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1 **Biochar amendment for improved and more sustainable peat stabilisation**

2 **Supplementary information**

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4 **1. Supplementary figures**

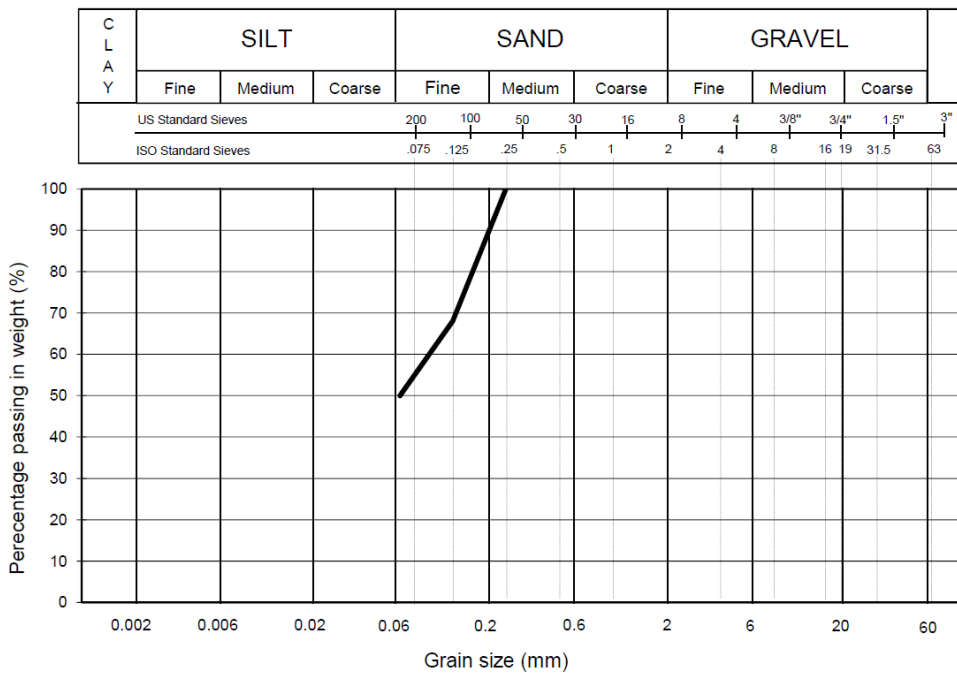
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7 Figure S1. Biomass used to produce biochar. Source: Sørmo et al. (2020).

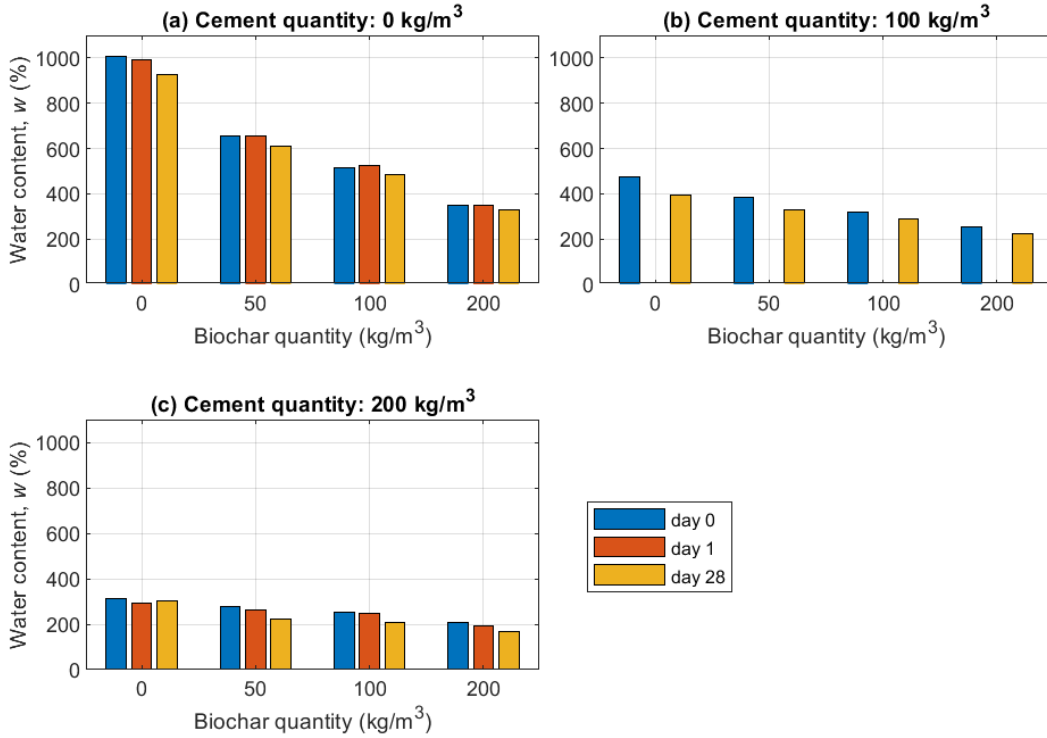
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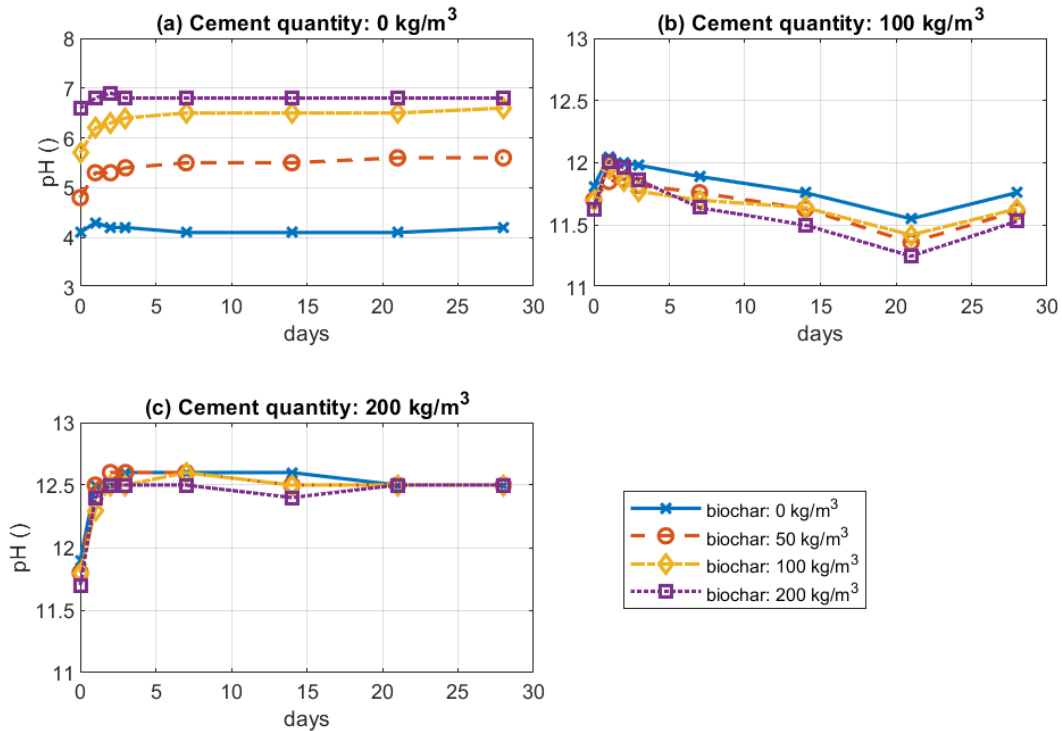
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10 Figure S2. Particle size distribution of the biochar processed for peat stabilisation
11 according to NS-EN 17892-4:2016.

This is an example created from parts of other articles, it is not designed to be read for sense.



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 13 Figure S3. Change of water content in peat samples with curing time (0, 1 and 28
 14 days). The water content at day 1 was not determined for the samples with a cement
 15 quantity of 100 kg/m³.
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 18 Figure S4. pH values with curing time for the peat samples.
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20 2. Supplementary table

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22 Table S1. Standard biochar properties according to the European Biochar Certificate (EBC)
 23 guidelines*. Source: Sørmo et al. (2020).

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Parameter	Unit	Clean wood and leave biochar	EBC Threshold values	25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
Density (bulk)	kg/m ³	229		
Density (actual)	g/cm ³	1.58		
BET-N ₂ surface (>1.5 nm)	m ² /g	287		
CO ₂ surface (0.3-1.5 nm)	m ² /g	453		
Porosity (pores 0.3-1.5 nm)	%	12.6		
Ash (550 °C)	%	14.3		
Hydrogen	%	2.35		
Carbon	%	78.9	> 50	
Nitrogen	%	1.15		
Oxygen	%	3.3		
Inorganic carbon	%	1.2		
Organic carbon	%	77.7		
H/C molar		0.35	< 0.6	
H/Corganic		0.36	< 0.7	
O/C molar		0.031	< 0.4	
Total sulfur (S)	%	0.03		
pH (CaCl ₂)		8.6	< 10	
Conductivity	μS/cm	822		
Salt content	g/kg	5.55		
Phosphorus (P)	%	0.2		
Magnesium (Mg)	%	0.3		
Calcium (Ca)	%	3.5		
Potassium (P)	%	1.0		
Sodium (Na)	%	0.05		
Iron (Fe)	%	0.11		
Silicone (Si)	%	1.1		
TGA*	T (°C)*	320		

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*TGA: thermogravimetric analysis. T is temperature where maximal weight loss is achieved – a way to determine maximum charring temperature.

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* EBC, "European Biochar Certificate - Guidelines for a Sustainable Production of Biochar," Arbaz, Switzerland, 2012.