SUPPORTING INFORMATION

Geographical variation in total and inorganic arsenic content of polished (white) rice.

Andrew A. Meharg[1], Paul N. Williams[1,2], Eureka Adamako[1], Youssef Y. Lawgali[1], Claire Deacon[1], Antia Villada[1], Robert C.J. Cambell[1], Guoxin Sun[2], Yong-Guan Zhu[2] Joerg Feldmann[3], Andrea Raab[3], Fang-Jie Zhao[4], Rafiqul Islam[5], Shahid Hossain[6], Junta Yanai[7]

1. Institute of Biological and Environmental Sciences, University of Aberdeen, Cruickshank Building, St. Machar Drive, Aberdeen, AB24 3UU, UK.

2. Research Centre for Eco-Environmental Sciences, Chinese Academy of Sciences, 18 Shuangqing Road, Haidian District, Beijing, 100085, China.

3. Department of Chemistry, University of Aberdeen, Meston Building, Meston Walk, AB24 3TU, Aberdeen.

4. Soil Science Department, Rothamsted Research, Harpenden, Hertfordshire AL5 2JQ, UK.

5. Bangladesh Agricultural University, Mymensingh - 2202, Bangladesh.

6.   Department of Soil, Water and Environment, Dhaka University, Dhaka-1000, Bangladesh.

7.   Graduate School of Agriculture, Kyoto Prefectural University, Shimogamo Hangi-cho, Sakyo, Kyoto 606-8522, Japan

Name and address of corresponding author:

Andrew A. Meharg

Institute of Biological and Environmental Sciences, University of Aberdeen, Cruickshank Building, St. Machar Drive, Aberdeen, AB24 3UU, UK.

Tel: +44 (0)1224 272264, fax: +44 (0) 1224 272703, email a.meharg@abdn.ac.uk

Figure 1. Boxplots of total arsenic distributions in rice from different countries. Horizontal lines are percentiles from the modelled global distribution: the central solid line is the median, the intermediate lines with long dashes are the 25th and 75th percentiles, the outer short dashed line are the 5th and 95th percentiles. Boxplot interpretation: the central line is the median, the outer limits of the box are the 25th and 75th percentiles, the whiskers are the 5th and 95th percentiles, and the dots the 1st and 99th percentiles.
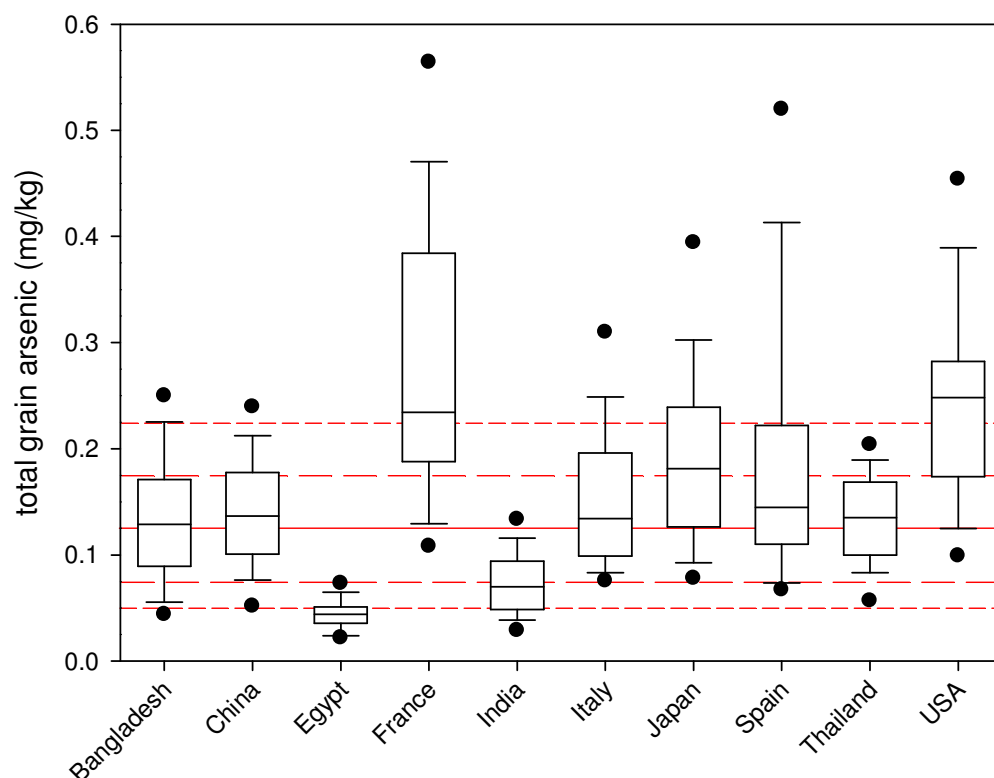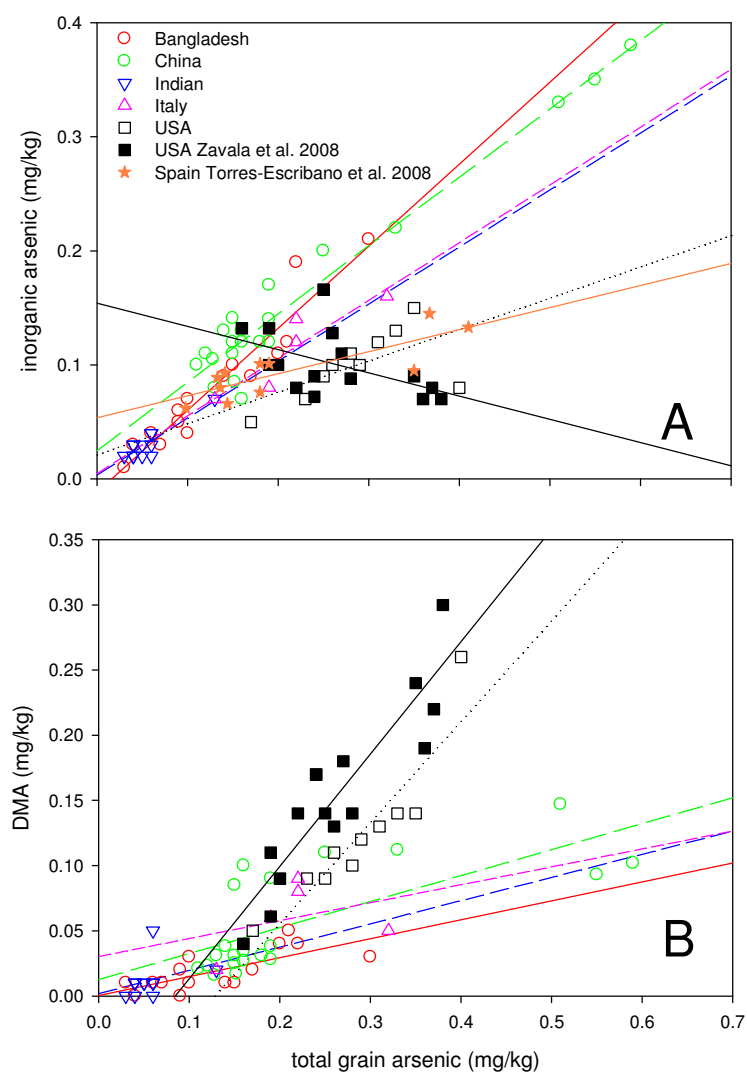

Figure 2. Regression of inorganic arsenic and DMA against total arsenic levels in rice for countries from different regions. USA data of Zavala *et al.* (2008), and Spanish data for

Torres-Escribano *et al.* (2008), were included for comparison. Graph A is for inorganic arsenic, graph B is for DMA.

Torres-Escribano, S.; Leal, M.; Velez, D.; Montoro, R. Total and inorganic arsenic concentrations in rice sold in Spain, effect of cooking and risk assessments. *Environ. Sci. Technol*. **2008**, *42*, 3867-3872.

Zavala, J.J.; Gerads, R.; Gurleyuk, H.; Duxbury, J.M. Arsenic in rice: II. Arsenic speciation in USA grain and implications for human health. *Environ. Sci. Technol.* **2008**, *42*, 3861-3866.