

**Table S1.** Chemical composition of three test substrates. The values are averages and standard deviations of 3 biological replicates. DM= dry matter.

<b>Compounds (g/100g DM)</b>	<b>Alfalfa pulp</b>	<b>Mixture (50:50)</b>	<b>Straw</b>
Ash	1.83 ± 0.23 %	2.30 ± 0.10 %	1.89 ± 0.12 %
Total Fiber	60.88 ± 1.34 %	74.05 ± 0.99 %	83.29 ± 1.76 %
<i>Cellulose</i>	28.01 ± 1.14 %	34.86 ± 0.03 %	37.86 ± 1.15 %
<i>Hemicellulose</i>	16.48 ± 0.70 %	20.64 ± 1.02 %	25.07 ± 0.75 %
<i>Acid soluble lignin</i>	1.40 ± 0.01 %	1.32 ± 0.02 %	1.75 ± 0.01 %
<i>Acid insoluble lignin</i>	16.39 ± 0.64 %	18.55 ± 1.10 %	20.37 ± 1.11 %
Protein	17.42 ± 0.24 %	10.12 ± 0.15 %	3.09 ± 0.04 %
<i>Nitrogen</i>	2.79 ± 0.01 %	1.62 ± 0.01 %	0.45 ± 0.02 %
Extractives	20.65 ± 0.01 %	13.05 ± 0.84 %	12.73 ± 0.81 %