EATLAS DATA CATALOGUE (AIMS)

Persistence of glyphosate in seawater. Glyphosate concentrations recorded over time in standard flask experiment 2013. (NERP TE 4.2, AIMS and UQ)

Metadata | Metadata (XML)
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Title	Persistence of glyphosate in seawater. Glyphosate concentrations recorded over time in standard flask experiment 2013. (NERP TE 4.2, AIMS and UQ)
Date	2014-05-28T00:00:00
Date type	Publication
Abstract	This dataset shows the concentrations of the herbicide glyphosate remaining over time in a simulation flask persistence experiment conducted in 2013. Glyphosate degradation experiments were carried out in flasks according to the OECD methods for ‘‘simulation tests’’. The tests used natural coastal seawater and were carried out in the incubator shakers under 3 conditions: (1) 25°C in the dark, (2) 31°C in the dark and (3) 25°C in the light. The light levels were ~40 µE on a 12:12 light:dark cycle and the flasks shaken at 100 rpm for up to 330 days. Water samples were taken periodically and analysed by high performance liquid chromatography-mass spectrometry (HPLC-MS/MS). Reductions in the concentration of Glyphosate were plotted to predict the persistence of this herbicide (its “half-life”). The emergence of AMPA, a breakdown product of Glyphosate, was also quantified. The experiment and its results are described in full detail in: P. Mercurio, F. Flores, J. F. Muller, S. Carter, A. P. Negri AP (2014), Glyphosate persistence in seawater. Marine Pollution Bulletin http://dx.doi.org/10.1016/j.marpolbul.2014.01.021 Data Format: The data consists of a CSV file containing the results of the 3 treatments. All concentrations in µg/L D25 = Dark 25 degrees celcius D31 = Dark 31 degrees celcius L25 = Light 25 degrees celcius Uncertainty in the analytical method for repeated inejctions into the LC-MS results in a concentration uncertainty of approximately ± 0.2 µg/L

Metadata language	eng
Character set	UTF8
Hierarchy level	Dataset

OnLine resource

Linkage	https://eatlas.org.au/data/uuid/3b718fb8-3e32-4564-a776-f9e36a8194dc
Protocol	WWW:LINK-1.0-http--metadata-URL

Linkage	https://eatlas.org.au/nerp-te/gbr-aims-pesticide-effects-4-2
Protocol	WWW:LINK-1.0-http--related
Linkage	https://eatlas.org.au/pydio/data/public/e2416f.php
Protocol	WWW:LINK-1.0-http--downloaddata
Linkage	http://dx.doi.org/10.1016/j.marpolbul.2014.01.021
Protocol	WWW:LINK-1.0-http--related

Point of contact

Individual name	Negri, Andrew, Dr
Organisation name	Australian Institute of Marine Science
Role	Point of contact

Topic category	Biota

Keyword

Keyword	marine
Type	Theme

Extent

Description	AIMS Lab

Geographic bounding box

West bound	147.05509
East bound	147.05509
South bound	-19.26762
North bound	-19.26762

File identifier	3b718fb8-3e32-4564-a776-f9e36a8194dc
Metadata language	eng
Character set	UTF8

Metadata author

Individual name	eAtlas Data Manager
Organisation name	Australian Institute of Marine Science (AIMS)
Role	metadataContact

Date stamp	2017-11-06T13:36:16