

PRESS RELEASE



27th April 2022

NEW RESEARCH HIGHLIGHTS THE RESPONSE TO FERTILISER

Last year a new series of reduced nitrogen input plots were set up alongside the existing GrassCheck plots at AFBI, Hillsborough. These plots received 135 kg N/ha over the course of the year compared to 270 kg N/ha for the existing GrassCheck plots.

The growth curves of these two plots can be seen in Figure 1 below.

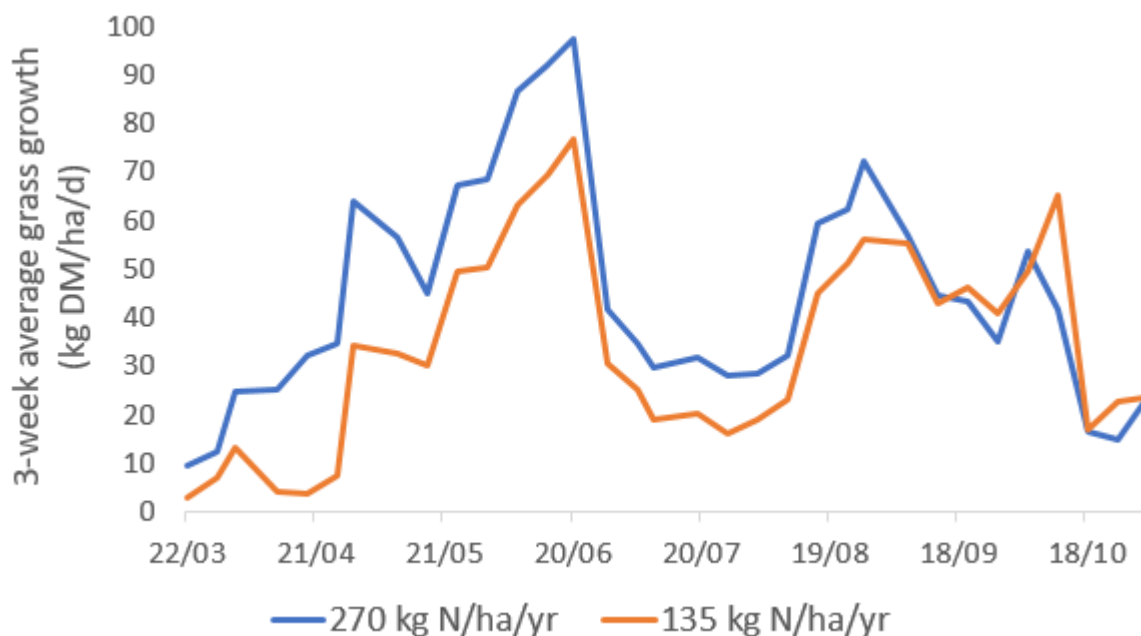


Figure 1. GrassCheck Hillsborough plot growth rates 2021: Variable N application

Over the whole year the average yields for 2021 were 10.7 t DM/ha on the 270 kg N/ha plots, but just 8.2 t DM/ha on the 135 kg N / ha plots, a difference of 2.5 t DM/ha. If applying N in the form of protected urea (46% N), an additional 294 kg of product per Hectare would be needed to move from the medium rate to the high rate.

Assuming a price of £1,050 for protected urea this extra 2.5 t of grass DM would cost £309 (£124 / t DM).

To purchase the same 2.5 t DM by buying concentrate (assuming a dry matter of 85%) 2.94 t would be required. It is expected that this winter concentrate prices will be over £400 / t, thus purchasing the equivalent amount of dry matter in the form of concentrate would cost approximately £1,176 (well over three times the cost).

These findings are further supported within the N Fertiliser review, commissioned by AgriSearch and conducted by AFBI earlier this year, which showed that even at current prices, fertiliser was over three times better value than purchased feed. A copy of this report is available to view on the AgriSearch website alongside recordings of the associated webinars.

This year the plot trial at AFBI, Hillsborough is being repeated with an additional series of low nitrogen input plots receiving only 67.5 kg N/ha over the year. The latest results can be seen in Figure 2 below.

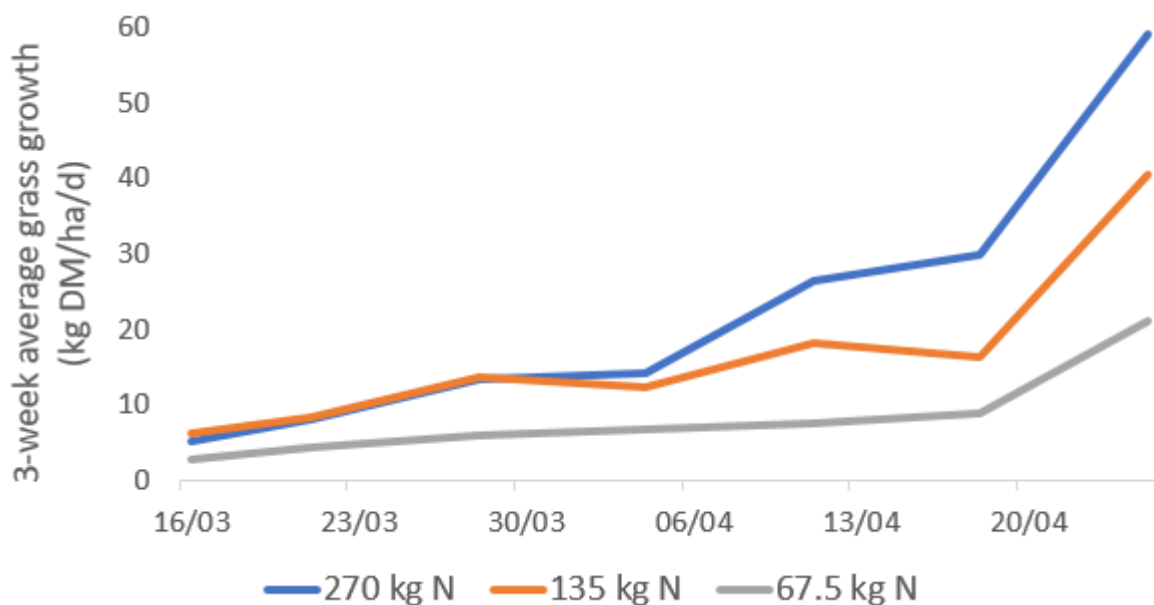


Figure 2. GrassCheck Hillsborough plot growth rates 2022: Variable N application

This week's results shows the 270 kg N/ha plots currently yielding 59 kg DM/ha/day, the 135 kg N/ha plots yielding 41 kg DM/ha/day and the 67.5 kg N/ha plots yielding just 21 kg DM/ha/day. Results from 2021 highlighted the particularly strong response

to manufactured nitrogen fertiliser from April through to the end of June, with this trend also appearing in the 2022 results.

To examine the impact of the rising costs of farm inputs and the decisions farmers are making in light of this, AgriSearch, in partnership with the Ulster Farmers' Union, is conducting an online survey. The survey is open to all farmers and links to participate can be found on the AgriSearch website www.agrisearch.org and social media.

ENDS

Caption: Figure 1. GrassCheck Hillsborough plot growth rates 2021: Variable N application

Caption: Figure 2. GrassCheck Hillsborough plot growth rates 2022: Variable N application

Caption: QR Code for farmer survey

Notes for Editors

1. GrassCheck is a joint initiative of AgriSearch, AFBI and CAFRE and is funded by AgriSearch and the Department of Agriculture, Environment and Rural Affairs (DAERA). GrassCheck is supported by the Centre for Innovation Excellence in Livestock (CIEL).
2. The UFU / AgriSearch on the impact of rising costs of farm inputs can be found here: <https://www.surveymonkey.co.uk/r/CXJZ76N>
3. The N Fertiliser report is available at: <https://agrisearch.org/add-file-to-publications/n-fertiliser-review-final-report/viewdocument/547>
4. A recording of the Dairy Fertiliser Planning Webinar is available at: <https://www.youtube.com/watch?v=0U3wWOHlAng>
5. A recording of the Beef & Sheep Fertiliser Planning Webinar is available at: <https://www.youtube.com/watch?v=Djod2zowFCc>

6. AgriSearch (The Northern Ireland Agricultural Research and Development Council) is an independent charity, registered with the Charities Commission for Northern Ireland. AgriSearch was formed in 1997 to provide a mechanism through which beef, dairy and sheep farmers could have direct involvement in production orientated research. Funds contributed to AgriSearch are used to commission research into the improvement and development of beef, sheep and dairy farming. AgriSearch's guiding principal is to provide practical benefit for primary producers to reduce costs, improve performance, drive innovation and improve welfare. Duplication of existing R&D work is avoided, and every effort is made to get maximum leverage from complementary funding sources.

7. For further information contact Jason Rankin (General Manager). Email: jason@agrisearch.org Tel: 028 92681316. Innovation Centre, Large Park, Hillsborough, BT26 6DR