

Table S1. Solid loss and REs content in leaching solid residue and leachate solution at the end of the tests for each test set.

Acid Type	Solid Residue Yield (%)	TREE in Solid Residue (mg/kg)	TREE in Leachate (mg/L)
1 M H ₂ SO ₄	89.9	182.3	4.6
1 M HCl	82.9	151.1	5.2
1 M HNO ₃	88.2	169.3	4.7
Stirring Speed	Solid Residue Yield (%)	TREE in Solid Residue (mg/kg)	TREE in Leachate (mg/L)
300 rpm	84.7	221.4	4.2
530 rpm	85.1	195.0	4.4
760 rpm	89.9	182.3	4.6
900 rpm	87.0	192.4	4.3
Solid-to-Liquid Ratio	Solid Residue Yield (%)	TREE in Solid Residue (mg/kg)	TREE in Leachate (mg/L)
S/L = 10 g/L	89.9	182.3	4.6
S/L = 20 g/L	90.7	221.6	9.5
S/L = 100 g/L	93.9	315.5	34.4
S/L = 200 g/L	95.0	375.7	49.0
Acid Concentration	Solid Residue Yield (%)	TREE in Solid Residue (mg/kg)	TREE in Leachate (mg/L)
0.1 M H ₂ SO ₄	92.7	402.5	2.5
0.5 M H ₂ SO ₄	91.2	248.3	4.1
1 M H ₂ SO ₄	89.9	182.3	4.6
2 M H ₂ SO ₄	85.6	191.9	5.4
Temperature	Solid Residue Yield (%)	TREE in Solid Residue (mg/kg)	TREE in Leachate (mg/L)
25 °C	96.6	386.5	2.0
40 °C	92.6	327.5	3.1
50 °C	91.5	235.2	3.9
60 °C	88.7	239.2	4.0