



*Supplement of*

## **Microbial carbon recycling: an underestimated process controlling soil carbon dynamics**

**A. Basler et al.**

*Correspondence to:* A. Basler (abasler@gwdg.de)

The copyright of individual parts of the supplement might differ from the CC-BY 3.0 licence.

## Supplementary

Table S1. Isotopic composition of bulk soil, plant material and density fractions. Means and standard error.

Wheat (n=9)	-27.46 ±0.48	-25.90 ±3.88	-19.91 ±0.92	-23.54 ±0.82	-26.57 ±0.81	-24.02 ±1.33	-21.45 ±3.37
Maize (n=9)	-13.17 ±0.20	-16.04 ±6.11	-4.80 ±0.61	-8.02 ±0.77	-12.30 ±0.66	-13.73 ±4.89	

Table S2. Isotopic values and carbon content of microbial biomass and extractable carbon (exC). Means and standard error (n=5). A kec factor of 0.45 was used to calculate the total microbial biomass-C (Joergensen, 1996).

		microbial biomass		extractable C			
continuous wheat plot		13C [%]		13C [%]			
Ap		-11.21	±0.05	110.46	±18.3	-26.21	±0.05
E		-11.27	±0.07	99.68	±4.9	-25.53	±0.04
continuous maize plot		Cmic [mg kg <sup>-1</sup> ]				C [mg kg <sup>-1</sup> ]	
Ap		-6.27	±0.03	323.95	±23.6	-21.76	±0.12
E		-7.06	±0.19	169.26	±6.5	-17.93	±0.28

## Reference

Joergensen, R. G.: The fumigation-extraction method to estimate soil microbial biomass: Calibration of the kEC value, *Soil Biol. Biochem.*, 28, 25–31, doi:10.1016/0038-0717(95)00102-6, 1996.