? --> yes (110 and 850 g as/ha) Abstract states 110 and 1110g/ha, only one is correct! x relevant route of exposure, exposure scenario, exposure time? --> yes (injury after 45 and 85 days) x new/additional useful information? --> ? --> no additional information, therefore study is not considered for risk assessment	Not agreed From the comments given it could not be concluded that the study is not relevant. Phytotoxicity
7067	Application of up-to-date and ecologically acceptable herbicides for weed control in tobacco crop	Dimeska, V. Stojkov, S. Krsteska, V.	Rastenievudni Nauki (2006), 43(5), 468-470 CODEN: RSTNA7; ISSN: 0568-465X	no	x although pytotoxicity of dimethenamid-P in tobacco was mentioned in the abtstract there is no indication for the study to contain relevant ecotoxicological information for DMTA-P terrestrial risk assessment --> comparison of efficacy of different herbicides on weed in tobacco --> no additional information, therefore study is not considered for risk assessment	Agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
7068	Response of adzuki bean to pre-emergence herbicides.	Sikkema, P. H. [Reprint Author] Soltani, N. Shropshire, C. Robinson, D. E.	Canadian Journal of Plant Science, (APR 2006) Vol. 86, No. 2, pp. 601-604. CODEN: CPLSAY. ISSN: 0008-4220.	yes?	x appropriate test species? --> yes (adzuki bean) x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? --> yes (phytotoxicity) x relevant and appropriate life-stage(s)? --> yes (PRE-emergence 1-2 days after sowing, assessments 28 and 42 days after emergence) x relevant substance? --> yes x relevant concentration range? --> yes (1250 and 2500 g as/ha) x relevant route of exposure, exposure scenario, exposure time? --> yes (injury after 45 and 85 days) x new/additional useful information? --> pre-emergence application at tested doses are not suitable concering crop safety of adzuki bean x appropriate test design (randomised block, 2 test doses, 4 replicates) x appropriate statistical evaluation --> study might be relevant for risk assessment of dimethenamid-P or be used as additional information	Agreed, relevant phytotxicity, shoot height, shoot dry weight, yield, seed maturity

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
7069	Combined effect of fertiliser and herbicide applications on the abundance, community structure and performance of the soil methanotrophic community.	Seghers, Dave Siciliano, Steven D. Top, Eva M. Verstraete, Willy [Reprint Author]	Soil Biology + Biochemistry, (February 2005) Vol. 37, No. 2, pp. 187-193. print. ISSN: 0038-0717 (ISSN print).	yes?	x appropriate test species? --> yes (methanotrophic microorganisms) x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? --> community structure x relevant and appropriate life-stage(s)? --> ? x relevant substance? --> yes x relevant concentration range? --> ? x relevant route of exposure, exposure scenario, exposure time? --> ? x new/additional useful information? --> study deals with influence of organic/mineral fertiliser/soil type/herbicide application on methane oxidiser activity and abundance. Herbicide application did not alter activity or abundance of methanotrophic community. Fertiliser type was driving activity and abundance, soil type was determining microbial community structure. --> study might be relevant for risk assessment of dimethenamid-P or be used as additional information	Agreed, relevant abundance, enzyme activity

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
7070	The effect of residual corn herbicides on injury and yield of soybean seeded in the same season.	Soltani, N. Mashhadi, H. R. Mesgaran, M. B. Cowbrough, M. Tardif, F. J. Chandler, K. Nurse, R. E. Swanton, C. J. Sikkema, P. H.	Canadian Journal of Plant Science (2011) Volume 91, Number 3, pp. 571-576, 16 refs. ISSN: 0008-4220 DOI: 10.4141/cjps10110 Published by: Agricultural Institute of Canada, Ottawa	yes?	x study was found and evaluated as hit #6828in this list	Agreed, relevant

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
7071	Tolerance of 12 sugarbeet varieties to applications of s-metolachlor and dimethenamid-P.	Bollman, S. L. Sprague, C. L.	Weed Technology (2008) Volume 22, Number 4, pp. 699-706 ISSN: 0890-037X DOI: 10.1614/WT-08-076.1 Published by: Weed Science Society of America, Lawrence	yes	x appropriate test species? --> yes (sugarbeet) x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? --> yes x relevant and appropriate life-stage(s)? --> field and greenhouse experiments --> yes (PRE-emergence, 2 true-leaf, 4 true leaf growth stage) x relevant substance? --> yes x relevant concentration range? --> yes (0.84 kg as/ha) x relevant route of exposure, exposure scenario, exposure time? --> yes x new/additional useful information? --> sugarbeet injury differs between variants and time of application x appropriate test design split-split block, 3-4 replicates) x appropriate statistical evaluation --> study might be relevant for risk assessment of dimethenamid-P or be used as additional information	Agreed, relevant injury, plant density, % leaf area reduction, biomass reduction, yield

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
7072	The effect of different herbicides on some factors of carbon cycle in a chernozem.	Zsolt, S. Janos, K. Peter, T. N. Agnes, O. Z.	Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Agriculture (2007) Volume 63/64, 340 p. ISSN: 1843-5246 Published by: University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca	no	--> Study is very likely identical to hits # 6819 and #6823 and not relevant for the risk assessment of DMTA-P --> no additional information, therefore study is not considered for risk assessment	Agreed

No.	Title	Author	Source	Relevant yes/no	Comments/ Justification for non-relevance	Comments RMS
7073	Processing spinach response to selected herbicides for weed control, crop injury, and yield.	Wallace, R. W. Phillips, A. L. Hodges, J. C.	Weed Technology (2007) Volume 21, Number 3, pp. 714-718 ISSN: 0890-037X DOI: 10.1614/WT-06-183.1 Published by: Weed Science Society of America, Lawrence	yes?	x appropriate test species? --> yes (spinach) x biological significance of effects (population level)? appropriate ecotoxicologcal manifestation level?? --> ? x relevant and appropriate life-stage(s)? --> field and greenhouse experiments --> ? x relevant substance? --> yes x relevant concentration range? --> yes (0.56 kg as/ha) x relevant route of exposure, exposure scenario, exposure time? --> ? x new/additional useful information? --> dimethenamid-P should be considered candidate for expanded-use registrations in precessing spinach production --> study might be relevant for risk assessment of dimethenamid-P or be used as additional information	Agreed, relevant injury, yield
7074	Tolerance of direct-seeded green onions to herbicides applied before or after crop emergence.	Norsworthy, J. K. Smith, J. P. Meister, C.	Weed Technology (2007) Volume 21, Number 1, pp. 119-123 ISSN: 0890-037X DOI: 10.1614/WT-06-042.1 Published by: Weed Science Society of America, Lawrence	yes?	x study was found and evaluated as hit #6825 in this list	Agreed, relevant

* according to Klimisch et al (1997)

Table B.9.1-4: Records sorted in the category 'check for reliability'

No.	Title	Author	Source	Reliability*	Comments/ Justification for non-relevance	Comments RMS
6215	Evaluation of the partial renewal of in situ phytoplankton microcosms and application to the impact assessment of bentazon and dimethenamid	de la Broise, Denis Stachowski-Haberkorn, Sabine	Marine Pollution Bulletin (2012), 64(11), 2480-2488 CODEN: MPNBAZ; ISSN: 0025-326X	3 (not reliable) x non-GPL; method not validated x no analytical measurements at start of exposure x no measurement of water parameter / environmental conditions x unsuitable test system: saltwater? daily exchange of 10 % of the test solutions with natural seawater and no measurement of initial test concentrations --> exposure concentrations during the study can not be estimated!!	x purpose/description/endpoint of study --> yes x OECD/GLP? --> non-GLP --> no guideline for microcom test; no standard test x Specification of the test substance: --> no CAS-no, batch-no., content of as, etc. x Information on test species: --> yes x Data on the measured parameters/exposure period/ use of emulgators/solubilisers --> yes x chemical analysis to verify substance concentrations: --> yes, however, measurements were performed in samples taken at test termination only!! x data on pyhsical/chemical test conditions (pH, conductivity, light intensity, temperature, hardness): --> no (no information on environmental conditions throughout the study!!)! especially the salinity of the test water would be relevant!? Determined effect concentrations: -->No Data on the statistical evaluations/dosing --> yes	Agreed
6810	Late-season weed control in glyphosate-resistant sugarbeet	Wilson, Robert G. Sbatella, Gustavo M.	Weed Technology (2011), 25(3), 350-355 CODEN: WETEE9; ISSN: 0890-037X	3	x Purpose/description/endpoint of study --> no real endpoint, test rates higher than in vegetative vigor studies and without analytical reference x OECD/GLP? --> no x Specification of the test substance:	Agreed

No.	Title	Author	Source	Reliability*	Comments/ Justification for non-relevance	Comments RMS
					--> no information on CAS-/batch no. x Information on test species: --> no information on source, plant stage at application: 2, 4 ,6 and 8-true leaf growth stage x Data on the measured parameters/exposure period/ use of emulgators/solubilisers --> no x Chemical analysis to verify substance concentrations: --> no x Data on pyhsical/chemical test conditions (pH, light intensity, temperature): --> no x Determined effect concentrations: --> no x Data on the statistical evaluations/dosing --> yes --> insufficient documentation (information on test organisms); non-GLP; no (OECD) guideline study; no chemical analysis to verify substance concentrations	
6814	Sodium safens saflufenacil applied postemergence to corn (Zea mays)	Moran, Meghan Sikkema, Peter H. Hall, J. Christopher Swanton, Clarence J.	Weed Science (2011), 59(1), 4-13 CODEN: WEESA6; ISSN: 0043-1745	3	x Purpose/description/endpoint of study --> no ER_{50} or other endpoint was calculated, only small effect (e.g. 8 %) x OECD/GLP? --> no x Specification of the test substance: --> no information on CAS-/batch no., no analytical varification of the dose rate x Information on test species: --> no information on source, plant stage at application: 2, 3-4 leaf growth stage x Data on the measured parameters/exposure period/ use of emulgators/solubilisers --> no x Chemical analysis to verify substance	Agreed No new endpoint for terrestrial risk assessment purposes

No.	Title	Author	Source	Reliability*	Comments/ Justification for non-relevance	Comments RMS
					concentrations: --> no x Data on pyhsical/chemical test conditions (pH, light intensity, temperature): --> no x Determined effect concentrations: --> no x Data on the statistical evaluations/dosing --> yes --> insufficient documentation (information on test organisms); non-GLP; no (OECD) guideline study; no chemical analysis to verify substance concentrations	
6815	Miscanthus .times. giganteus response to preemergence and postemergence herbicides	Anderson, Eric K. Voigt, Thomas B. Bollero, German A. Hager, Aaron G.	Weed Technology (2010), 24(4), 453-460 CODEN: WETEE9; ISSN: 0890-037X	3	x Purpose/description/endpoint of study --> only tested in combination with saflufenacil; endpoint in regulatory studies are lower and thus more relevant x OECD/GLP? --> no x Specification of the test substance: --> no information on CAS-/batch no. x Information on test species: --> source: hand-harvested rhizomes in mid-September, 2007, from planted stands in 2004 at Urbana, Il, USA, plant stage at application: 2-4 leaf growth stage x Data on the measured parameters/exposure period/ use of emulgators/solubilisers --> no x Chemical analysis to verify substance concentrations: --> no x Data on pyhsical/chemical test conditions (pH, light intensity, temperature): --> yes x Determined effect concentrations:	Agreed No new endpoint for terrestrial risk assessment purposes

No.	Title	Author	Source	Reliability*	Comments/ Justification for non-relevance	Comments RMS
					--> no x Data on the statistical evaluations/dosing --> yes --> altogether insufficient documentation; non-GLP; no (OECD) guideline study; no chemical analysis to verify substance concentrations	
6817	Effect of reduced herbicide rates on weed control, environmental impact and profitability on corn	Soltani, Nader Vyn, Richard J. Van Eerd, Laura L. Shropshire, Christy Sikkema, Peter H.	Canadian Journal of Plant Science (2009), 89(5), 969-975 CODEN: CPLSAY; ISSN: 0008-4220	3	x Purpose/description/endpoint of study --> only tested in combination with other substances; no control treatment; no drift rates tested x OECD/GLP? --> no x Specification of the test substance: --> no information on CAS-/batch no. x Information on test species: --> no information on source; plant stage at application: 1 leaf growth stage x Data on the measured parameters/exposure period/ use of emulgators/solubilisers --> no x Chemical analysis to verify substance concentrations: --> no x Data on pyhsical/chemical test conditions (pH, light intensity, temperature): --> incomplete documentation (pH) x Determined effect concentrations: --> no x Data on the statistical evaluations/dosing --> yes --> altogether insufficient documentation; non-GLP; no (OECD) guideline study; no chemical analysis to verify substance concentrations	Agreed No new endpoint for terrestrial risk assessment purposes Might be relevant for effecacy assessment
6818	Control of common waterhemp	Soltani, Nader	Canadian Journal of Plant Science (2009),	3	x Purpose/description/endpoint of study --> no dose response testing and only tested in	Agreed No new endpoint

No.	Title	Author	Source	Reliability*	Comments/ Justification for non-relevance	Comments RMS
	(Amaranthus tuberculatus var. rudis) in corn and soybean with sequential herbicide applications	Vyn, Joshua D. Sikkema, Peter H.	89(1), 127-132 CODEN: CPLSAY; ISSN: 0008-4220		combination with other substances; no drift rates tested x OECD/GLP? --> no x Specification of the test substance: --> no information on CAS-/batch no. x Information on test species: --> no information on source; no information about plant growth stage st application x Data on the measured parameters/exposure period/ use of emulgators/solubilisers --> no x Chemical analysis to verify substance concentrations: --> no x Data on pyhsical/chemical test conditions (pH, light intensity, temperature): --> incomplete (soil pH, Corg) x Determined effect concentrations: --> no x Data on the statistical evaluations/dosing --> yes --> altogether insufficient documentation; non-GLP; no (OECD) guideline study; no chemical analysis to verify substance concentrations	for terrestrial risk assessment purposes
6822	Optimising s-metolachlor and dimethenamid-P in sugarbeet microrate treatments	Bollman, Scott L. Sprague, Christy L.	Weed Technology (2007), 21(4), 1054-1063 CODEN: WETEE9; ISSN: 0890-037X	3	x Purpose/description/endpoint of study --> no dose response testing; no real endpoint x OECD/GLP? --> no x Specification of the test substance: --> no information on CAS-/batch no. x Information on test species: --> no information on source x Data on the measured parameters/exposure period/ use of emulgators/solubilisers --> no	Agreed No new endpoint for terrestrial risk assessment purposes Might be relevant for effecacy assessment.

No.	Title	Author	Source	Reliability*	Comments/ Justification for non-relevance	Comments RMS
					x Chemical analysis to verify substance concentrations: --> no x Data on pyhsical/chemical test conditions (pH, light intensity, temperature): --> yes (greenhouse trial) x Determined effect concentrations: --> no x Data on the statistical evaluations/dosing --> yes --> altogether insufficient documentation; non-GLP; no (OECD) guideline study; no chemical analysis to verify substance concentrations	
6824	Chemical control of wild-oat (Avena sterilis L.) and other weeds in wheat (Triticum durum Desf.) in Jordan	Qasem, J. R.	Crop Protection (2007), 26(8), 1315-1324 CODEN: CRPTD6; ISSN: 0261-2194	3	x Purpose/description/endpoint of study --> no dose response testing; no real endpoint; not relevant for European situations x OECD/GLP? --> no x Specification of the test substance: --> no information on CAS-/batch no. x Information on test species: --> no information on source x Data on the measured parameters/exposure period/ use of emulgators/solubilisers --> no x Chemical analysis to verify substance concentrations: --> no x Data on pyhsical/chemical test conditions (pH, light intensity, temperature): --> pH, soil characteristics, Corg x Determined effect concentrations: --> no x Data on the statistical evaluations/dosing --> yes	Agreed No new endpoint for terrestrial risk assessment purposes Might be relevant for efficacy assessment

No.	Title	Author	Source	Reliability*	Comments/ Justification for non-relevance	Comments RMS
					--> altogether insufficient documentation; non-GLP; no (OECD) guideline study; no chemical analysis to verify substance concentrations	
6825	Tolerance of direct-seeded green onions to herbicides applied before or after crop emergence	Norsworthy, Jason K. Smith, John P. Meister, Charles	Weed Technology (2007), 21(1), 119-123 CODEN: WETEE9; ISSN: 0890-037X	3	x Purpose/description/endpoint of study --> no dose response testing; no real endpoint x OECD/GLP? --> no x Specification of the test substance: --> no information on CAS-/batch no. x Information on test species: --> no information on source x Data on the measured parameters/exposure period/ use of emulgators/solubilisers --> no x Chemical analysis to verify substance concentrations: --> no x Data on pyhsical/chemical test conditions (pH, light intensity, temperature): --> pH, soil characteristics, Corg x Determined effect concentrations: --> no x Data on the statistical evaluations/dosing --> yes --> altogether insufficient documentation; non-GLP; no (OECD) guideline study; no chemical analysis to verify substance concentrations	Agreed No new endpoint for terrestrial risk assessment purposes Might be relevant for efficacy assessment
6828	The effect of residual corn herbicides on injury and yield of soybean seeded in the same season.	Soltani, Nader [Reprint Author] Mashhadi, Hamid R. Mesgaran, Mohsen B. Cowbrough,	Canadian Journal of Plant Science, (MAY 2011) Vol. 91, No. 3, pp. 571-576. CODEN: CPLSAY. ISSN: 0008-4220.	3	x Purpose/description/endpoint of study --> no dose response testing; no real endpoint; only used in mixture x OECD/GLP? --> no x Specification of the test substance: --> no information on CAS-/batch no. x Information on test species: --> no information on source	Agreed No new endpoint for terrestrial risk assessment purposes Might be relevant for efficacy assessment

No.	Title	Author	Source	Reliability*	Comments/ Justification for non-relevance	Comments RMS
		Mike Tardif, Francois J. Chandler, Kevin Nurse, Robert E. Swanton, Clarence J. Sikkema, Peter H.			x Data on the measured parameters/exposure period/ use of emulgators/solubilisers --> no x Chemical analysis to verify substance concentrations: --> no x Data on pyhsical/chemical test conditions (pH, light intensity, temperature): --> pH, soil characteristics, organic matter x Determined effect concentrations: --> no x Data on the statistical evaluations/dosing --> yes --> altogether insufficient documentation; non-GLP; no (OECD) guideline study; no chemical analysis to verify substance concentrations	
6829	Weed control, environmental impact and profitability with glyphosate tank mixes in glyphosate-tolerant corn.	Soltani, N. Eerd, L. L. van Vyn, R. J. Shropshire, C. Sikkema, P. H. van Eerd, L. L.	Canadian Journal of Plant Science (2010) Volume 90, Number 1, pp. 125-132, 30 refs. ISSN: 0008-4220 Published by: Agricultural Institute of Canada, Ottawa	3	x Purpose/description/endpoint of study --> no dose response testing; no real endpoint; only used in mixture x OECD/GLP? --> no x Specification of the test substance: --> no information on CAS-/batch no. x Information on test species: --> no information on source x Data on the measured parameters/exposure period/ use of emulgators/solubilisers --> no x Chemical analysis to verify substance concentrations: --> no x Data on pyhsical/chemical test conditions (pH, light intensity, temperature): --> no x Determined effect concentrations: --> no	Agreed No new endpoint for terrestrial risk assessment purposes

No.	Title	Author	Source	Reliability*	Comments/ Justification for non-relevance	Comments RMS
					x Data on the statistical evaluations/dosing --> yes --> altogether insufficient documentation; non-GLP; no (OECD) guideline study; no chemical analysis to verify substance concentrations	
6831	Tolerance of direct-seeded leafy greens to herbicides applied before or after crop emergence.	Norsworthy, J. K. Smith, J. P.	Crop Protection (2007) Volume 26, Number 8, pp. 1158-1165, 16 refs. ISSN: 0261-2194 DOI: 10.1016/j.cropro.2006.10.010 Published by: Elsevier, Amsterdam	3	x Purpose/description/endpoint of study --> no dose response testing; no real endpoint; only used in mixture x OECD/GLP? --> no x Specification of the test substance: --> no information on CAS-/batch no. x Information on test species: --> no x Data on the measured parameters/exposure period/ use of emulgators/solubilisers --> no x Chemical analysis to verify substance concentrations: --> no x Data on pyhsical/chemical test conditions (pH, light intensity, temperature): --> pH, Corg x Determined effect concentrations: --> no x Data on the statistical evaluations/dosing --> yes --> altogether insufficient documentation; non-GLP; no (OECD) guideline study; no chemical analysis to verify substance concentrations	Agreed No new endpoint for terrestrial risk assessment purposes
7068	Response of adzuki bean to pre-emergence herbicides.	Sikkema, P. H. [Reprint Author] Soltani, N. Shropshire,	Canadian Journal of Plant Science, (APR 2006) Vol. 86, No. 2, pp. 601-604. CODEN: CPLSAY. ISSN: 0008-	3	x Purpose/description/endpoint of study --> no dose response testing; no real endpoint; existing endpoints are lower and thus more relevant x OECD/GLP?	Agreed No new endpoint for terrestrial risk assessment purposes

No.	Title	Author	Source	Reliability*	Comments/ Justification for non-relevance	Comments RMS
		C. Robinson, D. E.	4220.		--> no x Specification of the test substance: --> no information on CAS-/batch no. x Information on test species: --> no x Data on the measured parameters/exposure period/ use of emulgators/solubilisers --> no x Chemical analysis to verify substance concentrations: --> no x Data on pyhsical/chemical test conditions (pH, light intensity, temperature): --> pH, Corg, soil characterisitcs x Determined effect concentrations: --> no x Data on the statistical evaluations/dosing --> yes --> altogether insufficient documentation; non-GLP; no (OECD) guideline study; no chemical analysis to verify substance concentrations	
7069	Combined effect of fertiliser and herbicide applications on the abundance, community structure and performance of the soil methanotrophic community.	Seghers, Dave Siciliano, Steven D. Top, Eva M. Verstraete, Willy [Reprint Author]	Soil Biology + Biochemistry, (February 2005) Vol. 37, No. 2, pp. 187-193. print. ISSN: 0038-0717 (ISSN print).	3	x Purpose/description/endpoint of study --> no dose response testing; only tested in combination with other substances x OECD/GLP? --> no x Specification of the test substance: --> no information on CAS-/batch no. x Information on test species: --> no x Data on the measured parameters/exposure period/ use of emulgators/solubilisers --> no x Chemical analysis to verify substance concentrations: --> no	Agreed No new endpoint for terrestrial risk assessment purposes

No.	Title	Author	Source	Reliability*	Comments/ Justification for non-relevance	Comments RMS
					x Data on pyhsical/chemical test conditions (pH, light intensity, temperature): --> no x Determined effect concentrations: --> no x Data on the statistical evaluations/dosing --> yes --> altogether insufficient documentation; non-GLP; no (OECD) guideline study; no chemical analysis to verify substance concentrations	
7071	Tolerance of 12 sugarbeet varieties to applications of s-metolachlor and dimethenamid-P.	Bollman, S. L. Sprague, C. L.	Weed Technology (2008) Volume 22, Number 4, pp. 699-706 ISSN: 0890-037X DOI: 10.1614/WT-08-076.1 Published by: Weed Science Society of America, Lawrence	3	x Purpose/description/endpoint of study -->no dose response testing; no real endpoint; existing endpoints are lower and thus more relevant x OECD/GLP? --> no x Specification of the test substance: --> no information on CAS-/batch no. x Information on test species: --> no x Data on the measured parameters/exposure period/ use of emulgators/solubilisers --> no x Chemical analysis to verify substance concentrations: --> no x Data on pyhsical/chemical test conditions (pH, light intensity, temperature): --> pH, organic matter, light ontensity, temperature (greenhouse trial) x Determined effect concentrations: --> no x Data on the statistical evaluations/dosing --> yes --> altogether insufficient documentation; non-	Agreed No new endpoint for terrestrial risk assessment purposes

No.	Title	Author	Source	Reliability*	Comments/ Justification for non-relevance	Comments RMS
					GLP; no (OECD) guideline study; no chemical analysis to verify substance concentrations	
7073	Processing spinach response to selected herbicides for weed control, crop injury, and yield.	Wallace, R. W. Phillips, A. L. Hodges, J. C.	Weed Technology (2007) Volume 21, Number 3, pp. 714-718 ISSN: 0890-037X DOI: 10.1614/WT-06-183.1 Published by: Weed Science Society of America, Lawrence	3	x Purpose/description/endpoint of study --> no dose response testing x OECD/GLP? --> no x Specification of the test substance: --> no information on CAS-/batch no. x Information on test species: --> no x Data on the measured parameters/exposure period/ use of emulgators/solubilisers --> no x Chemical analysis to verify substance concentrations: --> no x Data on pyhsical/chemical test conditions (pH, light intensity, temperature): --> pH, Corg x Determined effect concentrations: --> no x Data on the statistical evaluations/dosing --> yes --> altogether insufficient documentation; non-GLP; no (OECD) guideline study; no chemical analysis to verify substance concentrations	Agreed No new endpoint for terrestrial risk assessment purposes

* according to Klimisch et al (1997)

Table B.9.1-5: Records sorted in the category 'used for dossier'

No.	Title	Author	Source	Reliability*
none				

* according to Klimisch et al (1997)

Conclusion

A comprehensive literature search was performed by the applicant for dimethenamid-P and its metabolites. While the general principle of the literature search appears to be in order, there are some discrepancies in the report as listed below:
According to the main literature search report, 104 open literature studies were subjected to a more detailed assessment of the relevance. However in the Excel Sheet summarising the results of the more detailed assessment, 108 open literature studies were discussed, i.e. studies checked for relevance after the first step to check for ballast.
In the main literature study it was stated that the studies subjected to a more detailed relevance assessment were sorted into three categories 'not-relevant', 'not reliable' and 'used for dossier'.

None of the open literature studies evaluated regarding Ecotoxicology data were sorted 'used for dossier' according to the applicant.
For the record 6832 it could not be concluded that the study is not relevant from the comments given by the applicant. Therefore this study should be considered relevant and checjed for reliability.

The RMS believes that one additional study should have been included in the dossier or their non-relevance should have been assessed in more detail. The studies for which the relevance is still considered uncertain are listed in Table B.9.1-6.

Table B.9.1-6: Studies which require further relevance assessment and/or should be included in the dossier

No.	Title	Author	Source
6832	Bio-efficacy of tepraloxydim and dimethenamid in soybean.	Singh, V. P. Govindra Singh Mahendra Singh Singh, G. Singh, M.	Indian Journal of Weed Science (2004) Volume 36, Number 3/4, pp. 271-273, 2 refs. ISSN: 0253-8040 Published by: Indian Society of Weed Science, Hisar