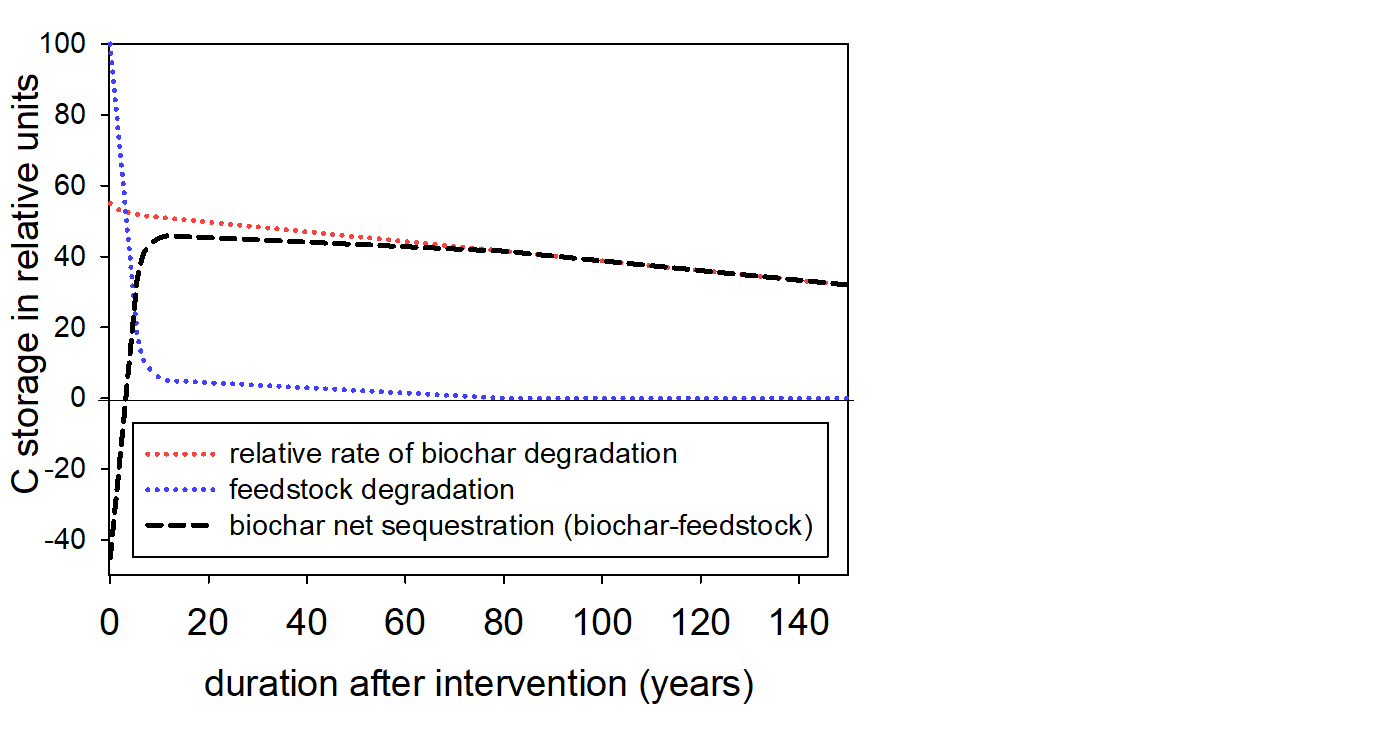
# **Supplementary Information**



Sup Figure 1: Carbon storage over time in relative units with natural biomass decomposition, conversion of biomass residues into biochar and net carbon sequestration through biochar 1–3.

**References**

1. Kuzyakov, Y., Bogomolova, I. & Glaser, B. Biochar stability in soil: Decomposition during eight years and transformation as assessed by compound-specific 14C analysis. *Soil Biol. Biochem.* **70**, 229–236 (2014).

2. Budai, A., Rasse, D. P., Lagomarsino, A., Lerch, T. Z. & Paruch, L. Biochar persistence, priming and microbial responses to pyrolysis temperature series. *Biol. Fertil. Soils* **52**, 749–761 (2016).

3. Bolinder, M. A., Angers, D. A., Giroux, M. & Laverdière, M. R. Estimating C inputs retained as soil organic matter from corn (Zea Mays L.). *Plant Soil* **215**, 85–91 (1999).