

NUTRIENT WISE DEMOS 2012

PRESENTED BY CREEDY ASSOCIATES



# **GREEN COMPOST OPPORTUNITIES**

# **DIGESTATE FACTSHEET**

# WHAT IS IT?

Digestate results from the digestion of biodegradable materials through an anaerobic digester. The inputs to anaerobic digesters can vary greatly and can include: manures and slurries, food waste, abattoir waste and purpose grown crops. The plant nutrients (especially the nitrogen) in digestate are more available than raw slurry and far more available than those in compost.

# NUTRIENT CONTENT

The nutrient content is very dependent on the feedstock used. The example below shows the analysis for a digestate made only from food and slaughterhouse waste, rather than animal slurry. Digestates with higher slurry content are likely to have higher P and K values but lower N.

	Nitrogen	Phosphate	Potash
	(kg N / m <sup>3</sup> )	(kgP₂O₅ /m³)	(kgK <sub>2</sub> O /m <sup>3</sup> )
Digestate (liquid)	6.0	0.8	1.5

PROS	CONS	
<ul> <li>Rich in nitrogen especially available nitrogen</li> <li>Some digestate has high P &amp; K</li> </ul>	<ul> <li>Plants may not delivery beyond 20 mile (ish) radius</li> <li>Regulations and rules can be strict regarding application rate and method</li> </ul>	
<ul><li>Source of organic matter</li><li>Inexpensive</li></ul>	Restrictions on grazing following application	

### WHERE CAN I GET IT?

The main AD plant in Devon is at Holsworthy and is run by Andigestion. Viridor are also planning a site at Tiverton, and a further site at Lee Moor, just outside Plymouth, has just been granted planning permission. Most plants will deliver up to a radius of about 20miles away but few will go further unless the farm has sufficient storage facilities.

#### HOW MUCH DOES IT COST?

This varies according to the plant which supplies you. As a guide, most plants charge a subsidised fee of roughly £3.50/tonne for supply, haulage and spreading. This may vary with distance from the plant, time of year, and whether your farm has storage facilities.

#### RESTRICTIONS

There are strict rules for the use of digestate in agriculture. The digestate itself varies enormously in terms of nutrient values and the regulations it is subject to, depending on the feedstock used and the company which makes it. Check whether or not the digestate is compliant with the regulatory Pas110 limit which certifies its content. Your supplier should provide you with advice and a full analysis of the product for nutrient management planning.

#### **ORGANIC FARMERS**

The rules governing organic farms differs according to your certification body. Please check with your certificating body. As far as we understand OF&G now permit the use of digestate which includes non-organic slurry as an input, provided it is from animals that have had access to pasture during the grazing season. Slurry from intensively reared stock is not permitted. If animal manure or slurry is included as an input to a digester then a non-GM declaration (or copies of feed labels) and evidence of the livestock system used would also be required.

#### MORE INFORMATION

To find out more about the Holsworthy Biogas plant see the website: <u>http://www.andigestion.co.uk/content/contact-us</u> or call 01409 253861

#### **NVZ ISSUES**

Digestate is an organic manure containing nitrogen. Therefore if you are in an NVZ you must include all sewage sludge applications in your ORGANIC MANURE FIELD LIMIT ensuring that you do not go over the limit of 250KgN/ha from organic manures in any 12 month period.

If the digestate does not have livestock manure as a feedstock you do not currently have to include sewage sludge applications in your Nmax calculation although this may be reviewed in the near future. If livestock manure is in the feedstock then you need to consider this for the Nmax calculation.

If the digestate has livestock manure as part of the feedstock then you need to consider this when calculating your Livestock Manure Farm N limit.

Remember to record all imports of digestate in your record keeping. The N content of digestate varies and the supplier should provide you with an analysis and interpretation.

BGS Nutrient Wise Demos are part of the South West Agricultural Resource Management (SWARM) Knowledge Hub www.swarmhub.co.uk, which is a SW RDA initiative, managed by Duchy College Rural Business School, and funded through the Rural Development Programme



for England (RDPE).



European Agricultural Fund for Rural Development: Europe investing in rural areas