

Nutrient Planning

The following tables illustrate the difference between the STD recommendations (green) and your analysis (blue) for inorganic fertiliser requirements.

The figures are based on planning for a first cut of silage (i.e. 50kg of N, 16kg of P & 32kg of K per acre)

(For full instructions on how to use, see overleaf)

1st Cut N requirements (kg per acre)

Slurry (gallons)	Std Cattle Slurry (RB209)			SG304 (DM 6.8%)			Bag saving/acre
	N Content	Fert N needed	Bags/acre req*	N content	Fert N needed	Bags/acre req*	
0	0	50	3.8	0.0	50	3.8	0.00
1000	5.4	44.6	3.3	10.2	39.8	3.0	0.36
2000	10.8	39.2	2.9	20.4	29.6	2.2	0.72
3000	16.2	33.8	2.5	30.6	19.4	1.5	1.08
4000	21.6	28.4	2.1	40.9	9.1	0.7	1.44

* Assuming 27% N type fertiliser

P requirements (kg per acre, 1st cut, assuming P index of 2)

Slurry (gallons)	Std Cattle Slurry (RB209)		SG304 (DM 6.8%)	
	Phos content	Fert P needed	Phos content	Fert P needed
0	0	16	0.0	16
1000	3.2	12.9	4.0	12.0
2000	6.3	9.7	7.9	8.1
3000	9.5	6.6	11.9	4.1
4000	12.6	3.4	15.8	0.2

K requirements (per acre, 1st cut, assuming K index of 2)

Slurry (gallons)	Std Cattle Slurry (RB209)		SG304 (DM 6.8%)	
	Potash content	Fert K needed	Potash content	Fert K needed
0	0	32	0.0	32
1000	13.8	18.2	19.3	12.7
2000	27.5	4.5	38.6	-6.6
3000	41.3	-9.3	57.9	-25.9
4000	55.1	-23.1	77.2	-45.2

SG304 (DM 6.8%)

INSTRUCTIONS

The tables are split into two - Green (figures based on average slurry of the same DM & type)

& Blue (figures from your own Slurry Analysis)

If we look at the first table, it details the amount of N fertiliser required (50kg per acre) for a first cut of silage

In the first row (for 0 gallons of slurry), it shows a figure in both sections of 50kg (3.8 bags)

In the second row (for 1000 gallons of slurry per acre) it shows how an average slurry of the same DM will have an N content of 5.4kgs. Therefore only a further 44.6kgs of N are required.

On the same row in the blue section, it takes the value from the analysis which is 9.8kg of N, hence a further requirement of 40.2kgs of N are required.

As you go down each row, the volume of slurry increases thereby reducing the overall additional N required.

e.g. If 3000gals/acre were applied, your slurry would supply nearly 30kg of N, hence only needing 1.5 bags/acre

The final column shows how much you would save using your own slurry analysis and that of the std values

The P & K tables work in a similar way. The required amounts here assume an Index of 2 for both P&K

If your field index is different, you should adjust the amount required appropriately

1st Cut N requirements (kg per acre)

Slurry (gallons)	Std Cattle Slurry (RB209)			SLURRY ANALYSIS			Bag saving/acre
	N Content	Fert N needed	Bags/acre req*	N content	Fert N needed	Bags/acre req*	
0	0	50	3.8	0.0	50	3.8	0.00
1000	5.4	44.6	3.3	10.2	39.8	3.0	0.36
2000	10.8	39.2	2.9	20.4	29.6	2.2	0.72
3000	16.2	33.8	2.5	30.6	19.4	1.5	1.08
4000	21.6	28.4	2.1	40.9	9.1	0.7	1.44

* Assuming 27% N type fertiliser

P requirements (kg per acre, 1st cut, assuming P index of 2)

Slurry (gallons)	Std Cattle Slurry (RB209)		SLURRY ANALYSIS	
	Phos content	Fert P needed	Phos content	Fert P needed
0	0	16	0.0	16
1000	3.2	12.9	4.0	12.0
2000	6.3	9.7	7.9	8.1
3000	9.5	6.6	11.9	4.1
4000	12.6	3.4	15.8	0.2

K requirements (per acre, 1st cut, assuming K index of 2)

Slurry (gallons)	Std Cattle Slurry (RB209)		SLURRY ANALYSIS	
	Potash content	Fert K needed	Potash content	Fert K needed
0	0	32	0.0	32
1000	13.8	18.2	19.3	12.7
2000	27.5	4.5	38.6	-6.6
3000	41.3	-9.3	57.9	-25.9
4000	55.1	-23.1	77.2	-45.2