

# Getting the best out of Cattle Slurry

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# LESS Technology – ‘Benefits’



- Reduction in N losses
  - ↓ Ammonia losses
  - ↑ N recovery (+ 3units/1,000gals)
- No odour / smells
- Precision application of slurry
- Apply in to heavier grass covers
- Better soils conditions
- Wider window of application

No. 1 Technology to Reduce Ammonia



# N-P-K Value of Cattle Slurry?

The effect of slurry DM on the N, P & K Values of cattle slurry

DM %	N kg/m <sup>3</sup> (units/1,000 gals)	P kg/m <sup>3</sup> (units/1,000 gals)	K kg/m <sup>3</sup> (units/1,000 gals)
2	0.4 (4)	0.21 (2)	1.4 (13)
4	0.7 (6)	0.35 (3)	2.3 (21)
6	1.0 (9)	0.5 (5)	3.5 (32)
7	1.1 (10)	0.6 (6)	4.0 (36)

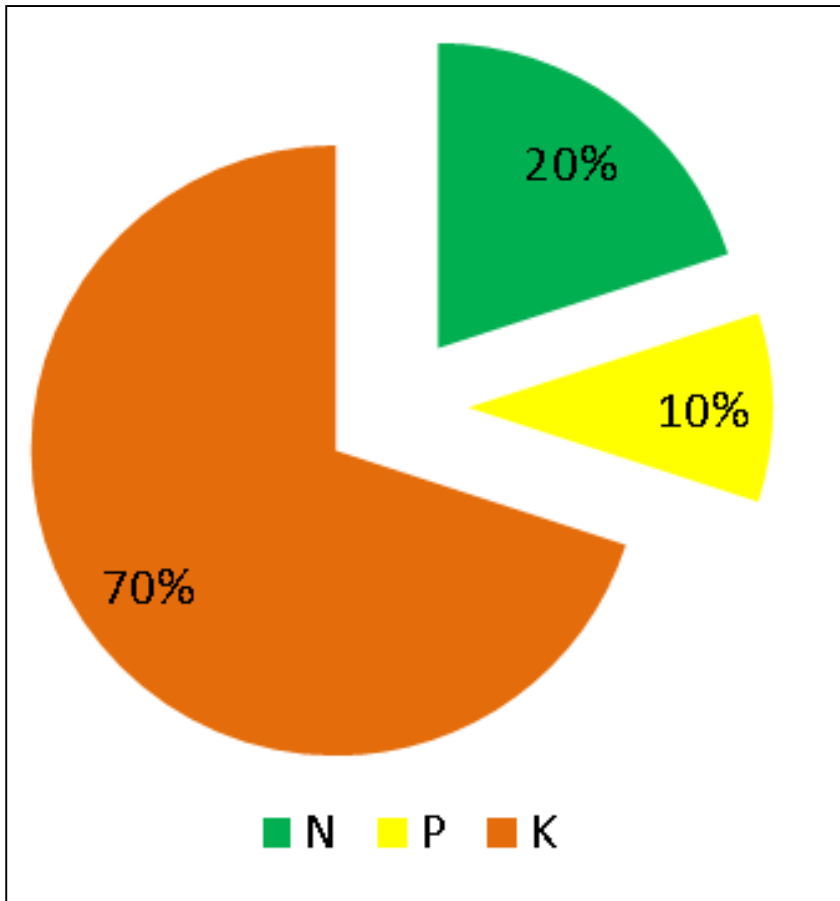
- Slurry DM – 10 fold variation
- Slurry dilution with water?
- Test slurry nutrient levels



# Where should I spread slurry?

*Where can I best maximise the value of slurry nutrients?*

## Nutrient Profile



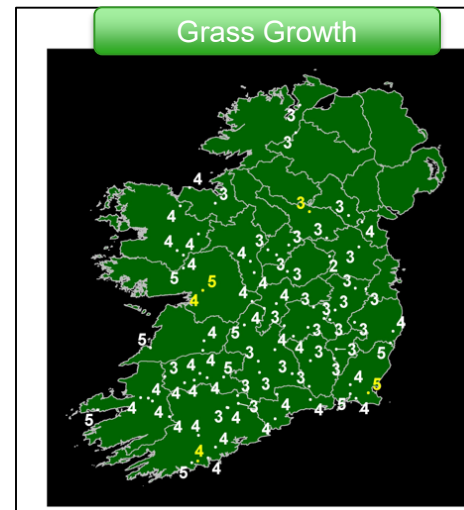
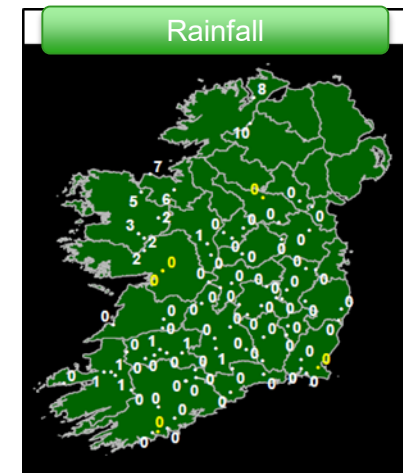
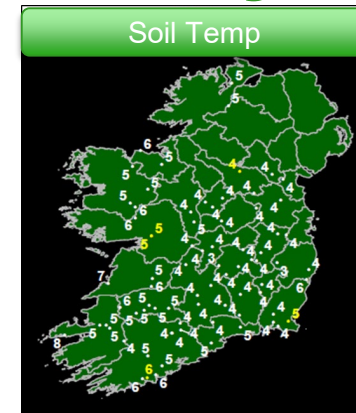
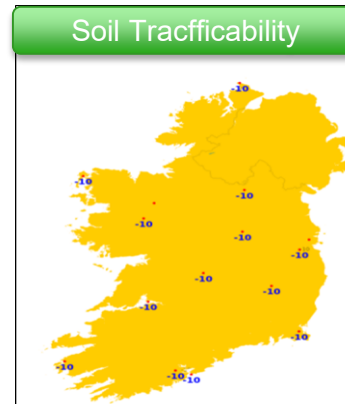
## Crop P & K Needs

- Soil Analysis
- Fertiliser Plan
- Crops
  - Grass Silage
  - Slurry - Balanced Fertiliser
  - Adjust slurry application rate based on slurry DM

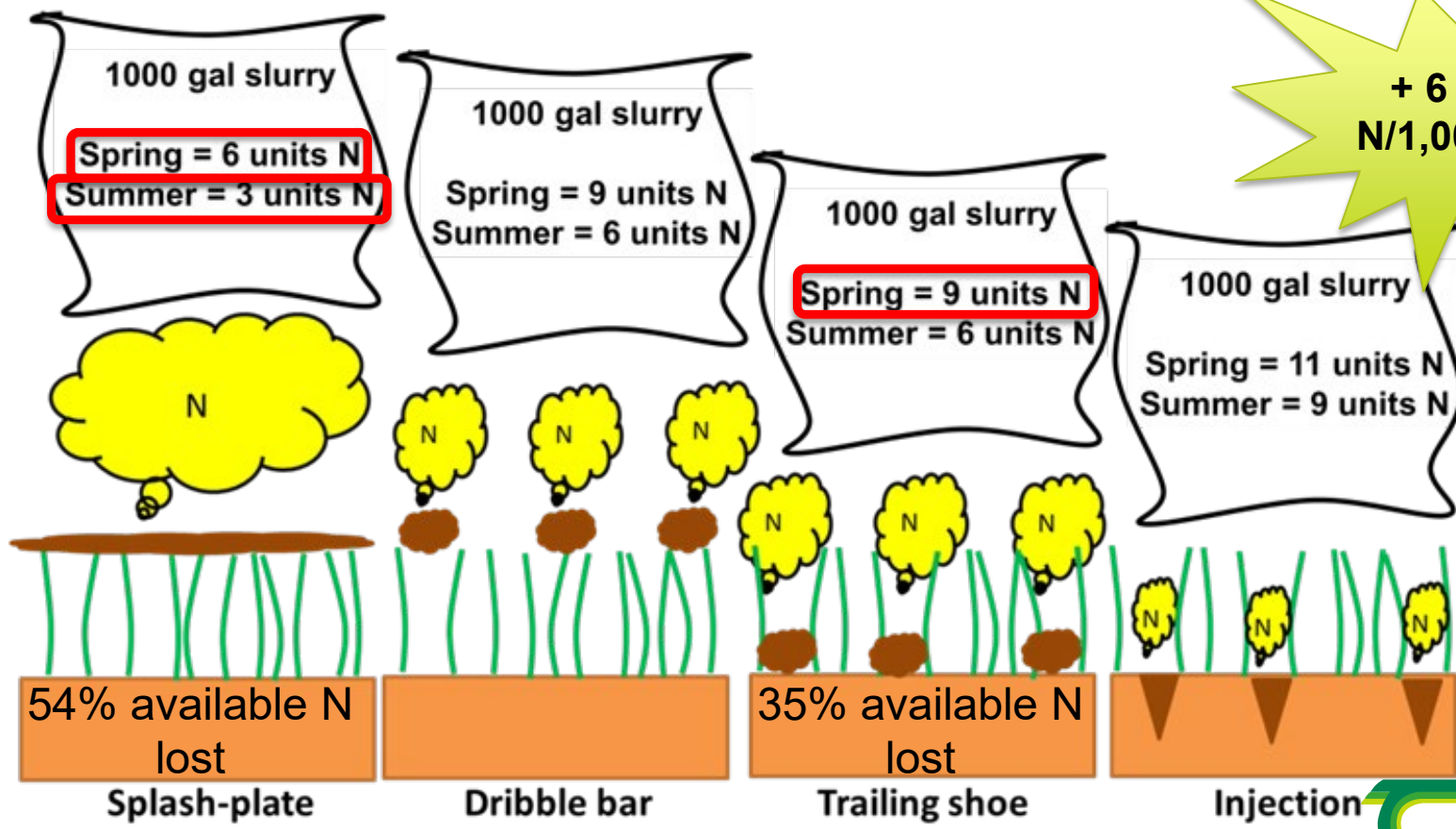


# When & How to Maximise Slurry N?

- Soil Temperatures
  - $>5.5^{\circ}\text{C}$
- Field Conditions
  - Positive SMD
- Weekly Forecast
  - Good forecast
- Grass growth rates
  - 10 kg DM/ha/day



# When & How to Maximise Slurry N?



# What rate to apply?

- Slurry quality
  - Good quality (>4% DM) – Silage fields
  - Dilute slurries (<4% DM) – Grazing fields
- Crop requirements
  - Grass silage crops
  - Maize crops





# Suppliers of Slurry Hydrometers

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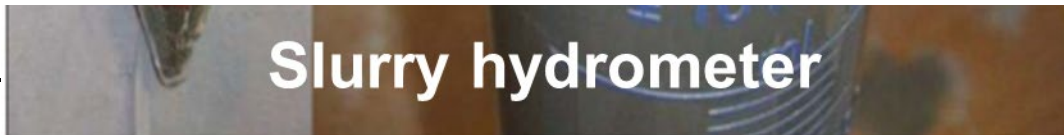
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s / 1,000gals





# In Summary

- Test slurry to determine N - P - K values
- LESS to maximise N recovery
- Check field conditions to maximise slurry use
- Match application rates based on soil, crop requirements & time of year
- Plan slurry applications for springtime