Digestate Information Sheets No.4 – Nutrient Availability



Digestate is available in 3 main forms, whole liquid Digestate, separated liquid Digestate and separated solid Digestate. Full details of nutrient availability and the factors that need to be considered can be found in <u>Technical Note (TN699) – Agricultural use of biosolids, composts, anaerobic digestates and other industrial organic fertilisers</u>

Nitrogen – Nutrient availability will vary depending on soil type and application timing. Table 1 is a reproduction of Table B in TN699 for the nitrogen for liquid and Table 2 is a reproduction of part of Table C in TN699 for solid digestate. Both show the key factors to consider when planning the application of digestate to maximize the value of the nitrogen content.

Table 1 Percentage of total N taken up by the crop following application of whole and separated liquordigestate (use value in brackets for grassland, winter OSR and brassicas).

	% of total N taken up by following crop						
		February					
	Aug	April	Summer				
	Readily Available Nitrogen (RAN) category	Sands, sandy loams, shallow soils	All soils	All soils	All soils		
Whole and seperated liquid	<50% of Total N	10(15)	15(30)	40*	10*		
digestate	>= 50% of Total N	10(15)	15(35)	50**	50**		

*Default values in NVZ's of 40% apply regardless of the timing of application, **Default values in NVZ's of 50% apply regardless of the timing of the application

Table 2 Percentage of total N taken up by crop following application of stackable organic fertiliser

	% of total N taken up by following crop								
	August-	October	Novembe	r-January	Feb-April	Summer			
	Sands, sandy loams, shallow	All other	Sands, sandy loams, shallow	All other		Creation d			
	soils	soils	soils	soils	All soils	Grassland			
Digestate -									
seperated									
fibre	10	10	15	15	20 (25*)	20			

*Incorporation by ploughing within 24 hours of application

Phosphate – when applying Digestate only 50% of the total phosphate will be available in the year of application, the remainder will add to soil reserves.

Potash - when applying Digestate up to 90% of the total potash will be available in the year of application, the remainder will add to soil reserves.