Slug pellet application

In the last 12 months SCS has tested over 300 slug pelleters with approximately 50% of them requiring setting adjustments. Incorrect calibration of spreaders can prove a costly mistake.

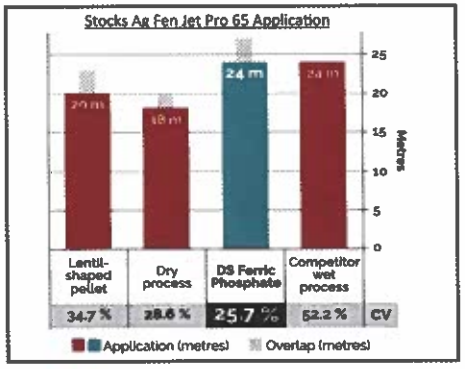
Common faults

Pelleter set-up incorrectly:

- Insufficient disc speed due to worn out motor or poor/ damaged wiring
- Worn/ damaged vanes – vanes become pitted and holes develop. Imperfections on the vane surface affect the pellet trajectory
- Incorrectly mounted – not high enough and not tilted at the right angle. Too many machines are mounted in a downward facing position, so the pellets are directed at the soil and do not reach the desired spread width

What to look for in a pelleter:

- The operating system: is the operator up to date with technology and confident using computer controls? Pelleters have almost caught up with fertiliser spreaders in terms of electronic controls (variable rate etc), but the machine designs are still very much what they were 10 years ago
- Is the machine capable of the desired width? Just because the machine has the number 24 in its name, does not mean it will spread to 24m with every pellet. Pellet size will play a crucial part in this. It is important that operators understand the differences in various pellets and what they achieve
- Average spread width of pellets in the UK is 12m/18m, but a lot more customers are/have moved to wider widths particularly 24m. The majority of pelleters in the UK market are capable of up to 18m, provided they have been set up correctly and a good quality pellet is used. It is more difficult to achieve 24m with a single hopper pelleter



Application results using typical application methods showing variability and overlap differences between pellet types.

- For spreading widths greater than 24m, models with two hoppers should be considered or existing fertiliser spreaders utilised
- Most fertiliser spreaders can be adjusted to spread pellets – the SCS team test pellets through an increasing number every year. It is vital to have the spreader tray tested as book settings are derived in a test hall and do not consider external factors or the wear on a particular machine. It can be difficult to get pellets to flow properly through a fertiliser spreader as the application rates are so low

Match pellet choice with machine and adjust expectations accordingly! Users often have unrealistic expectations of mini pellets reaching wider widths.

Slug pelleter testing requirements: Any machine used to apply slug pellets, whether broadcast or placement type must have a valid NSTS test certificate, which is valid for six years. New machines have until their 5th anniversary to get tested.

The importance of pellet application equipment is not reflected in the testing frequency. Slug pelleters should be calibrated and tray tested at least once a year, and again if changing pellet type.

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Why test slug pelleter annually?

- Minimise financial losses
- Inaccurate applications, over/ under applying pellets means slug control is ineffective or pellets are being wasted
- Ineffective slug control will result in yield losses.
- Even brand new pelleters can give a poor spread pattern. When they leave the factory, they are not set up for a specific combination of pellet, applicator and spread width. An SCS slug pelleter test is a combination of testing the machine and the product
- Any SCS slug pelleter test includes an MOT style check on the machine before the tray test. This check is recorded and sent to the customer. They can see any faults that may cause an uneven spread and rectify them before problems occur
- Applicator settings can vary from one batch of pellets to another. A full width tray test is the only way to ensure the most efficient settings are being used

Ensure the pelleter is at the correct height and tilted at the right angle so that it reaches the desired spread width.

Environmental protection

- NSTS testing means a particular machine is applying as accurately as possible, minimising the chances of pellets reaching watercourses and field margins
- Improved spreading accuracy (particularly in water catchment areas) reduces the effects of agricultural pollution. Reducing pollution means products are less likely to be banned

Compliment expensive technology - agriculture spends thousands on GPS, variable rate, section control etc, but without checking the accuracy of application equipment, these technologies are wasted.

Legal/farm assurance - under the Sustainable Use Directive these machines must be tested. Red Tractor assurance also states that... "all Plant Protection Product (PPP) application equipment must be calibrated between seasons of use," and "Granular PPP equipment and any equipment used to apply slug pellets must be calibrated whenever there is a change of product."

The only way to control slugs effectively is with a good quality pellet and a machine that is capable of specific spreading requirements, and finally a tray test to confirm the two are working in harmony!

For further information go to *www.spreadcheck.com*