

Publication

Total mercury accumulation in aboveground parts of maize plants (*Zea mays*) throughout a growing season

JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

ID 4658312

Author(s) Glauser, Emanuel; Wohlgemuth, Lena; Conen, Franz; Jiskra, Martin

Author(s) at UniBasel [Conen, Franz](#) ; [Jiskra, Martin](#) ; [Wohlgemuth, Lena](#) ; [Glauser, Emanuel](#) ;

Year 2022

Title Total mercury accumulation in aboveground parts of maize plants (*Zea mays*) throughout a growing season

Journal Journal of Plant Interactions

Volume 17

Number 1

Pages / Article-Number 239-243

We investigated Hg accumulation in maize (*Zea mays*) plants grown in non-contaminated conditions on a farm in Switzerland throughout a growing season. Concentrations of Hg in leaves and husk followed the same temporal pattern as the mass growth of these parts. In contrast, silk and tassel accumulated Hg almost linearly over time until harvest. At the end of the growing season Hg concentration was highest in tassel (10.4 ng g⁻¹), followed by leaves (7.3 ng g⁻¹) and silk (5.7 ng g⁻¹). Silk and tassel had accumulated 5-10 times more Hg per unit dry mass than all aboveground parts of the plant on average. Cob and kernels contained only very small amounts of Hg. Greater exposure of a plant part to the atmosphere was clearly associated with higher rates of Hg accumulation.

ISSN/ISBN 1742-9145 ; 1742-9153

URL <https://doi.org/10.1080/17429145.2022.2028914>

edoc-URL <https://edoc.unibas.ch/92348/>

Full Text on edoc No;

Digital Object Identifier DOI 10.1080/17429145.2022.2028914

ISI-Number 000752053100001

Document type (ISI) Article