CO2 emission after Urea application

Lab trial at Yara Research Center Hanninghof (unpublished data)

Jens Tierling 2016
Lab trial to measure CO2 emission after Urea application

Method
- Trial in a closed chamber on bare soil
- Continuous measurement of CO2 emission
- Fertilizer application = 130 mg Urea-N per kg soil = 282 mg Urea per kg soil
- 282 mg Urea do contain 55.8 mg C
- Flux rate measurements did not begin immediately at time of application Day 0
- It started at Day 0.6, therefore „real“ cumulative values might be slightly higher than shown here.

Result
- 8 days after application of 55.8 mg C with Urea, 54 mg C was released as CO2
CO2 emissions during urea hydrolysis
(Result of a trial in laboratory)

8 days after application of 55.8 mg C with Urea, 54 mg C was released as CO₂