Digestate Information Sheets No.3 – Application methods

Digestate is available in 3 main forms whole liquid Digestate, separated liquid Digestate and separated solid Digestate and can be applied to land by various methods.

LIQUID DIGESTATE

Liquid digestate can be applied by tanker or by umbilical systems.

Tankers are simple self-contained equipment while umbilical systems more complex and are usually used by contractors.

Tankers are heavier than umbilical systems which have a greater risk causing soil compaction when the soil is saturated.

Both application systems for liquid Digestate can have different methods for spreading the material.

1. **Splash plate**
    a. Benefits - simple system, cheapest option, lowest cost of application.
    b. Drawbacks – least accurate in applying material, highest for losses of nitrogen to atmosphere.

2. **Dribble Bar**
    a. Benefits – More efficient than splash plate, less losses of nitrogen than splash plate.
    b. Drawbacks – More expensive than splash plate, heavier than splash plate, more prone to blockages than splash plate (more suited to separated liquid.

3. **Trailing Shoe**
    a. Benefits – more efficient than dribble bar, less losses of nitrogen than dribble bar.
    b. Drawbacks – More expensive than Dribble bar, heavier than dribble bar, needs larger tractor than Dribble bar.

4. **Shallow injection**
    a. Benefits – most efficient method of Digestate application, least losses of nitrogen,
    b. Drawbacks – Heaviest and most expensive system and requires largest tractor to pull equipment.

SOLID DIGESTATE

Solid Digestate can be spread using equipment similar to those used to spread solid farmyard manure (FYM) the most accurate of these being rear discharge types which have a more accurate spread pattern.

Solid Digestate can have a high Readily Available Nitrogen (RAN) content which makes it advisable to incorporate this into the soil as quickly as possible ideally within 24 hours.

Funded with support from the Universities Innovation Fund (UIF), from the Scottish Funding Council (SFC)