

## Greenhouse gas emissions from acidified and stripped organic fertilizers

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**The problem:** The nitrogen fertilization value of liquid organic fertilizers, such as cattle slurry or digested slurry, is often impaired by ammonia volatilization immediately after field application.

## Two possible solutions:In-field acidificationIn-field acidificationAmmonium strippingImage: Solution of the stripping of th

Our question: What is the effect of those treatments on greenhouse gas emissions after field application?



**Methods:** Emissions were extrapolated from fluxes measured with non-steady-state chambers over two growing seasons (winter wheat, winter barley) in a replicated (n = 4) field trial (Wallbach, CH).

## **Take-home**

In-field acidification did not significantly affect nitrous oxide or methane emissions.



- Ammonium stripping did not affect nitrous oxide emissions, but reduced methane emissions at field application of cattle slurry.
- Together, nitrous oxide and methane emissions from liquid organic fertilizers undergoing in-field acidification or ammonium stripping were not higher than from untreated controls (data not shown).



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