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Title: Cadmium and arsenic affect root development in *Oryza sativa* L. negatively interacting with auxin

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Cadmium and arsenic affect root development in *Oryza sativa* L. negatively interacting with auxin.

Running title

Cadmium and arsenic alter the rice root system

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Highlight

- Arsenic and cadmium affect lateral root formation and development in rice.
- Arsenic and cadmium are mainly accumulated in rice roots.
- Arsenic and cadmium act on different IAA biosynthetic genes in rice roots.
- Arsenic and cadmium disrupt IAA localization disturbing IAA transporters

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