

# Supplementary Materials: Improving Processing and Performance of Pure Lignin Carbon Fibers through Hardwood and Herbaceous Lignin Blends

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**Table S1.** Tukey test results for mechanical properties of carbon fibers made from different ratios of switchgrass (SG) and yellow poplar (YP) lignin blend (*w/w*).<sup>a,b</sup>

Source	Stabilization rate (°C min <sup>-1</sup> )	Tensile strength (MPa)	Tensile modulus (GPa)
50% YP:50% SG	0.05	BC	A
50% YP:50% SG	0.1	BCD	A
50% YP:50% SG	0.2	BCD	A
50% YP:50% SG	0.5	CD	AB
75% YP:25% SG	0.05	B	A
75% YP:25% SG	0.1	CD	CD
75% YP:25% SG	0.2	CD	CD
75% YP:25% SG	0.5	EF	D
85% YP:15% SG	0.05	A	A
85% YP:15% SG	0.1	BC	A
85% YP:15% SG	0.2	DE	BC
85% YP:15% SG	0.5	F	D

<sup>a</sup> Interaction of two factors (blend ratio and stabilization rate).

<sup>b</sup> Samples not connected by same letters are significantly different ( $p < 0.01$ ).