

## Supplementary Material

Table S1: Organic Compound Composition in Biocrude.

S. No.	RT	Compounds	Peak Area (%)							
			Wood 350	Wood 400	Algae Sp. 350	Algae Sp.400	Lignin 350	Lignin 400	Wood Cont. 350	Wood Cont. 400
<b>Ketones</b>										
1	2.71	2-Butanone	1.21	1.41	2.13	2.11	0.97	1.11	1.21	1.41
2	7.78	2-Pentanone, 4-hydroxy-4-methyl-	1.34	2.14	3.43	2.45	3.14	1.75	1.34	2.14
3	9.22	2-Cyclopenten-1-one, 2-methyl-	2.12	1.34	1.43	2.56	1.54	0.78	2.12	1.34
4	10.22	3-Ethylcyclopentanone	1.11	1.56	1.87	2.52	1.01	1.87	1.11	1.56
5	11.46	4,4-Dimethyl-2-cyclopenten-1-one	2.32	2.12	2.65	2.45	1.34	1.89	2.32	2.12
6	22.89	2-Nonadecanone	1.98	1.34	1.67	1.54	1.87	0.67	1.98	1.34
<b>Acids and esters</b>										
7	2.77	Acetic acid	1.43	0.87	1.11	0.75	0.91	1.23	1.43	0.87
8	16.01	2,5-Octadecadiynoic acid, methyl ester	0.33	0.56	1.78	0.56	0.56	1.23	0.33	0.56
9	19.51	5-Benzofuranacetic acid, 6-ethenyl	1.73	0.87	1.45	1.26	0.89	0.89	1.73	0.87
10	29.65	Oleic acid, eicosyl ester	1.12	0.83	1.55	1.32	1.11	0.98	1.12	0.83
<b>Aromatics</b>										
11	7.51	8,3,5-Dihydroxytolune	3.13	3.98	1.13	1.89	4.55	5.12	3.13	3.98
12	10. 77	Phenol	3.15	3.47	1.15	2.47	2.12	3.47	3.15	3.47
13	12.05	Phenol, 2-methyl-	3.56	4.76	0.65	2.67	3.65	4.76	3.56	4.76
14	13.87	Phenol, 3-ethyl-	2.34	2.70	1.98	1.75	1.98	2.70	2.34	2.70
15	14.29	Creosol	1.15	1.65	ND	ND	1.15	1.65	1.15	1.65
16	15.57	Phenol, 4-ethyl-2-methoxy-	3.23	3.45	ND	ND	3.12	2.45	3.23	3.45
17	16.57	Phenol, 2,6-dimethoxy-	2.45	0.45	1.65	1.68	1.65	3.45	2.45	0.45
18	8.58	1,1,2,3-Trihydroxybenzene	1.10	1.67	0.11	1.67	3.12	1.67	1.10	1.67
19	9.27	3,4-[(1E)-3-hydroxyprop-1-en-1-yl]phenol	0.57	0.98	0.68	1.98	0.67	0.98	0.57	0.98
<b>Hydrocarbons</b>										
20	8.94	2-Octene	1.35	1.67	2.34	2.78	1.32	0.92	1.35	1.67
21	11.64	1-Methylcyclooctene	1.11	1.23	0.98	2.11	1.42	0.73	1.11	1.23
22	14.77	1,5,5-Trimethyl-6-methylene-cyclohexene	1.31	1.67	2.34	2.78	1.65	0.96	1.31	1.67

23	17.12	Hexadecane	1.35	1.67	2.34	2.78	1.32	0.98	1.35	1.67
24	25.16	Octadecane, 3-ethyl-5-(2-ethylbutyl)-	1.35	1.67	2.34	2.78	1.32	0.98	1.35	1.67
<b>N-containing compounds</b>										
25	6.91	Pyrimidine, 2-methyl-	ND	ND	6.5	5.2	0.21	1.41	1.21	1.41
26	9.22	Propanamide, N-methyl-	1.21	1.41	3.4	2.7	1.34	2.14	1.34	2.14
27	12.13	2-Pyrrolidinone	1.34	2.14	1.5	1.2	1.12	1.34	2.12	1.34
28	12.45	3-Aminopyridine	2.12	1.34	2.5	1.5	0.98	1.12	1.21	1.41
29	13.67	Piperidine-2,5-dione	1.11	1.56	3.42	0.4	0.89	0.77	1.34	2.14
30	25.53	Dodecanamide,	0.98	1.12	1.22	0.66	0.86	1.33	0.98	1.12
31	25.85	N-Methyldodecanamide,	0.89	0.77	0.55	0.67	0.89	0.77	0.89	0.77
32	27.11	9-Octadecenamide- (Z)]	0.12	0.56	0.78	0.44	1.32	0.67	0.12	0.56
<b>Alcohols and Aldehydes</b>										
33	12.81	Cyclohexanol, 3,3,5-trimethyl	1.22	1.45	1.43	2.34	1.21	1.41	1.22	1.45
34	18.29	1,1-Diphenyl-4-phenylthiobut-3-en-1-ol	1.56	1.78	1.87	2.89	1.34	2.14	1.21	1.41
35	9.86	cis-4-Decenal	0.98	0.67	ND	ND	2.12	1.34	ND	ND
		Total area covered	53.23	57.23	59.65	51.21	52.87	59.48	55.23	55.23

ND: Not Detected.