Isothiazolinone biocides are rapidly removed from liquid plant medium by sterile Arabidopsis plants.

**INTRODUCTION**

- Isothiazolinones such as BIT and MIT are widely used in paints and coatings for building exteriors.
- They wash off of building exteriors in rain events and enter stormwater, which can interact with vegetation.
- Thus, it is important to determine if these compounds are taken up by vegetation.

**METHODS**

- Arabidopsis plants (30 +/- 2, per box) were grown from sterilized seed in sterile liquid medium in autoclaved Magenta boxes.
- After 10–11 days of growth, medium is replaced with biocide-spiked medium.
- Medium samples were taken over time and chemical concentrations quantified via LC-MS/MS.

**RESULTS**

Sterile Arabidopsis removes:
BIT \( (C_0 = 100 \mu g/L) \)
CMI \( (C_0 = 100 \mu g/L) \), and
MIT \( (C_0 = 33 \mu g/L) \)
from liquid plant medium at a statistically indistinguishable rate.

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