Synergies between BECCS and Biochar - Maximizing Carbon Sequestration Potential by Recycling Wood Ash

Supplementary Information

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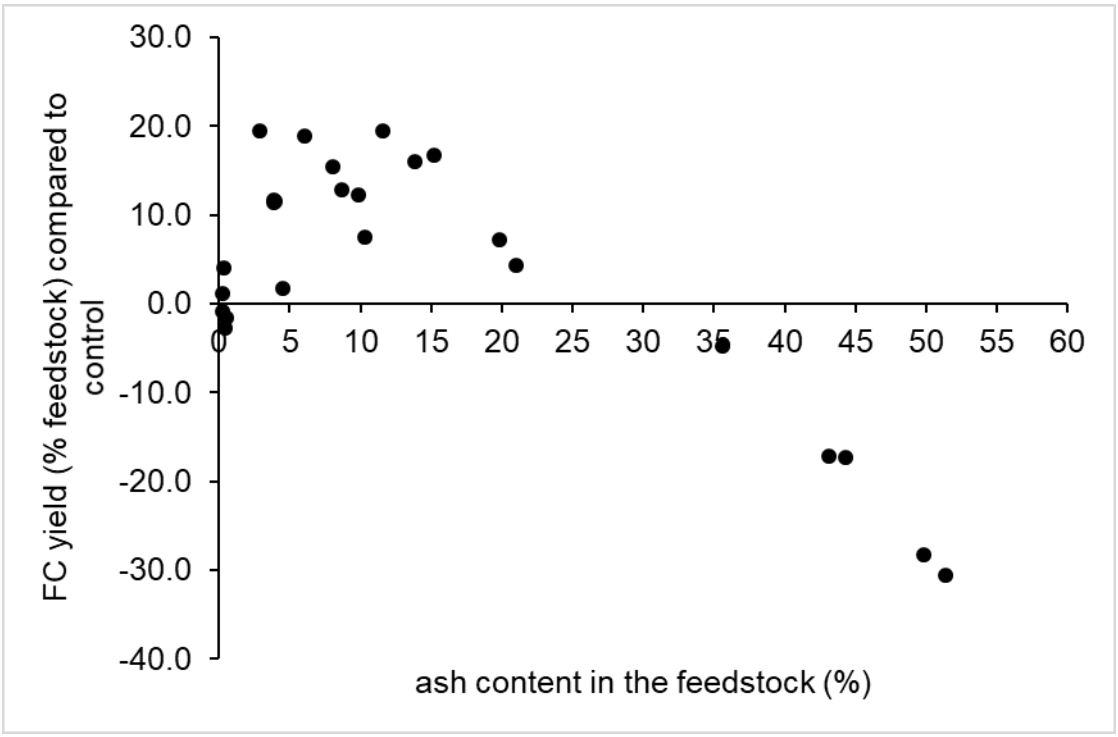
SI Table 1: Proximate analysis, biochar and fixed carbon (FC) yield of unamended and wood-ash amended spruce biochars. PPS = pelletised, pyrolysed spruce.

	volatile matter	FC	ash	biochar yield	ash-free biochar yield	ash-free biochar yield	FC yield	FC yield
	% dry biochar	% dry biochar	% dry biochar	% feedstock	% feedstock	% ash-free feedstock	% feedstock	% ash-free feedstock
	AV ± SD	AV ± SD	AV ± SD	AV ± SD	AV ± SD	AV ± SD	AV ± SD	AV ± SD
PPS 0% 450	25.4 ± 0.4	73.0 ± 0.6	1.6 ± 0.6	22.4 ± 0.4	22.0 ± 0.5	22.1 ± 0.5	16.3 ± 0.4	16.4 ± 0.4
PPS 5% 450°C	23.4 ± 0.6	63.3 ± 2.3	13.3 ± 2.4	28.7 ± 0.7	24.9 ± 1.2	25.8 ± 1.1	18.2 ± 1.0	18.9 ± 1.0
PPS 10% 450°C	21.6 ± 0.5	53.7 ± 3.8	24.7 ± 4.2	34.5 ± 1.2	26.0 ± 0.6	28.4 ± 0.2	18.5 ± 0.7	20.2 ± 0.4
PPS 20% 450°C	20.9 ± 1.0	42.3 ± 5.5	36.8 ± 6.4	43.8 ± 3.2	27.5 ± 0.8	32.9 ± 0.7	18.4 ± 1.1	22.0 ± 0.3
PPS 50% 450°C	17.2 ± 0.9	19.0 ± 3.8	63.9 ± 4.7	70.0 ± 4.8	25.1 ± 1.4	45.8 ± 2.5	13.1 ± 1.7	23.8 ± 0.4



SI Figure 1: FC yield (% feedstock) compared to the control with the ash content in the feedstock determined via proximate analysis.