Table 8 of the paper. The bio-oil components distribution. In this version with data on wet basis included.

Pyrolysis temperature ($^{\circ}$C)	On wet basis				On dry basis			
	Wood oil	Straw oil	Lignin oil	Algae Oil	Wood oil	Straw oil	Lignin oil	Algae oil
Water (wt.%)[a]	27.3	25.7	27.4	26.6	-	-	-	-
Light fraction (wt %)[b]	29.7	28.8	25.5	16.1	40.9	38.8	35.2	21.9
Medium fraction (wt %)[c]	22.5	22.9	28.6	30.8	30.9	30.8	39.4	42.0
Heavy fraction (wt %) [d]	3.0	2.8	2.5	3.8	4.1	3.8	3.4	5.2
Residual[e] (char)	17.5	19.8	15.9	22.7	24.1	26.6	21.9	30.9

[a]determined by Karl Fischer, [b]determined as the mass loss appearing from room temperature to 200 °C of the TGA curve and substrated the water content, [c]determined as the mass loss from 200 to 500 °C on TGA curve, [d]determined as the mass loss from 500 to 950 °C on TGA curve, [e]the residual char after heating to 950 $^{\circ}$C.

Table 10 of the paper. The bio-oil components distribution. In this version with data on wet basis included.

Pyrolysis temperature ($^{\circ}$C)	On wet basis		On dry basis	
	Lignin oil	Lignin bottom oil	Lignin oil	Lignin bottom oil
Water (wt.%)[a]	27.4	15.3	-	-
Light fraction (wt %)[b]	25.5	7.7	35.2	9.1
Medium fraction (wt %)[c]	28.6	50.4	39.4	59.5
Heavy fraction (wt %) [d]	2.5	4.1	3.4	4.8
Residual [e] (char)	15.9	22.5	21.9	26.6

[a]determined by Karl Fischer, [b]determined as the mass loss appearing from room temperature to 200 °C of the TGA curve and substrated the water content, [c]determined as the mass loss from 200 to 500 °C on TGA curve, [d]determined as the mass loss from 500 to 950 °C on TGA curve, [e] the residual char after heating to 950 $^{\circ}$C.

Some comments regarding the use of isopropanol for condensation of the bio oil from the pyrolysis gas

In this study isopropanol was used as a condensing solvent, and after the pyrolysis experiments the isopropanol was removed by a rotary vacuum evaporator at a temperature of 30 °C and using a soft sub-pressure. The isopropanol solvent removal procedure are mentioned by I.Fonts et al. (Ind. Eng. Chem. Res., Vol 48, No .4, 2009; Anal. Appl. Pyrolysis 85 (2009) 184-191). A pure isopropanol (having a boiling point of 82 ℃ at atmospheric pressure) was used to determine a set point pressure (the temperature is fixed 30 ℃ to avoid an aging of the bio-oil) in which the isopropanol start to evaporate. The mixture of isopropanol and bio-oil was distilled at those conditions. Regarding low boiling point species in the bio oil acetic acid is considered to be present at a relatively high concentration in the bio-oil and has a boiling point of 119 ℃ (at atmospheric pressure) next to water with a boiling point of 100 ℃ (at atmosphere pressure). The bio-oil components were identified with GC-MS (The GC-MS identified components of lignin and wood oil are shown in table 1). We used a wood bio-oil (that has the highest acetic acid concentration in the bio-oil) to quantify the acetic acid concentrations of a bio-oil liquid sample including isopropanol and the bio-oil sample after solvent removal (see figure 1). It was observed that 37% the acetic acid (corresponding to 1.9 %wt of the wood bio-oil) is lost during solvent removal. Also wood oil was used as condensing solvent during a wood pyrolysis experiment and the pH value of the obtained bio-oil was 3.04. This is slightly lower than when using isopropanol as solvent where a pH value of 3.2 is obtained. Thus the isopropanol solvent removal has a small influence on the pH value of bio-oil.
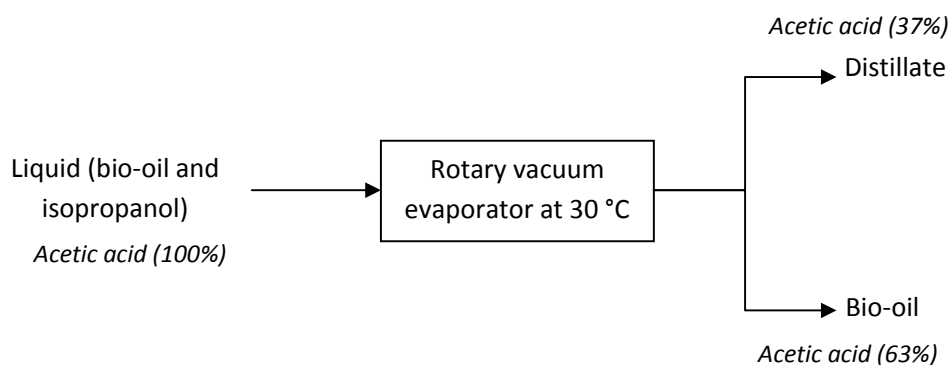
Figure 1: Distribution of acetic acid after removing solvent

Table 1: The GC-MS results on % identified peak area[a]

	Lignin oil	Wood oil	Boiling point (°C)
Acids	6.15	25.88	
Acetic acid	6.15	25.88	119
Nonaromatic ketones	2.55	13.3	
Hydroxyacetone	2.55	7.16	146
1,2-ethanediol, monoacetate	-[a]	3.93	182
1-(acetyloxy)-2-propanone	-	0.73	176
2,3-butanedione	-	-	
2-hydroxy-3-methyl- 2-cyclopenten-1-one	-	0.69	
2-methyl-cyclopentanone	-	0.79	141
Furans	1.01	8.61	
Furfural	0.51	5.16	162
5-methyl-furfural	-	-	
Furfuryl alcohol	0.50	1.35	170
5-hydroxymethylfurfural	-	-	
γ-crotonolactone	-	-	
Carbohydrates	5.5	7.1	
Glycerol	2.91	-	290
Levoglucosan	2.55	7.10	384
Lignin-derived phenols	2.89	0.48	
Phenol	1.52	0.48	182
2,4-dimethyl-phenol	-	-	
4-methyl-phenol	-	-	
p-ethylphenol	0.73	-	219
2,4,6-trihydroxyphenyl-2-pentanone	0.64	-	
Guaiacols	27.4	11.4	
o-guaiacol	6.18	1.85	205
p-methylguaiacol	3.21	1.27	222
p-ethylguaiacol	2.95	0.75	236
p-vinylguaiacol	9.35	2.12	224
Isoeugenol	2.29	2.48	266
Acetoguaiacon	0.80	-	
Coniferyl alcohol	2.62	2.93	
Syringols	18.3	10.3	
Syringol	9.03	3.08	261
Methoxyeugenol	3.57	2.50	
3',5'-dimethoxyacetophenone	3.37	2.09	
Syringaldehyde	0.72	0.74	
Acetosyringone	1.61	1.89	
Methoxy benzenes	4.43	3.05	
Trimethoxybenzene	1.95	1.29	
1,2,3-trimethoxy-5-methyl-benzene	0.80	-	
Benzenemethanol, 2,5-dimethoxy-, acetate	1.68	1.76	

[a]Components with a peak area less than 0.5% are not listed in the table