



Knowledge grows

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(unpublished data)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

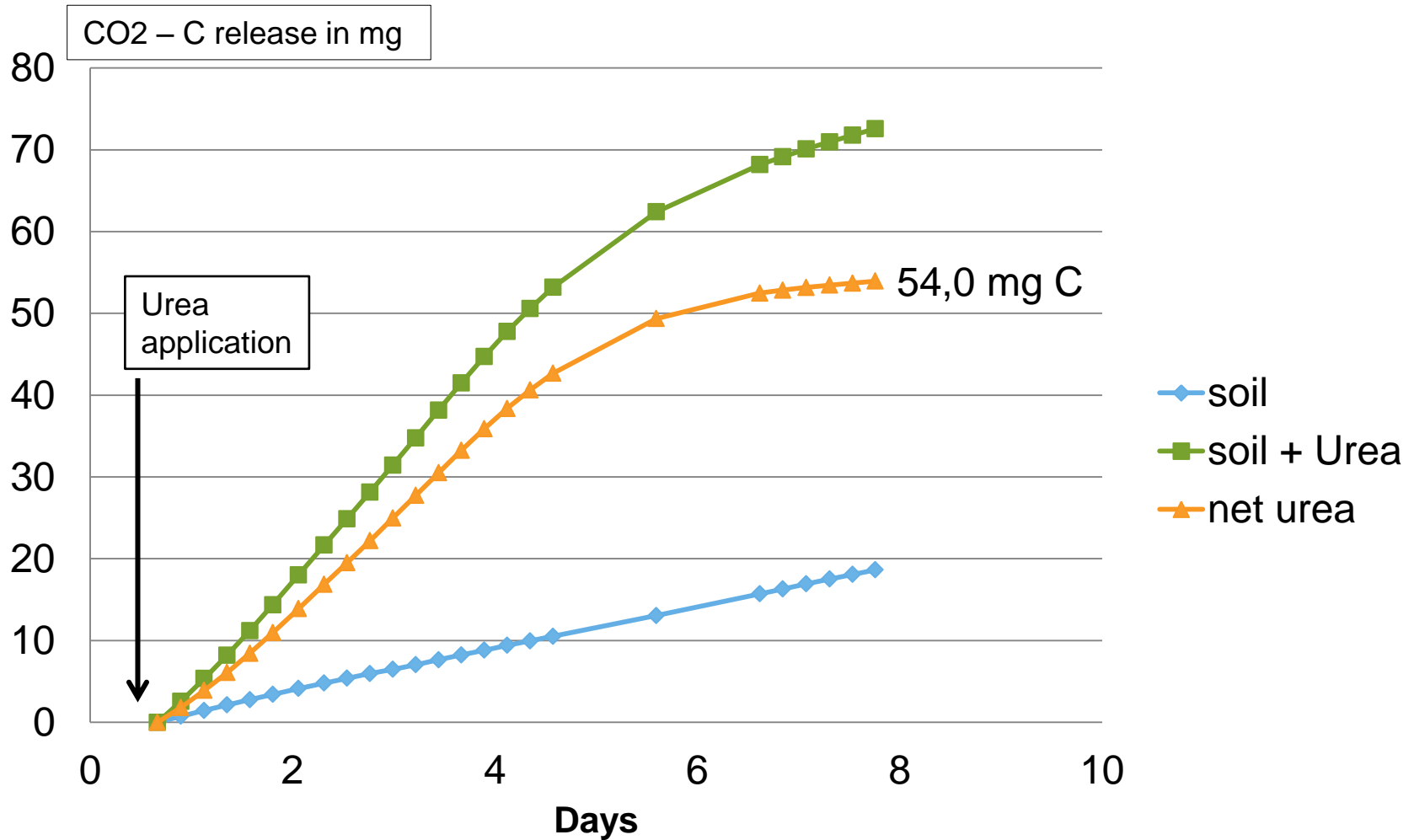
- Trial in a closed chamber on bare soil
- Continuous measurement of CO₂ emission
- Fertilizer application = 130 mg Urea-N per kg soil = 282 mg Urea per kg soil
- 282 mg Urea do contain 55,8 mg C
- Flux rate measurements did not begin immediately at time of application Day 0
- It started at Day 0.6, 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)



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