Pesticide residues and contaminants in rice:

new developments and an evaluation of the Eurofins analytical result data base

Dr. Alexander Zahm

Eurofins Dr. Specht Express Testing & Inspection GmbH

October 6th, 2025

anuga

www.eurofins.com

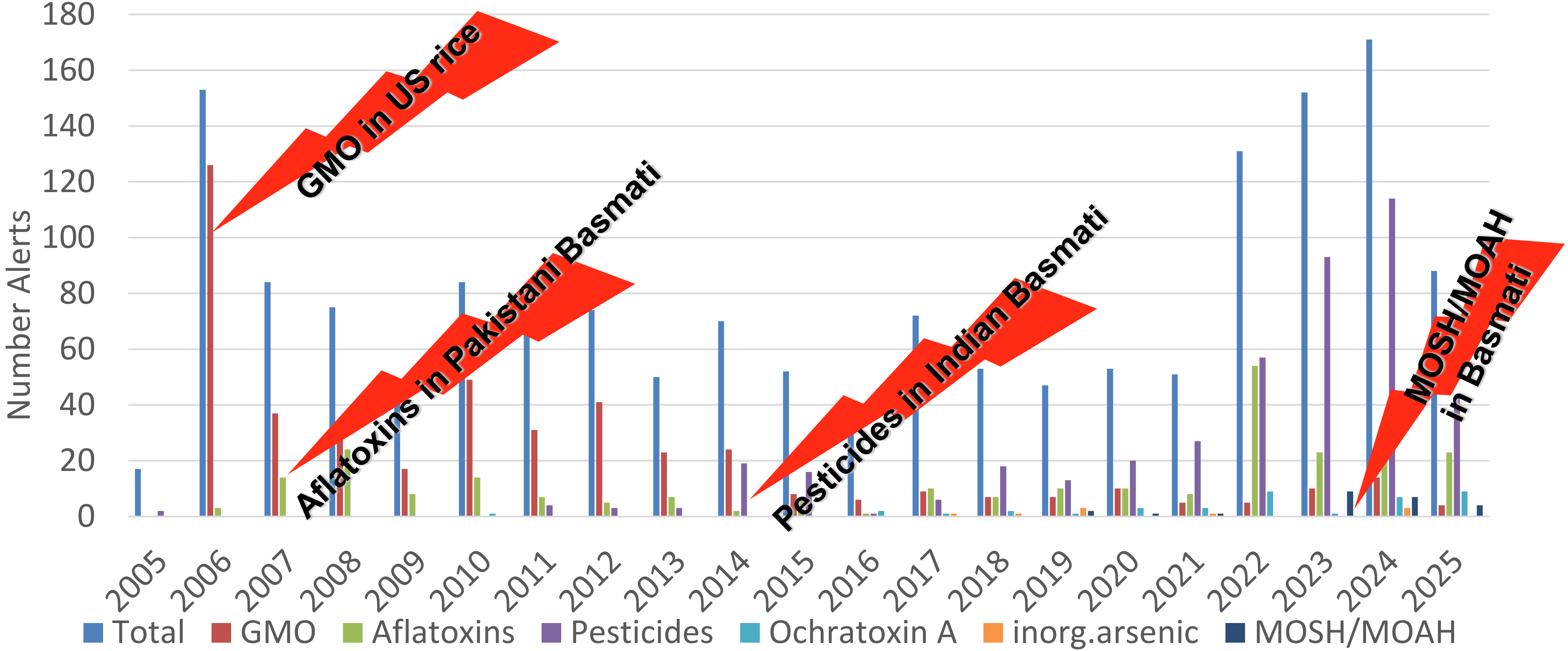
Visit our booth in the passage of halls 3 and 11

eurofins
Testing for Life

Pesticide residues and contaminants

RASFF and statistics of our own historical findings by country

Rapid alerts in RASFF for rice



Pesticides and contaminants in rice in the EU Rapid Alert System, RASFF, by country

Rapid alerts in the RASFF from 2020 till August 2025

Hazard	Pesticide	Aflatoxin B1	GMO	ochratoxin A	MOSH/MOAH	cadmium	arsenic	DON, ZEA	Total
Pakistan	134	102	1	8	9				255
India	153	18	1	19	4				185
Vietnam	11		15						26
China	1		25			1			27
Italy	3	1				11	1	1	17
Bangladesh	9								9
Cambodia	3	3							6
Thailand	2		1		1		1		5
Paraguay	4								4
Sri Lanka	1	3				1			5
Guyana	1						1		2
Brazil	1								1
Greece	1								1
Japan	1								1
Madagascar	1								1
Myanmar		1							1
Portugal							1		1
Total	**326**	**128**	**43**	**27**	**14**	**13**	**4**	**1**	**547**

Rice snacks and noodles

Rice oil

Rapid alerts for Indian and Pakistani rice by year

Rapid alerts of Indian and Pakistani rice from 2020 till August 2025, by year

	Year	Pesticide	Aflatoxin B1	ochratoxin A	MOSH/MOAH	GMO	Total
India	2020	7	1				8
	2021	10		1		1	12
	2022	30	6	7			43
	2023	45	3	1	1		50
	2024	38	4	4	3		49
	2025	20	4	5			23
Pakistan	2020	4	6				10
	2021	4	4	1	1		10
	2022	6	44	1			51
	2023	35	14		4		53
	2024	69	18	3	2	1	93
	2025	16	16	3	2		26

Rapid alerts increased in 2022 due to stricter controls implemented by the EU

Legal basis for stricter controls by EU authorities

Official Journal of the European Union

2024/1662

COMMISSION IMPLEMENTING REGULATION (EU) 2024/1662

of 11 June 2024

amending Implementing Regulation (EU) 2019/1793 on the temporary increase of official controls and emergency measures governing the entry into the Union of certain goods from certain third countries implementing Regulations (EU) 2017/625 and (EC) No 178/2002 of the European Parliament and of the Council

Country of origin	Food and feed (intended use)	CN code (1)	TARIC sub-division	Hazard	Frequency of identity and physical checks (%)
India (IN)	Betel leaves (*Piper betle L.*) ***(Food)***	ex 1404 90 00 (11)	**10**	*Salmonella* (4)	50
	Okra ***(Food – fresh, chilled or frozen)***	ex 0709 99 90 ex 0710 80 95	**20** **30**	Pesticide residues (3) (7) (13)	20
	Drumsticks (*Moringa oleifera*) ***(Food fresh, chilled or frozen)***	ex 0709 99 90 ex 0710 80 95	**10** **75**	Pesticide residues (3)	30
	Rice *(Food)*	1006		Aflatoxins and Ochratoxin A	5
				Pesticide residues (3)	10
Pakistan (PK)	Spice mixes ***(Food)***	0910 91 10 0910 91 90		Aflatoxins	30
	Rice *(Food)*	1006		Aflatoxins and Ochratoxin A	10
				Pesticide residues (3)	10

The challenge: cover many pesticides under the umbrella of multi residue methods

Methods in pesticide analysis

Multi Residue Methods (MRM) which are covering many hundreds pesticides (QuEChERS (Quick Easy Cheap Efficient Rugged Safe) DIN EN 15662)

- cover a broad spectrum of analytes
- determine as many pesticides as possible with one sample extraction

Group Residue Methods which are covering pesticide classes not amenable to MRM

- Example: Dithiocarbamate-Fungicides

QuPPe (Quick Polar Pesticides for highly polar compounds

Single Residue Methods for special chemicals

- Fosetyl-Aluminium, Ethephon, Glyphosate, Phosphonic acid
- Chlorate/Perchlorate
- Bromide
- Glufosinate
- Paraquat / Diquat
- Chlormequat / Mepiquat

- Ethylenoxide, phosphane, sulfurylfluoride, methylbromide

Pesticides by country in the Eurofins data base

Period: 2022 - April 2025

	Number		Top pesticides							
Country	pesticides detect.	samples analysed	1.	% pos.	2.	% pos.	3.	% pos.	4.	% pos.
Total	102	>8000	tebuconazole	34.0%	azoxystrobin	7.9%	isoprothiolane	7.7%	imidacloprid	6.7%
Organic	49	>1000	tebuconazole	5.7%	phthalimide	4.6%	diphenylamine	4.2%	chlorpyrifos	2.5%
Pakistan	72	>1000	tebuconazole	46.2%	acetamiprid	9.4%	imidacloprid	9.1%	clothianidin	8.2%
India	42	>1000	isoprothiolane	35.0%	tebuconazole	28.4%	azoxystrobin	24.9%	dinotefuran	17.7%
Thailand	40	>500	propiconazole	23.3%	tricyclazole	17.7%	isoprothiolane	11.5%	tebuconazole	10.9%
Myanmar	12	>500	quinclorac	19.0%	2,4-D	1.9%	tricyclazole	1.3%	acetamiprid	0.4%
Cambodia	20	>100	acetamiprid	11.8%	isoprothiolane	8.6%	clothianidin	7.5%	hexaconazole	5.9%
Argentina	11	>100	imazapyr	15.1%	quinclorac	15.1%	cyproconazole	6.9%	azoxystrobin	4.8%
Guyana	16	>100	imidacloprid	47.1%	cypermethrin	21.9%	carbendazim	11.8%	permethrin	10.9%

Uruguay, Vietnam, Italy, Brasil, Costa Rica, Japan, Paraguay, Taiwan and USA sample numbers below 100

Analysis performed with PXP7G, a specially for rice developed QuEChERS GC-MS/MS LC-MS/MS method covering > 750 chemicals

green: pesticides with MRLs > 0.1 mg/kg
yellow: pesticides with MRLs at limit of quantification, mostly 0.01 mg/kg

MRL regulations worldwide – data bases

- **EU:** https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/start/screen/mrls
- **UK:** https://secure.pesticides.gov.uk/MRLs/search
- **USA:** https://bcglobal.bryantchristie.com/db#/login
- **Saudi Arabia:** https://www.sfda.gov.sa/sites/default/files/2019-06/PESTICIDE-RESIDUES-AGRICULTURAL-FOOD-PRODUCTS.pdf
- **Codex Alimentarius:** https://www.fao.org/fao-who-codexalimentarius/codex-texts/dbs/pestres/en/
- **Australia New Zealand Food Standards Code**:
  - Schedule 19 – Maximum levels of contaminants and natural toxicants, https://www.legislation.gov.au/F2015L00454/latest/versions
  - Schedule 20 – Maximum residue limits, https://www.legislation.gov.au/F2015L00468/latest/versions
- **Canada**: https://pest-control.canada.ca/pesticide-registry/en/mrl-search.html

Diversity of MRLs in the EU, UK and USA

	EU	UK	USA
Tebuconazole	**1,5**	**1,5**	**zero tolerance**
Clothianidin	0,5	0,5	0,5*
Azoxystrobin	5	5	5
Imidacloprid	**0,01**	**1,5**	**0,05**
Acetamiprid	0,01	0,01	zero tolerance
Thiamethoxam	**0,01**	**5**	**6***
Chlorpyrifos (-ethyl)	0,01	0,01	zero tolerance
Dinotefuran	8	8	9
Triazophos	0,02	0,02	zero tolerance
Carbendazim/Thiophanate-methyl	0,01	0,01	zero tolerance

* U.S. Section 18 emergency exemption valid till Dez. 31, 2027

MRLs are defined for the brown husked rice
For milled white rice processing factors apply

REGULATION (EC) No 396/2005 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 23 February 2005

on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC

ANNEX I

PART A

Products of plant and animal origin referred to in Article 2(1) to which MRLs apply

Code number	Category	Group / subgroup	Main product of the group or subgroup [1]	Scientific names	Part of the product to which MRLs apply
(1)	(2)	(3)	(4)	(5)	(6)
0500060			Rice	*Oryza sativa*	Brown rice (husked rice), defined as rice after the removal of the hull from paddy rice

But for parboiled rice processing factors cannot be applied

EFSA Compendium of Representative Processing Techniques Investigated in Regulatory Studies for Pesticides

Parboiling

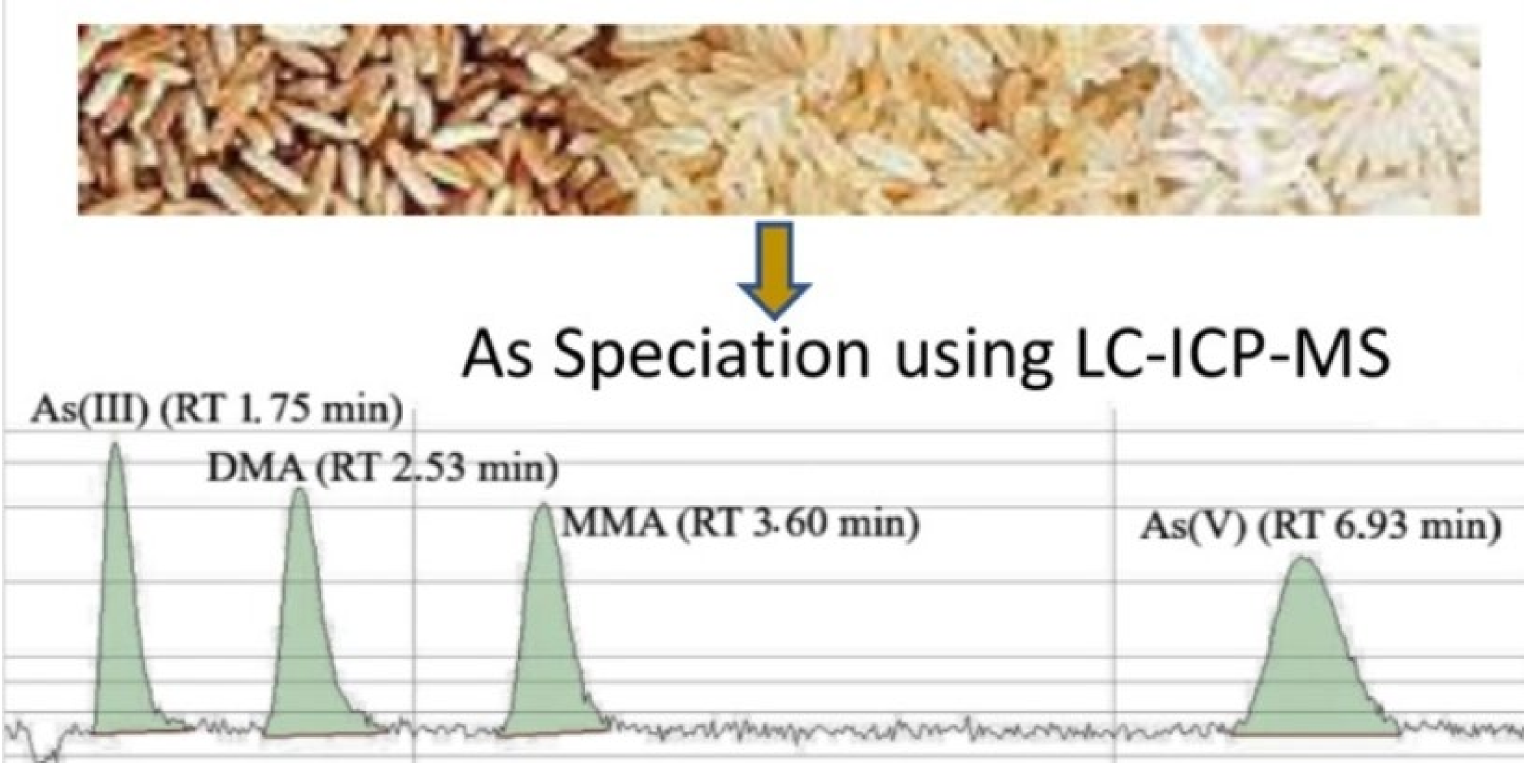
Parboiled rice is obtained by steam (wet) milling. Rice grains are soaked in water, steamed and subsequently dried. While brown rice can theoretically be used for parboiling, the rice used for parboiling in Europe is paddy rice. Parboiling drives nutrients from the outer kernel into the inner parts of the rice kernel, but can also lead to an unwanted introduction of pesticide residues from the hull. The rice is milled analogously to polished rice (white rice).

Definition of the RAC as hulled rice renders it impossible to derive processing factors for parboiled rice which is obtained from paddy rice and not from the defined RAC. Therefore, parboiling is not reflected in the flowchart. It might be considered to change the definition of the RAC to "paddy rice" in future in Annex I to Regulation (EC) No 396/2005.

Arsenic differentiation and quantification

Inorganic arsenic, MMA and DMA, as well as toxic thioarsenates

Arsenic speciation in rice using LC ICP-MS coupling



Impact of climate change on arsenic concentrations in paddy rice and the associated dietary health risks in Asia: an experimental and modelling study

Dongming Wang, Brent F Kim, Keeve E Nachman, Andrea A Chiger, Julie Herbstman, Irakli Loladze, Fang-Jie Zhao, Chuan Chen, Axiang Gao, Yongguan Zhu, Fangbai Li, Ren Fang Shen, Xiaoyuan Yan, Jiabao Zhang, Chuang Cai, Lian Song, Min Shen, Chuanqi Ma, Xiong Yang, Wei Zhou[1], Yujun Wang, Haoye Tang, Yu Jiang, Yanfeng Ding, Wuxing Liu, Jianqiang Sun, Wei Zhou[2], Ana Navas-Acien, Chunwu Zhu, Lewis H Ziska

Summary

Background Rising global atmospheric carbon dioxide (CO_2) concentrations and surface temperatures could negatively affect rice yields and nutritional quality; however, their effects on arsenic accumulation in paddy rice have not been assessed concurrently. We aimed to assess the impact of increases in CO_2 and temperature (individually and in combination) on arsenic concentrations in rice, characterise soil properties that might influence arsenic uptake, and model the associated risks of cancer and other health outcomes due to increased arsenic exposure.

Methods For this modelling study we performed in-situ multi-varietal trials using Free-Air CO_2 Enrichment platforms with and without supplemental temperature to examine the bioaccumulation of arsenic in paddy rice and the underlying biogeochemical mechanisms from 2014 to 2023. We modelled dietary inorganic arsenic exposure and the associated risks of cancer and non-cancer health outcomes via rice consumption for seven of the leading rice-consuming countries in east and southeast Asia.

Findings Concomitant increases in CO_2 and temperature resulted in a synergistic increase of inorganic arsenic in rice grain. The observed increase is likely to be related to changes in soil biogeochemistry that favoured reduced arsenic species. Modelled consumption of rice under these conditions resulted in projected increases in inorganic arsenic exposure and lifetime cancer and health risks for multiple Asian countries by 2050.

Interpretation Inorganic arsenic exposure and the associated health consequences might increase in rice grain grown in flooded systems with mid-century climate projections. The current assessment reinforces the urgent need for mitigation of arsenic exposure in rice relative to near-term climate change.

Funding National Key Research and Development Program of China, National Natural Science Foundation of China, Key-Area Research and Development Program of Guangdong Province, China, Carbon Peaking and Carbon Neutrality Special Fund for Science and Technology from Nanjing Science and Technology Bureau, Key Research and Development Program of Jiangsu Province, Erdos City Science and Technology Major Project, Science Foundation of the Chinese Academy of Sciences, Carbon Peaking and Carbon Neutrality Special Fund for Science and Technology from Jiangsu Science and Technology Department, and "0-1" Original Innovation Project of the Chinese Academy of Sciences.

Thioarsenate, a potential challenge to the industry

eurofins

Environmental Science & Technology

pubs.acs.org/est

Article

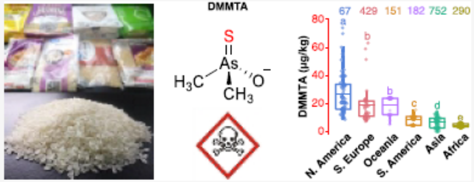
Widespread Occurrence of the Highly Toxic Dimethylated Monothioarsenate (DMMTA) in Rice Globally

Jun Dai, Zhu Tang, A-Xiang Gao, Britta Planer-Friedrich, Peter M. Kopittke, Fang-Jie Zhao, and Peng Wang*

Cite This: *Environ. Sci. Technol.* 2022, 56, 3575−3586

Read Online

ACCESS | Metrics & More | Article Recommendations | Supporting Information



ABSTRACT: Arsenic (As) accumulation in rice is of global concern for human health and international trade. Rice is typically reported to contain inorganic As (iAs) and dimethylated arsenate (DMA), with current food guidelines limiting toxic iAs but not less-toxic DMA. Here, we show that the highly toxic dimethylated monothioarsenate (DMMTA) is also found in rice worldwide and has been unknowingly determined as less-toxic DMA by previous routine analytical methods. Using enzymatic extraction followed by high-performance liquid chromatography−inductively coupled plasma−mass spectrometry (HPLC-ICP-MS) analysis with a C18 column, DMMTA was detected in rice grains (n = 103) from a field survey from China and in polished rice grains (n = 140) from a global market-basket survey. Concentration ranged from <0.20 to 34.8 μg/kg (median 10.3 μg/kg), accounting for 0 to 21% of total As. A strong linear correlation was observed in all rice samples between DMA and DMMTA (being 30 ± 8% of DMA) concentrations. This robust relationship allows an estimation of DMMTA in rice grains from the DMA data reported in previous market-basket surveys, showing a general global geographical pattern with DMMTA concentration increasing from the equator toward high-latitude regions. Based on the global occurrence and potential high toxicity, DMMTA in rice should be considered in health risk assessments and for setting food regulations.

KEYWORDS: *arsenic, food safety, geographic pattern, thiolation, rice, DMA*

ELSEVIER

Food Chemistry

journal homepage: www.elsevier.com/locate/foodchem

FOOD CHEMISTRY

Check for updates

Short communication

Widespread occurrence of dimethylmonothioarsenate (DMMTA) in rice cakes: Effects of puffing and storage

Andrea E. Colina Blanco [a], Alejandra Higa Mori [a], Britta Planer-Friedrich [a,*]

[a] *Environmental Geochemistry, Bayreuth Center for Ecology and Environmental Research (BAYCEER), University of Bayreuth, 95440 Bayreuth, Germany*

A R T I C L E I N F O

Keywords:
Rice products
Dietary exposure
Arsenic speciation
DMA
DMDTA
Infant food
Food safety

A B S T R A C T

Thioarsenates have recently been detected in rice and rice-based products, with particularly high contents in puffed rice cakes. Here, we show that puffing rice can cause almost complete transformation of dimethylarsenate (DMA) to dimethyldithioarsenate (DMDTA) and dimethylmonothioarsenate (DMMTA). Analysis of puffed rice cakes after 3 months of non-sealed storage at room temperature showed transformation of DMDTA mainly into DMMTA. From a food safety perspective, this likely represents an increased risk because DMMTA is highly cytotoxic and misidentified as non-regulated DMA by routine acid extractions. Analysis of 80 commercial puffed rice cakes confirmed widespread occurrence of thioarsenates. The sum of non-regulated, but potentially toxic DMMTA and DMDTA reached values up to 537 $\mu g \cdot kg^{-1}$ and 241 $\mu g \cdot kg^{-1}$ for generic and infant-labeled rice cakes, respectively. Our results highlight the importance of better understanding (de)thiolation processes along the rice cake-production chain and potentially revising current thresholds set for iAs to include DMMTA and DMDTA.

1. Introduction

Puffed rice cakes are snacks prepared using rapid heating methods. High temperatures are applied to pregelatinized rice to release the moisture inside the grains, causing the kernels to expand (Joshi & Mohapatra, 2014). They have gained popularity in the food industry because of their low serving weight, low-calorie content (Hsieh et al., 1989), and compatibility with celiac diets (Munera-Picazo et al., 2014). Rice-based products are commonly fed to young children due to their mild flavor, nutritional properties, and low allergen potential (Signes-Pastor et al., 2016).

However, rice and rice-based products have also been identified as one of the main dietary sources of arsenic (As) (Munera-Picazo et al., 2014; Signes-Pastor et al., 2016). Arsenic speciation is typically reported

typically total As and iAs are determined and DMA is assumed to be the calculated difference between both.

Recent studies have, however, also shown the widespread occurrence of inorganic and methylated thioarsenates, especially dimethylmonothioarsenate (DMMTA), in rice grains (Colina Blanco et al., 2021; Dai et al., 2022) and, in even higher contents, in a small number of tested commercial puffed rice cakes (n = 6) where thioarsenate contents (DMMTA, dimethyldithioarsenate (DMDTA), monothioarsenate (MTA), and dithioarsenate (DTA)) up to 26 $\mu g \cdot kg^{-1}$ were detected (Colina Blanco et al., 2021). The reason for their previous non-detection is that routinely applied acid-based extraction and detection methods transform inorganic thioarsenates to arsenite and methylated thioarsenates to the respective methylated oxyarsenates (Colina Blanco et al., 2021).

Even though a risk assessment of ingesting thioarsenate-containing

Thioarsenate, a potential challenge to the industry

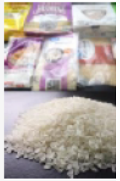
Environmental Science & Technology
pubs.acs.org/est

Widespread Occurrence
Monothioarsenate (DM

Jun Dai, Zhu Tang, A-Xiang Gao, I
and Peng Wang*

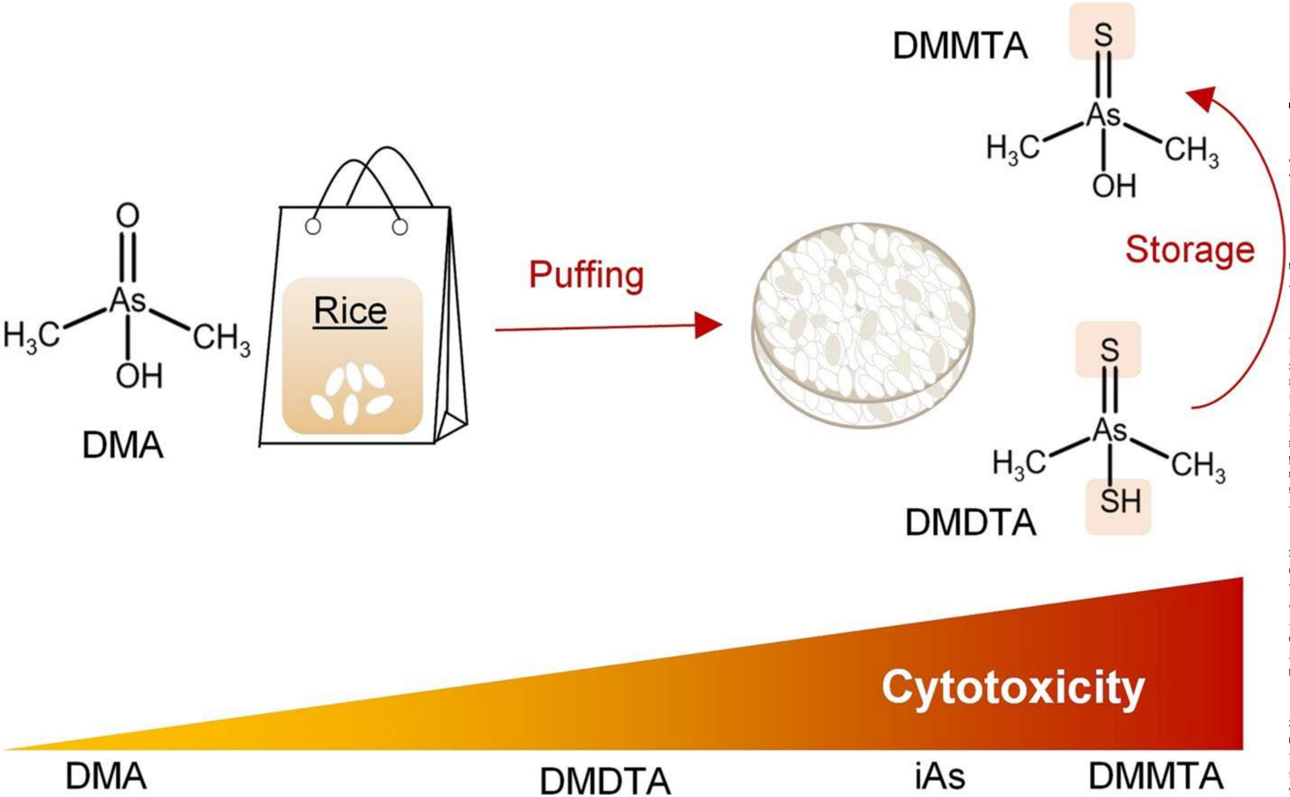
Cite This: *Environ. Sci. Technol.* 2022, 56, 35

ACCESS | Metrics & More



ABSTRACT: Arsenic (As) accumulation in
reported to contain inorganic As (iAs) and d
less-toxic DMA. Here, we show that the highl
has been unknowingly determined as less-tox
by high-performance liquid chromatography–
column, DMMTA was detected in rice grains
global market-basket survey. Concentration ra
As. A strong linear correlation was observ
concentrations. This robust relationship allov
market-basket surveys, showing a general gl
toward high-latitude regions. Based on the gl
health risk assessments and for setting food

KEYWORDS: *arsenic, food safety, geographic*



FOOD CHEMISTRY

) in rice

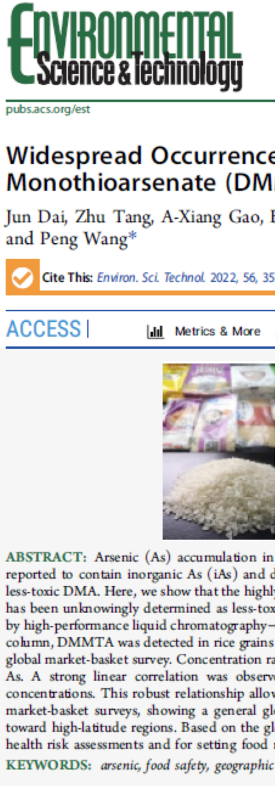
Check for updates

th, Germany

roducts, with particularly high contents in
omplete transformation of dimethylarsenate
arsenate (DMMTA). Analysis of puffed rice
wed transformation of DMDTA mainly into
increased risk because DMMTA is highly
tractions. Analysis of 80 commercial puffed
sum of non-regulated, but potentially toxic
g^{-1} for generic and infant-labeled rice cakes,
nding (de)thiolation processes along the rice
t for iAs to include DMMTA and DMDTA.

termined and DMA is assumed to be the
oth.
er, also shown the widespread occur-
ylated thioarsenates, especially dime-
), in rice grains (Colina Blanco et al.,
en higher contents, in a small number of
kes (n = 6) where thioarsenate contents
te (DMDTA), monothioarsenate (MTA),
to 26 μg·kg^{-1} were detected (Colina
for their previous non-detection is that
traction and detection methods trans-
rsenite and methylated thioarsenates to
senates (Colina Blanco et al., 2021).
nt of ingesting thioarsenate-containing

Thioarsenate, a potential challenge to the industry


Environmental Science & Technology

pubs.acs.org/est

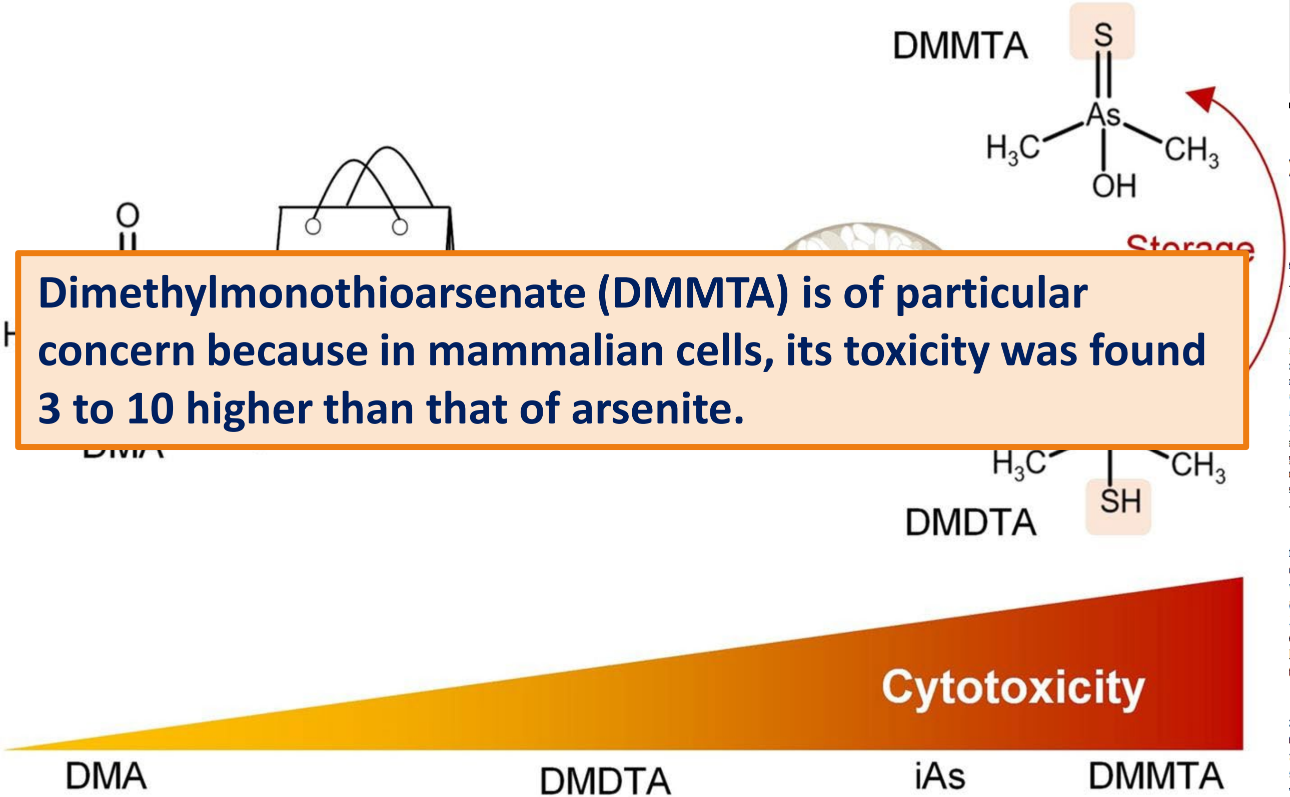
Widespread Occurrence
Monothioarsenate (DM

Jun Dai, Zhu Tang, A-Xiang Gao, F
and Peng Wang*

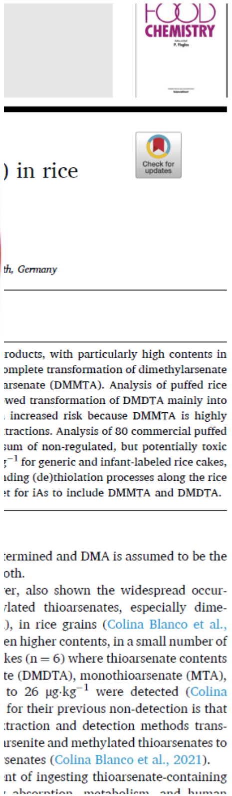
Cite This: Environ. Sci. Technol. 2022, 56, 35

ACCESS | Metrics & More

ABSTRACT: Arsenic (As) accumulation in
reported to contain inorganic As (iAs) and d
less-toxic DMA. Here, we show that the highl
has been unknowingly determined as less-tox
by high-performance liquid chromatography–
column, DMMTA was detected in rice grains
global market-basket survey. Concentration ra
As. A strong linear correlation was observ
concentrations. This robust relationship allov
market-basket surveys, showing a general gl
toward high-latitude regions. Based on the gl
health risk assessments and for setting food
KEYWORDS: arsenic, food safety, geographic



Dimethylmonothioarsenate (DMMTA) is of particular concern because in mammalian cells, its toxicity was found 3 to 10 higher than that of arsenite.


FOOD CHEMISTRY

) in rice

th, Germany

roducts, with particularly high contents in
omplete transformation of dimethylarsenate
arsenate (DMMTA). Analysis of puffed rice
wed transformation of DMDTA mainly into
increased risk because DMMTA is highly
tractions. Analysis of 80 commercial puffed
sum of non-regulated, but potentially toxic
$^{-1}$ for generic and infant-labeled rice cakes,
ding (de)thiolation processes along the rice
t for iAs to include DMMTA and DMDTA.

termined and DMA is assumed to be the
oth.
er, also shown the widespread occur-
lated thioarsenates, especially dime-
), in rice grains (Colina Blanco et al.,
en higher contents, in a small number of
kes (n = 6) where thioarsenate contents
te (DMDTA), monothioarsenate (MTA),
to 26 μg·kg^{-1} were detected (Colina
for their previous non-detection is that
traction and detection methods trans-
rsenite and methylated thioarsenates to
senates (Colina Blanco et al., 2021).
nt of ingesting thioarsenate-containing

Nickel
New EU maximum levels, concentrations in Eurofins historic samples

New maximum levels for nickel in rice

eurofins

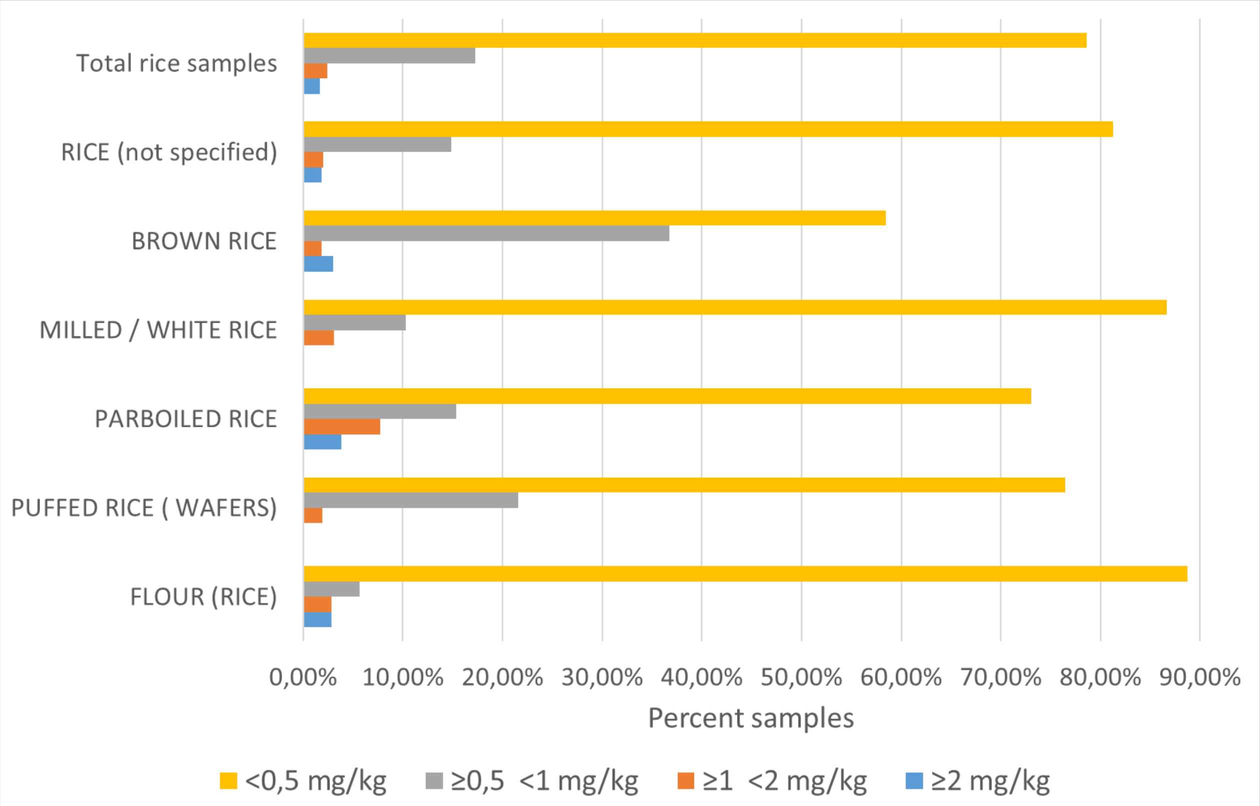
COMMISSION REGULATION (EU) 2023/915

of 25 April 2023

on maximum levels for certain contaminants in food and repealing Regulation (EC) No 1881/2006

3.6	**Nickel**	Maximum level (mg/kg)
3.6.11.2	Durum wheat (*Triticum durum*) and rice except products listed in 3.6.11.3	1,5 As from 1 July 2026
3.6.11.3	Husked rice	2,0 As from 1 July 2026
3.6.14	Processed cereal-based food for infants and young children [3]	3,0
3.6.15	Baby food [3] except products listed in 3.6.16.	0,50

Nickel concentrations in Eurofins rice samples: results from over 1000 samples



MOSH/MOAH

Sources for rice, planned EU maximum levels and rapid alerts

Sources of MOSH/MOAH in rice

Primary packaging,
if not from virgin fibre

Secondary packaging,
if no barrier function in
primary package

Batching oils
in jute bags

Machinary oils
and grease

Contaminated water in
parboiling process

MOSH / MOAH legislation

Agreement of the Standing Comittee for a MOAH limit

If the quantified presence of MOAH, which are possible genotoxic carcinogens, in food including food for infants and young children is confirmed by an official control, the products concerned should be withdrawn and, if necessary, recalled from the market on the basis of Article 14 of the General Food Law (Regulation (EC) No 178/2002), to ensure a high level of human health protection. In this regard the Member States also stress the responsibilities of food business operators in accordance with Article 19 of the General Food Law.

In order to ensure a uniform enforcement approach throughout the EU, the Member States agreed to withdraw and, if necessary, to recall products from the market, when the sum of the concentrations of MOAH in food are at or above the following maximum LOQs:

- *0.5 mg/kg for dry foods with a low fat/oil content (≤ 4% fat/oil)*
- *1 mg/kg for foods with a higher fat/oil content (> 4% fat/oil)*

This statement replaces the statement of the SC PAFF of 23 June 2020 on Presence of mineral oil romatic hydrocarbons (MOAH) in infant formula and follow-on formula – conclusion on harmonised risk ıanagement measures.

Draft of the EU commission for MOAH limits in the EU contaminant regulation

SANTE PLAN 2023/2345 Rev.2.

COMMISSION REGULATION (EU) …/…

of XXX

amending Regulation (EU) 2013/915 as regards maximum levels of mineral oil aromatic hydrocarbons in food.

- 0,50 mg/kg for ingredients with a fat < 4% fat/oil content
- 1,0 mg/kg for ingredients with ≥ 4% and ≤ 50% fat/oil content
- 2,0 mg/kg for ingredients with > 50% fat/oil content

MOSH/MOAH rapid alerts for rice

Date	Subject	Origin	Product	MOSH	MOAH
				mg/kg	
19.08.2025	MOSH/MOAH	India	rice	135	3
23.06.2025	MOAH	Pakistan	Basmati rice		42
19.05.2025	MOAH	Pakistan	vermicelli		13,3
24.04.2025	MOSH/MOAH	India	rice	-	-
29.11.2024	MOSH/MOAH	Pakistan	rice	132	3,4
	MOSH/MOAH in packaging			3176	27,82
11.10.2024	MOSH/MOAH	Pakistan	rice	17,9	2,4
12.07.2024	MOSH/MOAH	Pakistan	Basmati rice	74	1,4
15.03.2024	MOSH/MOAH	India	rice		
10.08.2023	MOSH/MOAH	Pakistan	Basmati rice		2,4
10.08.2023	MOSH/MOAH	India	Basmati rice		2,6
10.08.2023	MOSH/MOAH	Pakistan	Basmati rice		8
01.02.2023	Migration of MOSH/MOAH	Pakistan	Packaging material for rice		0,71
12.05.2022	MOSH	Pakistan	Basmati rice	33	
04.02.2020	MOAH	unkown	Basmati rice		1,5

Your Contacts

Eurofins Dr.Specht Express Testing & Inspection

Dr. Werner Nader
Consultant
Retired Managing Director

E-Mail:
Werner.Nader@ ftdach.eurofins.com

Amar Guberinic, MA
Sales Manager

E-Mail:
Amar.Guberinic@ ftdach.eurofins.com

Dr. Alexander Zahm
Managing Director

E-Mail:
Alexander.Zahm@ftdach.eurofins.com