Digestate Information Sheets No.5 – Total Nutrient Content Liquid Digestate

Liquid Digestate is available in 2 main forms either whole liquid Digestate or separated liquid Digestate and nutrient content can be variable. Full details of nutrient content for a standard range of Digestates can be found in Technical Note (TN699) – Agricultural use of biosolids, composts, anaerobic digestates and other industrial organic fertilisers (). Table 1 below provides an extract of the nutrient values from Technical Note (TN699) with a comparison with liquid farm manures using data taken from Technical Note (TN650) – Optimising the application of bulky organic fertilisers.

Table 1 Standard nutrients of liquid Digestate from technical notes TN699 and TN650

<table>
<thead>
<tr>
<th>Liquid Organic fertilisers</th>
<th>Dry matter (%)</th>
<th>kg/m³ (liquids/slurries)</th>
<th>kg/m³ (liquids/slurries)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total N</td>
<td>Readily Available N</td>
</tr>
<tr>
<td>Food-based digestate, whole</td>
<td>4.1</td>
<td>4.8</td>
<td>3.8</td>
</tr>
<tr>
<td>Food-based digestate, separated liquor</td>
<td>3.8</td>
<td>4.5</td>
<td>4.0</td>
</tr>
<tr>
<td>Farm-based digestate, whole</td>
<td>5.5</td>
<td>3.6</td>
<td>2.8</td>
</tr>
<tr>
<td>Farm-based digestate, separated liquor</td>
<td>3.0</td>
<td>1.9</td>
<td>1.7</td>
</tr>
<tr>
<td>Cattle slurry</td>
<td>6.0</td>
<td>2.6</td>
<td>1.2</td>
</tr>
<tr>
<td>Pig slurry</td>
<td>4.0</td>
<td>3.6</td>
<td>2.5</td>
</tr>
</tbody>
</table>

In addition to the standard values from the technical notes Table 2 provides values that have been taken from individual Digestate analyses that have been collected recently.

Table 2 Nutrients from analyses of liquid digestate

<table>
<thead>
<tr>
<th>Organic fertilisers</th>
<th>Dry matter (%)</th>
<th>kg/m³ (liquids/slurries)</th>
<th>kg/m³ (liquids/slurries)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total N</td>
<td>Readily Available N</td>
</tr>
<tr>
<td>Distillery based digestate 1 (whole)</td>
<td>7.2</td>
<td>7.8</td>
<td>3.8</td>
</tr>
<tr>
<td>Distillery based digestate 1 (Separated liquid)</td>
<td>4.6</td>
<td>6.8</td>
<td>3.8</td>
</tr>
<tr>
<td>Distillery based digestate 2 (whole)</td>
<td>5.6</td>
<td>5.9</td>
<td>3.1</td>
</tr>
<tr>
<td>Industrial digestate (whole)</td>
<td>4.9</td>
<td>5.4</td>
<td>2.8</td>
</tr>
<tr>
<td>Farm-based digestate (whole)</td>
<td>4.9</td>
<td>3.9</td>
<td>0.9</td>
</tr>
</tbody>
</table>