

Water-stingy agriculture reduces arsenic in rice markedly

July 28 2008

A new farming method first developed to conserve precious irrigation water may have the added benefit of producing rice containing much less arsenic than rice grown using traditional rice-farming methods, researchers in the United Kingdom report. Their study is scheduled for the August 1 issue of ACS' *Environmental Science & Technology*.

In the new study, Fang-Jie Zhao and colleagues point out that rice — a staple crop for 2.5 billion people worldwide — also is a major source of human exposure to arsenic in certain countries.

Arsenic has been linked to cancer and other diseases. Arsenic gets in rice in countries such as Bangladesh and India when farmers flood rice paddies with arsenic-contaminated irrigation water.

The scientists compared rice plants grown in "flooded" soil in greenhouse conditions to rice plants grown under aerobic conditions. The other rice contained 10 to 15 times lower arsenic levels than the "flooded" rice, the scientists report.

Article: dx.doi.org/10.1021/es800324u

Source: ACS

Citation: Water-stingy agriculture reduces arsenic in rice markedly (2008, July 28) retrieved 24



April 2024 from <u>https://phys.org/news/2008-07-water-stingy-agriculture-arsenic-rice-markedly.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.