

Accepted Manuscript

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PII: S0045-6535(16)31815-X

DOI: [10.1016/j.chemosphere.2016.12.081](https://doi.org/10.1016/j.chemosphere.2016.12.081)

Reference: CHEM 18537

To appear in: *ECSN*

Received Date: 20 May 2016

Revised Date: 12 December 2016

Accepted Date: 18 December 2016

Please cite this article as: Liu, H., Zhang, C., Wang, J., Zhou, C., Feng, H., Mahajan, M.D., Han, X., Influence and interaction of iron and cadmium on photosynthesis and antioxidative enzymes in two rice cultivars, *Chemosphere* (2017), doi: 10.1016/j.chemosphere.2016.12.081.

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**Influence and interaction of Iron and Cadmium on photosynthesis and
antioxidative enzymes in two rice cultivars**

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ABSTRACT

In this study, a soil pot experiment was conducted to investigate the changes in
photosynthesis and antioxidative enzymes in two rice varieties (Shendao 6 and
Shennong 265) supplied with iron (Fe), cadmium (Cd), and Fe and Cd together. The
concentrations of Fe and Cd in the soil were 0, 1.0 g Fe·kg⁻¹ and 0, 2.0 mg Cd·kg⁻¹,
respectively. Photosynthetic indices and antioxidative enzyme activities were
recorded at different rice growth stages. At the early stage, Cd showed a transient
stimulatory effect on the photosynthetic rate of Shennong 265. For Shendao 6,
however, Cd showed a transient stimulatory effect on photosynthetic rate, intercellular
CO₂ concentration, stomatal conductance and transpiration efficiency. In addition, the

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